
REPORT PROJECT: “DATABASES 2022-2023”

**DATABASES LAB
CEID1124**

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Περιεχόμενα

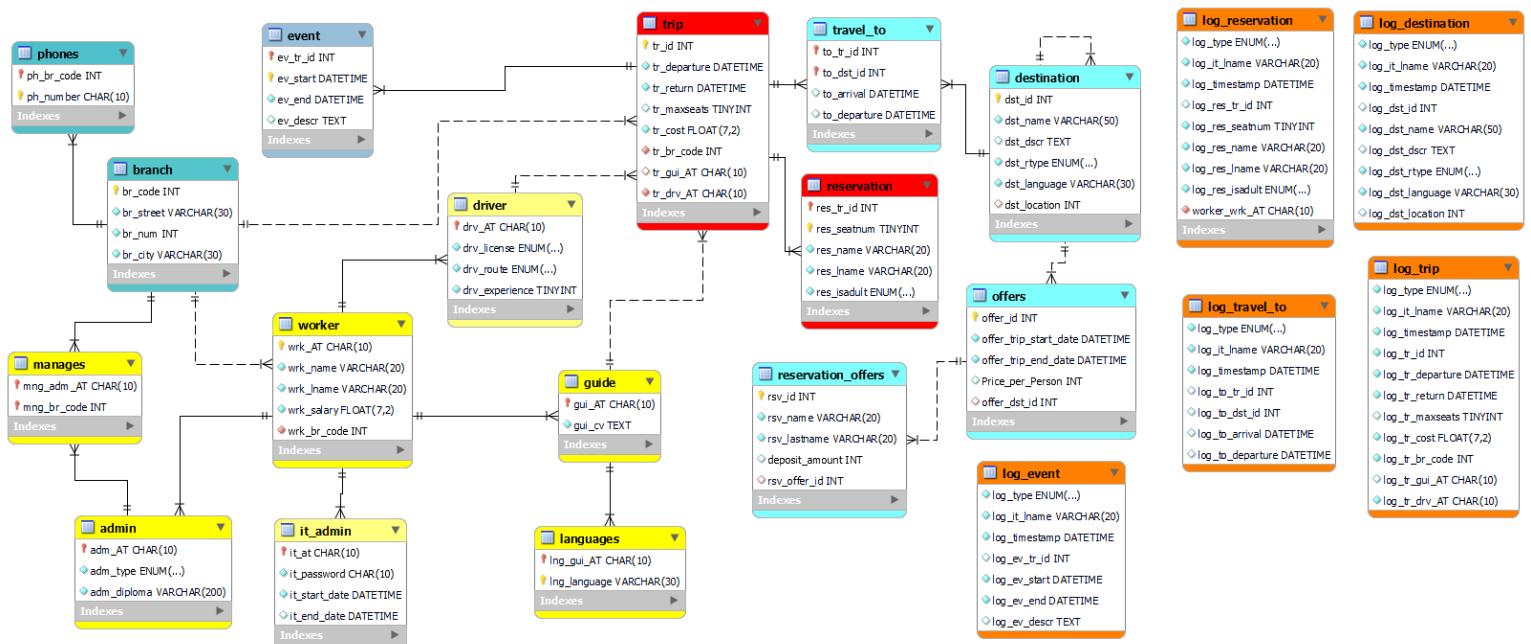
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Μέρος Α: Σχεδιασμός ΒΔ και SQL

Κεφάλαιο 1 - Περιγραφή Βάσης

Σχεσιακό διάγραμμα της συνολικής αναθεωρημένης ΒΔ.



Περιγραφή παραδοχών

Για την σχεδίαση της βάσης δεδομένων μας κάναμε της παρακάτω παραδοχές:

- *Υποκαταστήματα (Branches)*

br_code	br_street	br_num	br_city
1	Kifisis	355	Athens
2	Amarisias Artemidos	5	Athens
3	Mezonos	44	Patra
4	Aristomenous	5	Kalamata
5	Tsimiskh	55	Thesalonikh

Δημιουργήσαμε πέντε branches. Δύο στην Αθήνα και από ένα στην Πάτρα, Καλαμάτα και Θεσσαλονίκη.

- Τηλέφωνα (Phones)

ph_br_code	ph_number	br_city
1	2101111111	Athens
1	2101222222	Athens
2	2102222222	Athens
2	2102333333	Athens
3	2103333333	Patra
4	2104444444	Kalamata
5	2105555555	Thesalonikh

Τα δύο υποκαταστήματα της Αθήνας έχουν από δύο τηλέφωνα, επειδή τα γραφεία τους είναι μεγαλύτερα, ενώ τα υπόλοιπα υποκαταστήματα έχουν από ένα.

- Εργαζόμενοι (Workers)

```
mysql> select count(*) from worker;
+-----+
| count(*) |
+-----+
|      39 |
+-----+
```

Συνολικά όλα τα υποκαταστήματα μαζί έχουν 39 εργαζόμενους. Οι εργαζόμενοι χωρίζονται σε admins (διαχειριστές), it_admins (υπεύθυνοι πληροφορικής), drives (οδηγούς) και guides (ξεναγούς). Κάθε branch έχει τρεις διαχειριστές, από έναν για την κάθε κατηγορία διαχείρισης (logistics, accounting, administrative). Σε κάποια υποκαταστήματα (branches 1 και 5) έχουμε θέσει κάποιους διαχειριστές να εκτελούν και αρμοδιότητες ξεναγού.

Branch 1:

count(*)	wrk_br_code
9	1

To Branch 1, έχει συνολικά 9 εργαζόμενους.

Admins:

adm_AT	adm_type	wrk_br_code
AK10311111	LOGISTICS	1
AK10322222	ACCOUNTING	1
AK10333333	ADMINISTRATIVE	1

IT Admins:

it_at	it_password	wrk_br_code
AK12000001	password	1
AK12000002	password	1
AK12000003	John	1

Drivers:

drv_AT	drv_license	drv_route	drv_experience	wrk_br_code
AM10410000	D	LOCAL	9	1
AM10410111	D	ABROAD	10	1

Έχουμε δύο drivers για το branch 1 έναν για ταξίδια στο εξωτερικό και έναν για το εξωτερικό.

Guides:

gui_AT	wrk_br_code	lng_language
AK10311111	1	Greek,English,French
AN10520010	1	Greek,English,French,Italian

Παρατηρούμε πως ο logistics admin του branch 1 με AT = AK10311111 είναι και guide.

Branch 2:

count(*)	wrk_br_code
9	2

To Branch 2, έχει επίσης 9 εργαζόμενους.

Admins:

adm_AT	adm_type	wrk_br_code
AK10344444	LOGISTICS	2
AK10355555	ACCOUNTING	2
AK10366666	ADMINISTRATIVE	2

IT Admins:

it_at	it_password	wrk_br_code
AK12000004	password	2
AK12000005	1234	2

Drivers:

drv_AT	drv_license	drv_route	drv_experience	wrk_br_code
AM10410222	D	LOCAL	7	2
AM10410333	D	ABROAD	11	2

Έχουμε δύο drivers για το branch 2 έναν για ταξίδια στο εξωτερικό και έναν για το εξωτερικό.

Guides:

gui_AT	wrk_br_code	lng_language
AN10520020	2	Greek,English,German
AN10520030	2	Greek,German,French,Italian

Branch 3:

count(*)	wrk_br_code
7	3

To Branch 3, που είναι στην Πάτρα έχει συνολικά 7 εργαζόμενους.

Admins:

adm_AT	adm_type	wrk_br_code
AK10377777	ADMINISTRATIVE	3
AK10388888	ACCOUNTING	3
AK10399999	LOGISTICS	3

IT Admins:

it_at	it_password	wrk_br_code
AK12000006	1444	3
AK12000007	ff	3

Drivers:

drv_AT	drv_license	drv_route	drv_experience	wrk_br_code
AM10410444	D	LOCAL	20	3

Έχουμε έναν driver για το branch 3, ο οποίος ταξιδεύει μόνο στο εσωτερικό. Το υποκατάστημα 3 στην Πάτρα δηλαδή κάνει μόνο ταξίδια στο εσωτερικό.

Guides:

gui_AT	wrk_br_code	lng_language
AN10520040	3	Greek,English,Italian

Branch 4:

count(*)	wrk_br_code
6	4

To Branch 4, που είναι στην Καλαμάτα έχει συνολικά 4 εργαζόμενους.

Admins:

adm_AT	adm_type	wrk_br_code
AK10310000	ADMINISTRATIVE	4
AK10310111	ACCOUNTING	4
AK10310222	LOGISTICS	4

IT Admins:

it_at	it_password	wrk_br_code
AK12000008	AlexAlex	4

Βλέπουμε πως αυτό το branch έχει μόνο έναν υπεύθυνο πληροφορικής.

Drivers:

drv_AT	drv_license	drv_route	drv_experience	wrk_br_code
AM10410555	D	LOCAL	15	4

Έχουμε έναν driver για το branch 4, ο οποίος ταξιδεύει μόνο στο εσωτερικό. Το υποκατάστημα 4 στην Καλαμάτα δηλαδή κάνει μόνο ταξίδια στο εσωτερικό.

Guides:

gui_AT	wrk_br_code	lng_language
AN10520050	4	Greek,English,German,Italian

Branch 5:

count(*)	wrk_br_code
8	5

To Branch 5, που είναι στην Θεσσαλονίκη έχει συνολικά 8 εργαζόμενους.

Admins:

adm_AT	adm_type	wrk_br_code
AK10310333	ADMINISTRATIVE	5
AK10310444	LOGISTICS	5
AK10310555	ACCOUNTING	5

IT Admins:

it_at	it_password	wrk_br_code
AK12000009	Nik	5
AK12000010	password	5

Drivers:

drv_AT	drv_license	drv_route	drv_experience	wrk_br_code
AM10410666	D	LOCAL	8	5
AM10410777	B	ABROAD	3	5

Έχουμε δύο driver για το branch 5, έναν για ταξίδια στο εξωτερικό και έναν για το εσωτερικό. Το υποκατάστημα 5 στην Θεσσαλονίκη δηλαδή διοργανώνει ταξίδια και των δύο ειδών.

Guides:

gui_AT	wrk_br_code	lng_language
AK10310444	5	Greek,English
AN10520060	5	Greek,English,German,Italian

Παρατηρούμε, ότι όπως και στο branch 1, ένας από τους ξεναγούς του branch 5 είναι logistics admin.

• Ταξίδια (Trips)

Συνολικά το ταξιδιωτικό γραφείο διοργανώνει 30 ταξίδια.

mysql> select count(*) from trip;
+-----+
count(*)
30
+-----+

Κάθε υποκατάστημα διοργανώνει 6 διαφορετικά ταξίδια.

Number of trips	tr_br_code
6	1
6	2
6	3
6	4
6	5

Για αυτά τα ταξίδια υπάρχουν 18 πιθανοί προορισμοί, 13 στο εσωτερικό και 5 στο εξωτερικό.

dst_id	dst_name	dst_rtype	dst_language	dst_location
1	Santorini	LOCAL	Greek	NULL
2	Mykonos	LOCAL	Greek	NULL
3	Paros	LOCAL	Greek	NULL
4	Zakynthos	LOCAL	Greek	NULL
5	Kalavryta	LOCAL	Greek	NULL
6	Kalavryta ski resort	LOCAL	Greek	5
7	Arachova	LOCAL	Greek	NULL
8	Parnassos	LOCAL	Greek	7
9	Heraklion	LOCAL	Greek	NULL
10	Mani	LOCAL	Greek	NULL
11	Rhodes	LOCAL	Greek	NULL
12	Nafpaktos	LOCAL	Greek	NULL
13	Ano Hora	LOCAL	Greek	12
14	London	ABROAD	English	NULL
15	Paris	ABROAD	French	NULL
16	Rome	ABROAD	Italian	NULL
17	Milan	ABROAD	Italian	NULL
18	Berlin	ABROAD	German	NULL

Οι προορισμοί που δεν έχουν το πεδίο dst_location NULL, είναι υπο-προορισμοί, δηλαδή αποτελούν έναν προορισμός που μπορούν να επισκεφτεί οι πελάτες ενός ταξιδιού μόνο αν το ταξίδι τους περιλαμβάνει τον υπερ-προορισμό. Υπο-προορισμού αποτελούν αυτοί με dst_id = 6(Kalavrita Ski Resort), 8(Parnassos), 13(Ano Hora) και ανήκουν στους προορισμούς με dst_id = 5(Kalavrita), 7(Arachova), 12(Nafpaktos) αντίστοιχα.

Παρακάτω φαίνονται όλα τα ταξίδια του ταξιδιωτικού γραφείου μαζί με τους αντίστοιχους προορισμούς τους.

tr_id	to_arrival	to_departure	tr_br_code	dst_id	dst_name	dst_rtype	dst_language
1	2022-03-05 22:00:00	2022-03-08 06:00:00	1	1	Santorini	LOCAL	Greek
2	2022-03-10 20:00:00	2022-03-16 12:00:00	1	2	Mykonos	LOCAL	Greek
3	2022-04-15 21:00:00	2022-04-16 22:00:00	1	3	Paros	LOCAL	Greek
4	2022-03-15 12:00:00	2022-03-20 16:00:00	1	14	London	ABROAD	English
5	2022-04-07 21:30:00	2022-04-15 17:30:00	1	15	Paris	ABROAD	French
6	2022-06-21 18:00:00	2022-06-26 23:00:00	1	16	Rome	ABROAD	Italian
7	2022-07-05 22:00:00	2022-07-15 13:00:00	2	4	Zakynthos	LOCAL	Greek
8	2022-07-18 20:30:00	2022-07-19 12:00:00	2	5	Kalavryta	LOCAL	Greek
8	2022-07-19 13:00:00	2022-07-19 20:00:00	2	6	Kalavryta ski resort	LOCAL	Greek
9	2022-08-02 17:00:00	2022-08-03 12:00:00	2	7	Arachova	LOCAL	Greek
9	2022-08-03 13:00:00	2022-08-03 20:00:00	2	8	Parnassos	LOCAL	Greek
10	2022-07-15 18:00:00	2022-07-26 17:30:00	2	17	Milan	ABROAD	Italian
11	2022-08-13 23:30:00	2022-08-20 14:00:00	2	18	Berlin	ABROAD	German
12	2022-09-13 15:30:00	2022-09-22 15:00:00	2	15	Paris	ABROAD	French
13	2022-01-05 22:00:00	2022-01-20 19:00:00	3	9	Heraklion	LOCAL	Greek
14	2022-01-22 20:30:00	2022-01-24 17:00:00	3	10	Mani	LOCAL	Greek
15	2022-02-14 12:30:00	2022-02-23 15:00:00	3	11	Rhodes	LOCAL	Greek
16	2022-03-17 20:00:00	2022-03-18 15:00:00	3	12	Nafplakos	LOCAL	Greek
16	2022-03-18 16:00:00	2022-03-18 20:00:00	3	13	Ano Hora	LOCAL	Greek
17	2022-03-20 21:00:00	2022-03-27 11:00:00	3	1	Santorini	LOCAL	Greek
18	2022-04-24 22:30:00	2022-04-28 18:00:00	3	2	Mykonos	LOCAL	Greek
19	2022-06-18 23:30:00	2022-06-22 17:30:00	4	3	Paros	LOCAL	Greek
20	2022-06-23 22:30:00	2022-06-30 13:00:00	4	4	Zakynthos	LOCAL	Greek
21	2022-07-23 22:45:00	2022-07-28 12:45:00	4	9	Heraklion	LOCAL	Greek
22	2022-08-08 12:00:00	2022-08-10 16:00:00	4	10	Mani	LOCAL	Greek
23	2022-09-14 23:45:00	2022-09-26 05:00:00	4	11	Rhodes	LOCAL	Greek
24	2022-10-08 19:30:00	2022-10-09 19:00:00	4	5	Kalavryta	LOCAL	Greek
25	2022-08-18 11:30:00	2022-08-22 15:00:00	5	7	Arachova	LOCAL	Greek
26	2022-10-20 23:30:00	2022-10-27 12:00:00	5	3	Paros	LOCAL	Greek
27	2022-11-11 21:15:00	2022-11-26 15:00:00	5	4	Zakynthos	LOCAL	Greek
28	2022-12-08 17:00:00	2022-12-18 16:00:00	5	16	Rome	ABROAD	Italian
29	2023-02-20 19:45:00	2023-02-26 18:00:00	5	17	Milan	ABROAD	Italian
30	2023-06-16 15:00:00	2023-06-25 14:00:00	5	18	Berlin	ABROAD	German

Σε αυτό το σημείο μπορούμε να επιβεβαιώσουμε ότι μόνο τα υποκαταστήματα της Αθήνας και της Θεσσαλονίκης έχουν ταξίδια στο εξωτερικό.

tr_id	to_arrival	to_departure	tr_br_code	dst_id	dst_name	dst_rtype	dst_language
4	2022-03-15 12:00:00	2022-03-20 16:00:00	1	14	London	ABROAD	English
5	2022-04-07 21:30:00	2022-04-15 17:30:00	1	15	Paris	ABROAD	French
6	2022-06-21 18:00:00	2022-06-26 23:00:00	1	16	Rome	ABROAD	Italian
10	2022-07-15 18:00:00	2022-07-26 17:30:00	2	17	Milan	ABROAD	Italian
11	2022-08-13 23:30:00	2022-08-20 14:00:00	2	18	Berlin	ABROAD	German
12	2022-09-13 15:30:00	2022-09-22 15:00:00	2	15	Paris	ABROAD	French
28	2022-12-08 17:00:00	2022-12-18 16:00:00	5	16	Rome	ABROAD	Italian
29	2023-02-20 19:45:00	2023-02-26 18:00:00	5	17	Milan	ABROAD	Italian
30	2023-06-16 15:00:00	2023-06-25 14:00:00	5	18	Berlin	ABROAD	German

Φυσικά έχουμε φροντίσει όλοι οι οδηγοί σε ταξίδια του εξωτερικού να έχουν το πεδίο drv_route = 'ABROAD'.

tr_id	tr_drv_AT	drv_route	dst_id	dst_name	dst_rtype
4	AM10410111	ABROAD	14	London	ABROAD
5	AM10410111	ABROAD	15	Paris	ABROAD
6	AM10410111	ABROAD	16	Rome	ABROAD
10	AM10410333	ABROAD	17	Milan	ABROAD
11	AM10410333	ABROAD	18	Berlin	ABROAD
12	AM10410333	ABROAD	15	Paris	ABROAD
28	AM10410777	ABROAD	16	Rome	ABROAD
29	AM10410777	ABROAD	17	Milan	ABROAD
30	AM10410777	ABROAD	18	Berlin	ABROAD

Αντίστοιχα για ταξίδια του εσωτερικού να είναι LOCAL.

tr_id	tr_drv_AT	drv_route	dst_id	dst_name	dst_rtype
1	AM10410000	LOCAL	1	Santorini	LOCAL
2	AM10410000	LOCAL	2	Mykonos	LOCAL
3	AM10410000	LOCAL	3	Paros	LOCAL
7	AM10410222	LOCAL	4	Zakynthos	LOCAL
8	AM10410222	LOCAL	5	Kalavryta	LOCAL
8	AM10410222	LOCAL	6	Kalavryta ski resort	LOCAL
9	AM10410222	LOCAL	7	Arachova	LOCAL
9	AM10410222	LOCAL	8	Parnassos	LOCAL
13	AM10410444	LOCAL	9	Heraklion	LOCAL
14	AM10410444	LOCAL	10	Mani	LOCAL
15	AM10410444	LOCAL	11	Rhodes	LOCAL
16	AM10410444	LOCAL	12	Nafpaktos	LOCAL
16	AM10410444	LOCAL	13	Ano Hora	LOCAL
17	AM10410444	LOCAL	1	Santorini	LOCAL
18	AM10410444	LOCAL	2	Mykonos	LOCAL
19	AM10410555	LOCAL	3	Paros	LOCAL
20	AM10410555	LOCAL	4	Zakynthos	LOCAL
21	AM10410555	LOCAL	9	Heraklion	LOCAL
22	AM10410555	LOCAL	10	Mani	LOCAL
23	AM10410555	LOCAL	11	Rhodes	LOCAL
24	AM10410555	LOCAL	5	Kalavryta	LOCAL
25	AM10410666	LOCAL	7	Arachova	LOCAL
26	AM10410666	LOCAL	3	Paros	LOCAL
27	AM10410666	LOCAL	4	Zakynthos	LOCAL

Επίσης σε κάποια ταξίδια χρησιμοποιούνται οδηγοί που κατέχουν άδεια οδήγησης τύπου B (για βανάκι), κάτι που αντιπροσωπεύεται από των μέγιστο αριθμό θέσεων.

tr_id	tr_maxseats	tr_drv_AT	drv_license	dst_name	dst_rtype
20	30	AM10410555	D	Zakynthos	LOCAL
21	100	AM10410555	D	Heraklion	LOCAL
22	30	AM10410555	D	Mani	LOCAL
23	80	AM10410555	D	Rhodes	LOCAL
24	30	AM10410555	D	Kalavryta	LOCAL
25	20	AM10410666	D	Arachova	LOCAL
26	90	AM10410666	D	Paros	LOCAL
27	30	AM10410666	D	Zakynthos	LOCAL
28	7	AM10410777	B	Rome	ABROAD
29	7	AM10410777	B	Milan	ABROAD
30	7	AM10410777	B	Berlin	ABROAD

Στα trips 28-30 βλέπουμε ότι ο μέγιστος αριθμός θέσεων είναι 7 και οι οδηγός για αυτά τα ταξίδια έχει δίπλωμα τύπου B.

• Δραστηριότητες (Events)

Κάθε trip μπορεί να περιλαμβάνει ένα ή περισσότερα events.

Παράδειγμα trip με ένα event.

tr_id	tr_br_code	dst_id	dst_name	ev_descr
1		1	Santorini	Mpanio stin Kokkini Paralia.

Παράδειγμα trip με δύο events.

tr_id	tr_br_code	dst_id	dst_name	ev_descr
7	2	4	Zakynthos	Tour sto Nauagio kai sto Turtle Island.
7	2	4	Zakynthos	Volta stin Xwra.

Φυσικά έχουμε φροντίσει όλες οι ώρες αποχώρησης και άφιξη να βγάζουν νόημα.

Για παράδειγμα στο trip 26 στην Πάρο.

tr_id	tr_departure	to_arrival	ev_start	ev_end	to_departure	tr_return
26	2022-10-20 14:30:00	2022-10-20 23:30:00	2022-10-23 12:30:00	2022-10-23 14:30:00	2022-10-27 12:00:00	2022-10-27 21:00:00

tr_id	dst_name	ev_descr
26	Paros	Volta stin Naousa.

Βλέπουμε ότι το ταξίδι ξεκινάει στις 20/10, 14:30 και η ώρα άφιξης είναι στις 23:30. Η ημερομηνία έναρξης της προγραμματισμένης βόλτας στην Νάουσα είναι 23/10 από τις 12:30 μέχρι τις 14:30.

Τέλος η αποχώρηση από το νησί γίνεται στις 27/10 12:00 και οι πελάτες επιστρέφουν στα σπίτια τους στις 21:00. Συνολικά δηλαδή το ταξίδι κράτησε 7 μέρες αν δεν μετρήσουμε την μέρα της επιστροφής.

• Κρατήσεις (Reservations)

Όσον αφορά τις κρατήσεις έχουμε κάνει τρείς κρατήσεις για κάθε ταξίδι. Στις οποίες σιγουρευτήκαμε να συμπεριλάβουμε και ADULTS και MINORS.

Για παράδειγμα βλέπουμε τις πρώτες 9 κρατήσεις παρακάτω.

res_tr_id	res_seatnum	res_name	res_lname	res_isadult
1	12	Apollon	Savvidis	ADULT
1	13	Nikolas	Papadakis	ADULT
1	20	Iris	Agelopoulou	ADULT
2	15	Kyriakos	Akritidis	ADULT
2	20	Leonidas	Papakonstantinou	ADULT
2	24	Iasonas	Agelopoulos	ADULT
3	9	Thanos	Makris	MINOR
3	10	Maria	Makri	ADULT
3	55	Atticus	Makris	ADULT

Νέοι Πίνακες

Φτιάχνουμε τον πίνακα it_admin που έχει τέσσερα πεδία και τον χρειαζόμαστε για το GUI και για να αναπαραστήσουμε έναν υπεύθυνο πληροφορικής (IT) ενός πρακτορείου. Την βάση δεδομένων την χειρίζεται ένας από τους υπεύθυνους πληροφορικής (IT) του πρακτορείου. Είναι worker, και έχει μοναδικό κλειδί το it_at (char(10)) το οποίο είναι ξένο κλειδί στο worker.wrk_AT. Επίσης έχει ένα κωδικό 10 χαρακτήρων με default τιμή 'password' με τον οποίο θα κάνουμε login στην βάση μέσω του GUI, ημερομηνία (start_date) που ανέλαβε τον ρόλο αυτόν η οποία είναι not null. Επίσης υπάρχει end_date ημερομηνία για όσους it_admins έχουν φύγει από το πρακτορείο.

Κάθε φορά που κάνουμε insert σε αυτόν τον πίνακα πρέπει να καλέσουμε την stored procedure create_user() ή create_select_user() (ανάλογα με τα δικαιώματα που θέλουμε να του δώσουμε), για να δημιουργηθεί ένας user στην βάση με τα στοιχεία του καινούριου it_admin. Η υλοποίηση των procedures εξηγείται στο κεφάλαιο 2.

```
DROP TABLE IF EXISTS it_admin;
create table it_admin(
    it_at CHAR(10) NOT NULL,
    it_password CHAR(10) not null default 'password',
    it_start_date datetime not null,
    it_end_date datetime null,
    primary key(it_at),
    constraint ITADMWORK foreign key(it_at)
    references worker(wrk_AT)
    on delete cascade on update cascade
);
```

Offers:

Ο πίνακας offers έχει πέντε πεδία και τον χρειαζόμαστε για να υπάρχει η δυνατότητα να καταχωρούνται προσφορές ταξιδιών. Το πρώτο πεδίο είναι ο κωδικός της προσφοράς ο οποίος είναι μοναδικός. Το δεύτερο και τρίτο πεδίο είναι η περίοδος που μπορεί να πραγματοποιηθεί ένα ταξίδι (δεν προσδιορίζει την διάρκεια του ταξιδιού αλλά το διάστημα που είναι δυνατόν να πραγματοποιηθεί). Το τέταρτο πεδίο είναι το κόστος ανά άτομο και το πέμπτο πεδίο είναι ο κωδικός του προορισμού(dst_id) ο οποίος είναι ξένο κλειδί στο destination.dst_id.

```

DROP TABLE IF EXISTS offers;
create table offers(
offer_id int(11) AUTO_INCREMENT,
offer_trip_start_date datetime not null,
offer_trip_end_date datetime not null,
Price_per_Person int(6),
offer_dst_id int(11) ,
primary key(offer_id),
constraint DSTOFFERS foreign key(offer_dst_id)
references destination(dst_id)
on delete cascade on update cascade
);

```

Reservation Offers:

Ο πίνακας reservation_offers έχει πέντε πεδία και αναπαριστά τις κρατήσεις στις προσφορές ταξιδιών. Το πρώτο πεδίο είναι ο κωδικός κράτησης ο οποίος είναι μοναδικός. Το δεύτερο και τρίτο πεδίο είναι το όνομα και επώνυμο του πελάτη. Το τέταρτο πεδίο είναι το ποσό προκαταβολής και το πέμπτο πεδίο είναι ο κωδικός προσφοράς ταξιδιού ο οποίος είναι ξένο κλειδί στο offers.offer_id. Με τους δύο πίνακες offers και reservation_offers το ταξιδιωτικό πρακτορείο σχεδιάζει μελλοντικές εκδρομές.

```

DROP TABLE IF EXISTS reservation_offers;
create table reservation_offers(
rsv_id int(11) AUTO_INCREMENT,
rsv_name varchar(20) not null default 'unknown',
rsv_lastname varchar(20) not null default 'unknown' ,
deposit_amount int(11),
rsv_offer_id int(11) ,
primary key(rsv_id),
constraint RSVOFFE foreign key(rsv_offer_id)
references offers(offer_id)
on delete cascade on update cascade
);

```

Log Tables:

Για να μπορούμε να κρατάμε ιστορικό των αλλαγών που εκτελούμε στους πίνακες trip, reservation, event, travel_to και destination δημιουργήσαμε αντίστοιχα τους πίνακες **log_trip**, **log_reservation**, **log_travel_to** και **log_destination**. Όλοι οι πίνακες περιλαμβάνουν τα πεδία: log_type τύπου ENUM, που αναπαριστά το είδος της δράσης που εκτελέστηκε, log_it_lname, που αναπαριστά το username του it_admin που έκανε την δράση και log_timestamp, που δείχνει την ώρα που έγινε η δράση. Η διαφορά των πινάκων βρίσκεται στα υπόλοιπα πεδία, τα οποία ταυτίζονται με τα πεδία του πίνακα στον οποίο αναφέρονται. Έτσι μπορούμε να αποθηκεύουμε τις τιμές που είχε ο πίνακας πριν κάνουμε UPDATE ή DELETE και τις καινούριες τιμές όταν κάνουμε INSERT.

Για παράδειγμα μπορούμε να δούμε τα πεδία του πίνακας log_trip:

```
DROP TABLE IF EXISTS log_trip;
CREATE TABLE log_trip (
    log_type ENUM('INSERT', 'UPDATE', 'DELETE') NOT NULL,
    log_it_lname VARCHAR(20) DEFAULT 'unknown' NOT NULL,
    log_timestamp DATETIME NOT NULL,
    log_tr_id int(11) not null,
    log_tr_departure datetime not null,
    log_tr_return datetime not null,
    log_tr_maxseats tinyint(4),
    log_tr_cost float(7,2) not null,
    log_tr_br_code int(11) not null,
    log_tr_gui_AT char(10),
    log_tr_drv_AT char(10) not null
);
```

Φυσικά η εισαγωγή εγγραφών στους πίνακες log, γίνεται με χρήση triggers, κάτι που εξηγείται αναλυτικά στο κεφάλαιο 3.

Κώδικας CREATE-INSERT

```
DROP TABLE IF EXISTS branch;
CREATE TABLE branch (
    br_code INT(11) NOT NULL AUTO_INCREMENT ,
    br_street VARCHAR(30) DEFAULT 'unknown' NOT NULL,
    br_num INT(4) DEFAULT 0 NOT NULL,
    br_city VARCHAR(30) DEFAULT 'unknown' NOT NULL,
    PRIMARY KEY (br_code)
) ;

DROP TABLE IF EXISTS phones;
CREATE TABLE phones (
    ph_br_code INT(11) NOT NULL ,
    ph_number CHAR(10) DEFAULT 'unknown' NOT NULL,
    PRIMARY KEY (ph_br_code , ph_number),
    CONSTRAINT branch_Phone FOREIGN KEY (ph_br_code) REFERENCES branch(br_code)
    ON DELETE CASCADE ON UPDATE CASCADE
) ;

DROP TABLE IF EXISTS worker;
CREATE TABLE worker (
    wrk_AT CHAR(10) NOT NULL ,
    wrk_name VARCHAR(20) DEFAULT 'unknown' NOT NULL,
    wrk_lname VARCHAR(20) DEFAULT 'unknown' NOT NULL,
```

```

wrk_salary float(7,2) DEFAULT 0 NOT NULL,
wrk_br_code Int(11) NOT NULL,
PRIMARY KEY (wrk_AT),
CONSTRAINT branch_Worker FOREIGN KEY (wrk_br_code) REFERENCES branch(br_code)
ON DELETE CASCADE ON UPDATE CASCADE
) ;

DROP TABLE IF EXISTS driver;
CREATE TABLE driver (
    drv_AT CHAR(10) NOT NULL,
    drv_license ENUM('A','B', 'C' , 'D') NOT NULL,
    drv_route ENUM('LOCAL','ABROAD') NOT NULL,
    drv_experience TINYINT(4) DEFAULT 0 NOT NULL ,
    PRIMARY KEY (drv_AT),
    CONSTRAINT Worker_Driver FOREIGN KEY (drv_AT) REFERENCES worker(wrk_AT)
    ON DELETE CASCADE ON UPDATE CASCADE
) ;

DROP TABLE IF EXISTS guide;
CREATE TABLE guide (
    gui_AT CHAR(10) NOT NULL,
    gui_cv TEXT NOT NULL,
    PRIMARY KEY (gui_AT),
    CONSTRAINT Worker_Guide FOREIGN KEY (gui_AT) REFERENCES worker(wrk_AT)
    ON DELETE CASCADE ON UPDATE CASCADE
);

DROP TABLE IF EXISTS languages;
CREATE TABLE languages (
    lng_gui_AT CHAR(10) NOT NULL,
    lng_language varchar(30),
    PRIMARY KEY (lng_gui_AT , lng_language),
    CONSTRAINT Guide_Languages FOREIGN KEY (lng_gui_AT) REFERENCES guide( gui_AT)
    ON DELETE CASCADE ON UPDATE CASCADE
) ;

DROP TABLE IF EXISTS admin;
CREATE TABLE admin (
    adm_AT CHAR(10) NOT NULL,
    adm_type ENUM('LOGISTICS' , 'ADMINISTRATIVE', 'ACCOUNTING') NOT NULL ,
    adm_diploma VARCHAR(200) DEFAULT 'unknown' NOT NULL,
    PRIMARY KEY (adm_AT),
    CONSTRAINT Worker_admin FOREIGN KEY (adm_AT) REFERENCES worker(wrk_AT)
    ON DELETE CASCADE ON UPDATE CASCADE
) ;

DROP TABLE IF EXISTS manages;

```

```

CREATE TABLE manages (
    mng_adm_AT CHAR(10) NOT NULL,
    mng_br_code INT(11) NOT NULL,
    PRIMARY KEY (mng_adm_AT , mng_br_code),
    CONSTRAINT Admin_Managers FOREIGN KEY (mng_adm_AT) REFERENCES admin(adm_AT)
    ON DELETE CASCADE ON UPDATE CASCADE,
    CONSTRAINT Branch_Managers FOREIGN KEY (mng_br_code) REFERENCES branch(br_code)
    ON DELETE CASCADE ON UPDATE CASCADE
);

DROP TABLE IF EXISTS trip;
create table trip (
    tr_id int(11) not null auto_increment,
    tr_departure datetime not null,
    tr_return datetime not null,
    tr_maxseats tinyint(4),
    tr_cost float(7,2) not null default 0,
    tr_br_code int(11) not null,
    tr_gui_AT char(10),
    tr_drv_AT char(10) not null,

    primary key(tr_id),
    constraint BRCH
    foreign key(tr_br_code)
    references branch(br_code)
    on delete cascade on update cascade,

    constraint DRVR
    foreign key(tr_drv_AT)
    references driver(drv_AT)
    on delete cascade on update cascade,

    constraint GUID
    foreign key(tr_gui_AT)
    references guide(gui_AT)
    on delete cascade on update cascade
);

DROP TABLE IF EXISTS event;
create table event(
    ev_tr_id int(11),
    ev_start datetime not null,
    ev_end datetime not null,
    ev_descr text,

    primary key(ev_tr_id, ev_start),
    constraint TRIP
    foreign key(ev_tr_id)

```

```

references trip(tr_id)
on delete cascade
on update cascade
);

DROP TABLE IF EXISTS destination;
create table destination(
dst_id int(11) auto_increment ,
dst_name varchar(50) not null,
dst_dscr text,
dst_rtype enum('LOCAL', 'ABROAD') not null,
dst_language varchar(30) not null,
dst_location int(11) ,

primary key(dst_id),
constraint LOC
foreign key(dst_location)
references destination(dst_id)
on delete cascade
on update cascade
);

DROP TABLE IF EXISTS travel_to;
create table travel_to(
to_tr_id int(11),
to_dst_id int(11),
to_arrival datetime,
to_departure datetime,

primary key(to_tr_id, to_dst_id),
constraint TRP
foreign key(to_tr_id)
references trip(tr_id)
on delete cascade on update cascade,

constraint DEST
foreign key(to_dst_id)
references destination(dst_id)
on delete cascade on update cascade
);

DROP TABLE IF EXISTS reservation;
create table reservation(
res_tr_id int(11),
res_seatnum tinyint(4) not null,
res_name varchar(20) not null default 'unknown',
res_lname varchar(20) not null default 'unknown',

```

```

res_isadult enum('ADULT','MINOR') not null,
primary key(res_tr_id, res_seatnum),
constraint TR
foreign key(res_tr_id)
references trip(tr_id)
on delete cascade on update cascade
);

DROP TABLE IF EXISTS it_admin;
create table it_admin(
it_at CHAR(10) NOT NULL,
it_password CHAR(10) not null default 'password',
it_start_date datetime not null,
it_end_date datetime null,
primary key(it_at),
constraint ITADMWORK foreign key(it_at)
references worker(wrk_AT)
on delete cascade on update cascade
);

DROP TABLE IF EXISTS log_trip;
CREATE TABLE log_trip (
log_type ENUM('INSERT', 'UPDATE', 'DELETE') NOT NULL,
log_it_lname VARCHAR(20) DEFAULT 'unknown' NOT NULL,
log_timestamp DATETIME NOT NULL,
log_tr_id int(11) not null,
log_tr_departure datetime not null,
log_tr_return datetime not null,
log_tr_maxseats tinyint(4),
log_tr_cost float(7,2) not null,
log_tr_br_code int(11) not null,
log_tr_gui_AT char(10),
log_tr_drv_AT char(10) not null
);

DROP TABLE IF EXISTS log_reservation;
CREATE TABLE log_reservation(
log_type ENUM('INSERT', 'UPDATE', 'DELETE') NOT NULL,
log_it_lname VARCHAR(20) DEFAULT 'unknown' NOT NULL,
log_timestamp DATETIME NOT NULL,
log_res_tr_id INT(11),
log_res_seatnum TINYINT(4) NOT NULL,
log_res_name VARCHAR(20) NOT NULL,
log_res_lname VARCHAR(20) NOT NULL,
log_res_isadult enum('ADULT','MINOR') NOT NULL
);

```

```

DROP TABLE IF EXISTS log_event;
CREATE TABLE log_event(
log_type ENUM('INSERT', 'UPDATE', 'DELETE') NOT NULL,
log_it_lname VARCHAR(20) DEFAULT 'unknown' NOT NULL,
log_timestamp DATETIME NOT NULL,
log_ev_tr_id INT(11),
log_ev_start DATETIME NOT NULL,
log_ev_end DATETIME NOT NULL,
log_ev_descr TEXT
);

DROP TABLE IF EXISTS log_travel_to;
CREATE TABLE log_travel_to(
log_type ENUM('INSERT', 'UPDATE', 'DELETE') NOT NULL,
log_it_lname VARCHAR(20) DEFAULT 'unknown' NOT NULL,
log_timestamp DATETIME NOT NULL,
log_to_tr_id INT(11),
log_to_dst_id INT(11),
log_to_arrival DATETIME,
log_to_departure DATETIME
);

DROP TABLE IF EXISTS log_destination;
CREATE TABLE log_destination(
log_type ENUM('INSERT', 'UPDATE', 'DELETE') NOT NULL,
log_it_lname VARCHAR(20) DEFAULT 'unknown' NOT NULL,
log_timestamp DATETIME NOT NULL,
log_dst_id INT(11),
log_dst_name VARCHAR(50) NOT NULL,
log_dst_dscr TEXT,
log_dst_rtype enum('LOCAL', 'ABROAD') NOT NULL,
log_dst_language varchar(30) NOT NULL,
log_dst_location INT(11)
);

DROP TABLE IF EXISTS offers;
create table offers(
offer_id int(11) AUTO_INCREMENT,
offer_trip_start_date datetime not null,
offer_trip_end_date datetime not null,
Price_per_Person int(6),
offer_dst_id int(11) ,
primary key(offer_id),
constraint DSTOFFERS foreign key(offer_dst_id)
references destination(dst_id)
on delete cascade on update cascade

```

```

);

DROP TABLE IF EXISTS reservation_offers;
create table reservation_offers(
rsv_id int(11) AUTO_INCREMENT,
rsv_name varchar(20) not null default 'unknown',
rsv_lastname varchar(20) not null default 'unknown' ,
deposit_amount int(11),
rsv_offer_id int(11) ,
primary key(rsv_id),
constraint RSVOFFE foreign key(rsv_offer_id)
references offers(offer_id)
on delete cascade on update cascade
);

/*Insert*/

INSERT INTO branch VALUES
(null , 'Kifisia ', 355 , 'Athens'),
(null , 'Amarisias Artemidos' , 5 , 'Athens'),
(null , 'Mezonos', 44 , 'Patra'),
(null , 'Aristomenous' , 5 , 'Kalamata'),
(null , 'Tsimiskh' , 55 , 'Thesalonikh');

INSERT INTO phones VALUES
(1 , '2101111111'),
(1 , '2101222222'),
(2 , '2102222222'),
(2 , '2102333333'),
(3 , '2103333333'),
(4 , '2104444444'),
(5 , '2105555555');

INSERT INTO worker VALUES
('AK10311111' , 'Giannhs' , 'Vasiliou' , '1547.55' ,1),
('AK10322222' , 'Artemis' , 'Papadopoulou' , '1800.34',1),
('AK10333333' , 'Georgia' , 'Makri' , '2000',1),
('AK10344444' , 'Greg' , 'Stephanopoulos' , '1600',2),
('AK10355555' , 'Iason' , 'Raikos' , '1800.99',2),
('AK10366666' , 'Maria' , 'Papadopoulou' , '2000',2),
('AK10377777' , 'Orestis' , 'Makris' , '1600.69',3),
('AK10388888' , 'Damianos' , 'Papadopoulos' , '1500',3),
('AK10399999' , 'Iris' , 'Oikonomou' , '1400.55',3),
('AK10310000' , 'John' , 'Politis' , '1400.55',4 ),
('AK10310111' , 'Alkis' , 'Eleftheriadis' , '1200.35',4 ),
('AK10310222' , 'Andreas' , 'Georgiou' , '1000.21',4),
('AK10310333' , 'Giannhs' , 'Stathopoulos' , '1900.56',5),

```

```
( 'AK10310444' , 'Sofia' , 'Politi', '1400.86',5),
( 'AK10310555' , 'Nikos' , 'Vasiliou', '1600.96',5),
( 'AM10410000' , 'Antonis' , 'Kokinos','1000',1),
( 'AM10410111' , 'Antonis' , 'Eleftheriadis','1100',1),
( 'AM10410222' , 'Nora' , 'Raikou','750',2),
( 'AM10410333' , 'John' , 'Oikonomou','1150',2),
( 'AM10410444' , 'Dimitrios' , 'Gongas','1500',3),
( 'AM10410555' , 'Fotios' , 'Patrios','1400',4),
( 'AM10410666' , 'Maria' , 'Papadopoulou','1000',5),
( 'AM10410777' , 'Andreas' , 'Makris','750',5),
( 'AN10520010' , 'Damianos' , 'Diasakos','1200',1),
( 'AN10520020' , 'Greg' , 'Delimpaltadakis','1000',2),
( 'AN10520030' , 'Orestis' , 'Delimpaltadakis','1000',2),
( 'AN10520040' , 'Iason' , 'Makris','1200',3),
( 'AN10520050' , 'Orestis' , 'Diasakos','1000',4),
( 'AN10520060' , 'Damianos' , 'Delimpaltadakis','1200',5);
```

INSERT INTO admin VALUES

```
( 'AK10311111' , 'LOGISTICS' , 'Dimploma: Logistics Athens School of Business'),
( 'AK10322222' , 'ACCOUNTING' , 'Dimploma: Accounting Athens School of Business'),
( 'AK10333333' , 'ADMINISTRATIVE' , 'Dimploma: Economics and Business Administration
Athens School of Business'),
( 'AK10344444' , 'LOGISTICS' , 'Dimploma: Economics Ioannina School of Busine'),
( 'AK10355555' , 'ACCOUNTING' , 'Dimploma: Economics Thesalonikh School of Business'),
( 'AK10366666' , 'ADMINISTRATIVE' , 'Dimploma: Tour Guide EKPA'),
( 'AK10377777' , 'ADMINISTRATIVE' , 'Dimploma: Tour Guide Patra School of Business'),
( 'AK10388888' , 'ACCOUNTING' , 'Dimploma: Mathematics Thesalonikh APTH'),
( 'AK10399999' , 'LOGISTICS' , 'Dimploma: Volos Logistics School of Busines'),
( 'AK10310000' , 'ADMINISTRATIVE' , 'Dimploma: Business Administration Patra School of
Business'),
( 'AK10310111' , 'ACCOUNTING' , 'Dimploma: Lamia School of Busines'),
( 'AK10310222' , 'LOGISTICS' , 'Dimploma: Mathematics Athens School of Business'),
( 'AK10310333' , 'ADMINISTRATIVE' , 'Dimploma: Economics and Business Administration
Lamia School of Business'),
( 'AK10310444' , 'LOGISTICS' , 'Dimploma: Physics Thesalonikh'),
( 'AK10310555' , 'ACCOUNTING' , 'Dimploma: 53 Lykio Thesalonikhs');
```

INSERT INTO manages VALUES

```
( 'AK10311111' , 1),
( 'AK10322222' , 1),
( 'AK10333333' , 1),
( 'AK10344444' , 2),
( 'AK10355555' , 2),
( 'AK10366666' , 2),
( 'AK10377777' , 3),
( 'AK10388888' , 3),
( 'AK10399999' , 3),
```

```

('AK10310000' , 4),
('AK10310111' , 4),
('AK10310222' , 4),
('AK10310333' , 5),
('AK10310444' , 5),
('AK10310555' , 5);

insert into driver values
('AM10410000','D','LOCAL',9),
('AM10410111','D','ABROAD',10),
('AM10410222','D','LOCAL',7),
('AM10410333','D','ABROAD',11),
('AM10410444','D','LOCAL',20),
('AM10410555','D','LOCAL',15),
('AM10410666','D','LOCAL',8),
('AM10410777','B','ABROAD',3);

insert into guide values
('AK10311111', 'Employment History:\n\t\t1997 - 2000 Accountant at Logistiko Gafeio
 "H Lysi"
\n\t\t2000 - 2010 Travel Guide at "Joy Tours"'),
('AN10520010', 'Employment History:\n\t\t1999 - 2005 Travel Guide at "Pimenidis
Travel"'),
('AN10520020', 'Employment History:\n\t\t1995 - 2002 Travel Guide at "TEMPI HOLIDAY"
\n\t\t2002 - 2011 Travel Guide at "KAVVADIAS TOURS"
\n\t\t2011 - 2017 Travel Guide at "ART TOURS"'),
('AN10520030', 'Employment History:\n\t\t2005 - 2016 Travel Guide at "DIOTOURS N.G &
RED ELEPHANT"'),
('AN10520040', 'Employment History:\n\t\t2001 - 2019 Travel Guide at "Rania TOURS"'),
('AN10520050', 'Employment History:\n\t\t1990 - 2002 Travel Guide at "Penguin Travel
Tours"'),
('AK10310444', 'Employment History:\n\t\t1999 - 2006 Accountant at "PANIDIS PAYLOS
LOGISTIKO GRAFEIO"
\n\t\t2010 - 2018 Travel Guide at "Herodotus TOURS"'),
('AN10520060', 'Employment History:\n\t\t1989 - 1999 Travel Guide at "Mazi Travel &
Events"
\n\t\t2000 - 2010 Travel Guide at "Prima Holidays"');

insert into languages values
('AK10311111','Greek,English,French'),
('AN10520010','Greek,English,French,Italian'),
('AN10520020','Greek,English,German'),
('AN10520030','Greek,German,French,Italian'),
('AN10520040','Greek,English,Italian'),
('AN10520050','Greek,English,German,Italian'),
('AK10310444','Greek,English'),
('AN10520060','Greek,English,German,Italian');

```

```

INSERT INTO trip VALUES
(null, '2022-03-05 15:30:00', '2022-03-08 12:30:00', 30, 300, 1, 'AK10311111',
'AM10410000'),
(null, '2022-03-10 15:00:00', '2022-03-16 17:00:00', 30, 500, 1, 'AK10311111',
'AM10410000'),
(null, '2022-04-15 17:30:00', '2022-04-17 01:30:00', 60, 1000.65, 1, 'AK10311111',
'AM10410000'),
(null, '2022-03-08 15:00:00', '2022-03-27 13:00:00', 20, 200.85, 1, 'AN10520010',
'AM10410111'),
(null, '2022-04-03 17:00:00', '2022-04-19 22:00:00', 30, 500.52, 1, 'AN10520010',
'AM10410111'),
(null, '2022-06-18 22:30:00', '2022-06-29 18:30:00', 30, 900, 1, 'AN10520010',
'AM10410111'),
(null, '2022-07-05 18:30:00', '2022-07-15 16:30:00', 70, 1500, 2, 'AN10520020',
'AM10410222'),
(null, '2022-07-18 18:30:00', '2022-07-19 22:00:00', 30, 800, 2, 'AN10520020',
'AM10410222'),
(null, '2022-08-02 15:30:00', '2022-08-03 21:30:00', 30, 300, 2, 'AN10520020',
'AM10410222'),
(null, '2022-07-12 16:00:00', '2022-07-29 19:30:00', 30, 2000, 2, 'AN10520030',
'AM10410333'),
(null, '2022-08-10 18:30:00', '2022-08-23 19:00:00', 50, 100, 2, 'AN10520030',
'AM10410333'),
(null, '2022-09-09 18:30:00', '2022-09-26 12:00:00', 30, 700.88, 2, 'AN10520030',
'AM10410333'),
(null, '2022-01-05 13:30:00', '2022-01-21 03:30:00', 20, 1600, 3, 'AN10520040',
'AM10410444'),
(null, '2022-01-22 17:30:00', '2022-01-24 20:00:00', 30, 560, 3, 'AN10520040',
'AM10410444'),
(null, '2022-02-13 19:30:00', '2022-02-24 08:00:00', 30, 300.99, 3, 'AN10520040',
'AM10410444'),
(null, '2022-03-17 18:30:00', '2022-03-18 21:30:00', 60, 890, 3, 'AN10520040',
'AM10410444'),
(null, '2022-03-20 16:30:00', '2022-03-27 15:30:00', 30, 230, 3, 'AN10520040',
'AM10410444'),
(null, '2022-04-24 19:00:00', '2022-04-28 21:30:00', 45, 670, 3, 'AN10520040',
'AM10410444'),
(null, '2022-06-18 19:30:00', '2022-06-22 21:30:00', 30, 300, 4, 'AN10520050',
'AM10410555'),
(null, '2022-06-23 17:30:00', '2022-06-30 18:00:00', 30, 600, 4, 'AN10520050',
'AM10410555'),
(null, '2022-07-23 12:45:00', '2022-07-28 22:45:00', 100, 2030.45, 4, 'AN10520050',
'AM10410555'),
(null, '2022-08-08 08:30:00', '2022-08-10 19:30:00', 30, 380, 4, 'AN10520050',
'AM10410555'),

```

```

(null, '2022-09-14 18:00:00', '2022-09-26 10:45:00', 80, 3500, 4, 'AN10520050',
'AM10410555'),
(null, '2022-10-08 16:30:00', '2022-10-09 22:00:00', 30, 360.32, 4, 'AN10520050',
'AM10410555'),
(null, '2022-08-18 05:30:00', '2022-08-22 21:00:00', 20, 9000.74, 5, 'AK10310444',
'AM10410666'),
(null, '2022-10-20 14:30:00', '2022-10-27 21:00:00', 90, 1800.23, 5, 'AK10310444',
'AM10410666'),
(null, '2022-11-11 15:15:00', '2022-11-26 21:00:00', 30, 800, 5, 'AK10310444',
'AM10410666'),
(null, '2022-12-05 12:30:00', '2022-12-21 20:30:00', 7, 3400, 5, 'AN10520060',
'AM10410777'),
(null, '2023-02-17 19:45:00', '2023-02-26 18:00:00', 7, 3900.43, 5, 'AN10520060',
'AM10410777'),
(null, '2023-06-12 18:30:00', '2023-06-29 10:30:00', 7, 700, 5, 'AN10520060',
'AM10410777');

INSERT INTO destination VALUES
(null, 'Santorini', 'The awesome island of Santorini with the magnificent volcano.', 'LOCAL', 'Greek', null),
(null, 'Mykonos', 'The awesome island of Mykonos with the magnificent windmills.', 'LOCAL', 'Greek', null),
(null, 'Paros', 'The awesome island of Paros with the magnificent seas.', 'LOCAL', 'Greek', null),
(null, 'Zakynthos', 'The awesome island of Zakynthos with the magnificent night clubs.', 'LOCAL', 'Greek', null),
(null, 'Kalavryta', 'The awesome village of Kalavryta with the magnificent mountains.', 'LOCAL', 'Greek', null),
(null, 'Kalavryta ski resort', 'The awesome ski resort of Kalavryta is perfect to have fun.', 'LOCAL', 'Greek', 5),
(null, 'Arachova', 'The awesome village of Arachova with the magnificent trees.', 'LOCAL', 'Greek', null),
(null, 'Parnassos', 'The awesome mountain Parnassos with the magnificent cliffs.', 'LOCAL', 'Greek', 7),
(null, 'Heraklion', 'The awesome island of Crete with the magnificent Heraklion.', 'LOCAL', 'Greek', null),
(null, 'Mani', 'The awesome Peloponnese with the magnificent Mani.', 'LOCAL', 'Greek', null),
(null, 'Rhodes', 'The awesome island of Rhodes with the biggest water park in Europe.', 'LOCAL', 'Greek', null),
(null, 'Nafpaktos', 'The awesome Nafpaktos with the magnificent buildings.', 'LOCAL', 'Greek', null),
(null, 'Ano Hora', 'The awesome village of Ano Hora near Nafpaktos with the magnificent view.', 'LOCAL', 'Greek', 12),
(null, 'London', 'The capital of Great Britain with the magnificent Big Ben.', 'ABROAD', 'English', null),

```

```

(null, 'Paris', 'The capital of France with the magnificent Eiffel Tower.', 'ABROAD',
'French', null),
(null, 'Rome', 'The capital of Italy with the magnificent Colosseum.', 'ABROAD',
'Italian', null),
(null, 'Milan', 'A city of Italy with the magnificent cathedral.', 'ABROAD',
'Italian', null),
(null, 'Berlin', 'The capital of Germany with the magnificent Reichstag.', 'ABROAD',
'German', null);

INSERT INTO travel_to VALUES
(1, 1, '2022-03-05 22:00:00', '2022-03-08 06:00:00'),
(2, 2, '2022-03-10 20:00:00', '2022-03-16 12:00:00'),
(3, 3, '2022-04-15 21:00:00', '2022-04-16 22:00:00'),
(4, 14, '2022-03-15 12:00:00', '2022-03-20 16:00:00'),
(5, 15, '2022-04-07 21:30:00', '2022-04-15 17:30:00'),
(6, 16, '2022-06-21 18:00:00', '2022-06-26 23:00:00'),
(7, 4, '2022-07-05 22:00:00', '2022-07-15 13:00:00'),
(8, 5, '2022-07-18 20:30:00', '2022-07-19 12:00:00'),
(8, 6, '2022-07-19 13:00:00', '2022-07-19 20:00:00'),
(9, 7, '2022-08-02 17:00:00', '2022-08-03 12:00:00'),
(9, 8, '2022-08-03 13:00:00', '2022-08-03 20:00:00'),
(10, 17, '2022-07-15 18:00:00', '2022-07-26 17:30:00'),
(11, 18, '2022-08-13 23:30:00', '2022-08-20 14:00:00'),
(12, 15, '2022-09-13 15:30:00', '2022-09-22 15:00:00'),
(13, 9, '2022-01-05 22:00:00', '2022-01-20 19:00:00'),
(14, 10, '2022-01-22 20:30:00', '2022-01-24 17:00:00'),
(15, 11, '2022-02-14 12:30:00', '2022-02-23 15:00:00'),
(16, 12, '2022-03-17 20:00:00', '2022-03-18 15:00:00'),
(16, 13, '2022-03-18 16:00:00', '2022-03-18 20:00:00'),
(17, 1, '2022-03-20 21:00:00', '2022-03-27 11:00:00'),
(18, 2, '2022-04-24 22:30:00', '2022-04-28 18:00:00'),
(19, 3, '2022-06-18 23:30:00', '2022-06-22 17:30:00'),
(20, 4, '2022-06-23 22:30:00', '2022-06-30 13:00:00'),
(21, 9, '2022-07-23 22:45:00', '2022-07-28 12:45:00'),
(22, 10, '2022-08-08 12:00:00', '2022-08-10 16:00:00'),
(23, 11, '2022-09-14 23:45:00', '2022-09-26 05:00:00'),
(24, 5, '2022-10-08 19:30:00', '2022-10-09 19:00:00'),
(25, 7, '2022-08-18 11:30:00', '2022-08-22 15:00:00'),
(26, 3, '2022-10-20 23:30:00', '2022-10-27 12:00:00'),
(27, 4, '2022-11-11 21:15:00', '2022-11-26 15:00:00'),
(28, 16, '2022-12-08 17:00:00', '2022-12-18 16:00:00'),
(29, 17, '2023-02-20 19:45:00', '2023-02-26 18:00:00'),
(30, 18, '2023-06-16 15:00:00', '2023-06-25 14:00:00');

INSERT INTO event VALUES
(1, '2022-03-06 10:00:00', '2022-03-06 14:00:00', 'Mpanio stin Kokkini Paralia.'),
```

```

(2, '2022-03-11 09:00:00', '2022-03-11 13:00:00', 'Mpanio stin paralia Platys
Gualos.'),
(3, '2022-04-16 15:00:00', '2022-04-16 19:00:00', 'Volta stin Naousa.'),
(4, '2022-03-16 14:00:00', '2022-03-16 18:00:00', 'Episkepsi sto Bretaniko Mouseio.'),
(5, '2022-04-08 18:00:00', '2022-04-08 20:00:00', 'Episkepsi ston Pyrgo tou Eiffel.'),
(6, '2022-06-22 11:00:00', '2022-06-22 15:00:00', 'Episkepsi sto Kolossaio.'),
(7, '2022-07-07 10:00:00', '2022-07-07 14:00:00', 'Tour sto Nauagio kai sto Turtle
Island.'),
(7, '2022-07-08 17:00:00', '2022-07-08 22:00:00', 'Volta stin Xwra.'),
(8, '2022-07-18 21:00:00', '2022-07-18 00:00:00', 'Deipno stin taverna "O Elatos".'),
(8, '2022-07-19 13:00:00', '2022-07-19 19:00:00', 'Ski kai xalarwsi sto sale.'),
(9, '2022-08-02 18:00:00', '2022-08-02 22:00:00', 'Volta sto xwrio.'),
(9, '2022-08-03 13:00:00', '2022-08-03 19:00:00', 'Ski kai xalarwsi sto sale.'),
(10, '2022-07-16 12:00:00', '2022-07-16 16:00:00', 'Volta sto kentro tis polis.'),
(11, '2022-08-14 16:00:00', '2022-08-14 17:30:00', 'Episkepsi sto toixos tou
Berolinou.'),
(11, '2022-08-15 15:00:00', '2022-08-15 16:30:00', 'Episkepsi stin Pyli tou
Bradenvourgou.'),
(12, '2022-09-14 14:00:00', '2022-09-14 18:00:00', 'Episkepsi sto Loubro.'),
(13, '2022-01-07 17:30:00', '2022-01-07 20:00:00', 'Episkepsi sto Istoriko Mouseio Tis
Kritis.'),
(14, '2022-01-22 09:00:00', '2022-01-22 12:00:00', 'Episkepsi stin spilia Dirou.'),
(15, '2022-01-22 10:00:00', '2022-01-22 14:00:00', 'Episkepsi sto Water Park.'),
(16, '2022-03-18 11:00:00', '2022-03-18 13:30:00', 'Episkepsi sto kastro tis
Naupaktou.'),
(16, '2022-03-18 16:00:00', '2022-03-18 19:00:00', 'Pezoporia Ksenios-Agia Paraskeui-
Ksenios.'),
(17, '2022-03-23 13:00:00', '2022-03-23 16:00:00', 'Tour me barka kai episkepsi sto
ifaistio.'),
(18, '2022-04-27 14:30:00', '2022-04-27 15:30:00', 'Episkepsi stous anemomilous.'),
(19, '2022-06-19 14:00:00', '2022-06-19 19:30:00', 'Mpanio stin Santa Maria.'),
(20, '2022-06-28 14:00:00', '2022-06-28 19:00:00', 'Tour sto Nauagio kai sta Blue
Caves'),
(21, '2022-07-25 14:45:00', '2022-07-25 15:45:00', 'Episkepsi sto anaktoro ths
Knosou.'),
(22, '2022-08-09 12:00:00', '2022-08-09 16:00:00', 'Episkepsi sto Gytheio.'),
(23, '2022-09-22 20:00:00', '2022-09-22 22:00:00', 'Episkepsi sto kastro.'),
(24, '2022-10-09 12:00:00', '2022-10-09 14:00:00', 'Pezoporeia sta giro bouna.'),
(25, '2022-08-20 10:30:00', '2022-08-20 12:30:00', 'Pezoporeia sta giro bouna.'),
(26, '2022-10-23 12:30:00', '2022-10-23 14:30:00', 'Volta stin Naousa.'),
(27, '2022-11-22 15:15:00', '2022-11-22 18:15:00', 'Volta stin Xwra.'),
(28, '2022-12-16 13:00:00', '2022-12-16 15:00:00', 'Episkepsi sto Kolossaio.'),
(29, '2023-02-23 15:00:00', '2023-02-23 17:00:00', 'Episkepsi ston kentriko kathedriko
nao.'),
(30, '2023-06-16 20:00:00', '2023-06-16 22:00:00', 'Episkepsi sto Reichstag.');

```

INSERT INTO reservation VALUES

```

(1,20,'Iris','Agelopoulou', 'ADULT'),
(2,24,'Iasonas','Agelopoulos', 'ADULT'),
(3,55,'Atticus','Makris', 'ADULT'),
(4,27,'Theo','Papadopoulos', 'ADULT'),
(5,28,'Gregory','Diasakos', 'ADULT'),
(6,29,'Achilles','Tsaltakis', 'ADULT'),
(7,70,'Daphne','Leonth', 'ADULT'),
(8,22,'Vasilis','Makris', 'ADULT'),
(9,2,'Alkis','Manouras', 'ADULT'),
(10,1,'Orestis','Bouras', 'ADULT'),
(1,13,'Nikolas','Papadakis', 'ADULT'),
(2,20,'Leonidas','Papakonstantinou', 'ADULT'),
(3,10,'Maria','Makri', 'ADULT'),
(4,20,'Alexia','Papadopoulou', 'ADULT'),
(5,18,'Alexandra','Diasakou', 'ADULT'),
(6,20,'Kostantina','Tsaltakh', 'ADULT'),
(7,17,'Apostolis','Nikolopoulos', 'ADULT'),
(8,20,'Marina','Makri', 'ADULT'),
(9,8,'Marios','Pavlidis', 'ADULT'),
(10,10,'Fotini','Boura', 'ADULT'),
(1,12,'Apollon','Savvidis', 'ADULT'),
(2,15,'Kyriakos','Akritidis', 'ADULT'),
(3,9,'Thanos','Makris', 'MINOR'),
(4,6,'Ioannis','Papadopoulos', 'MINOR'),
(5,2,'Hercules','Diasakos', 'MINOR'),
(6,19,'Nektarios','Tsaltakis', 'MINOR'),
(7,67,'Ambrosia','Akritidou', 'ADULT'),
(8,28,'Stavroula','Makri', 'MINOR'),
(9,9,'Triantafylos','Stefanidis', 'ADULT'),
(10,8,'Cleopatra','Boura', 'MINOR'),
(11, 5, 'Giannis', 'Kokas', 'ADULT'),
(11, 6, 'Maria', 'Koka', 'ADULT'),
(11, 7, 'Alexandros', 'Kokas', 'MINOR'),
(12, 5, 'Thanasis', 'Alexiou', 'ADULT'),
(12, 6, 'Zoi', 'Likou', 'ADULT'),
(12, 7, 'Tzina', 'Pseutou', 'ADULT'),
(13, 5, 'Nikos', 'Kolas', 'ADULT'),
(13, 6, 'Eleni', 'Kappa', 'ADULT'),
(13, 7, 'Oresths', 'Kappa', 'MINOR'),
(14, 5, 'Andreas', 'Ntivakias', 'ADULT'),
(14, 6, 'Anastasia', 'Ntivakia', 'ADULT'),
(14, 7, 'Xara', 'Ntivakia', 'MINOR'),
(15, 5, 'Grigoris', 'Manifavas', 'MINOR'),
(15, 6, 'Kleanthi', 'Manifava', 'ADULT'),
(15, 7, 'Anastasia', 'Manifava', 'MINOR'),
(16, 5, 'Iason', 'Alexakhs', 'ADULT'),
(16, 6, 'Eleni', 'Alexakh', 'ADULT'),

```

```

(16, 7, 'Dimitris', 'Alexakhs', 'MINOR'),
(17, 5, 'Tzoulia', 'Alexandratou', 'ADULT'),
(17, 6, 'Alkhs', 'Alexandratos', 'ADULT'),
(17, 7, 'Manos', 'Manolos', 'ADULT'),
(18, 5, 'Giorgos', 'Georgiou', 'ADULT'),
(18, 6, 'Anakin', 'Skywalker', 'ADULT'),
(18, 7, 'Padme', 'Skywalker', 'ADULT'),
(19, 5, 'Damianos', 'Tate', 'ADULT'),
(19, 6, 'Roumpini', 'Tate', 'ADULT'),
(19, 7, 'Xarhs', 'Tate', 'MINOR'),
(20, 5, 'Apollonas', 'Prifths', 'ADULT'),
(20, 6, 'Marios', 'Prifths', 'ADULT'),
(20, 7, 'Platonas', 'Prifths', 'MINOR'),
(21, 13, 'Alexandros', 'Gkogkas', 'ADULT'),
(21, 14, 'Anastasia', 'Gkogkas', 'ADULT'),
(21, 15, 'Marios', 'Gkogas', 'MINOR'),
(22, 5, 'Marios', 'Skourlis', 'ADULT'),
(22, 6, 'Grigoris', 'Papadakis', 'ADULT'),
(22, 7, 'Giorgos', 'Papadopoulos', 'ADULT'),
(23, 9, 'Vasiliana', 'Konstantakopoulou', 'ADULT'),
(23, 10, 'Dimitris', 'Konstantakopoulos', 'ADULT'),
(23, 11, 'Asimakis', 'Konstantakopoulos', 'MINOR'),
(24, 30, 'Giannis', 'Koutsogiannis', 'ADULT'),
(24, 31, 'Panagiota', 'Koutsogianni', 'ADULT'),
(24, 32, 'Sofoklis', 'Koutsogiannis', 'MINOR'),
(25, 1, 'Grigoris', 'Aleksiou', 'MINOR'),
(25, 2, 'Vasiliki', 'Aleksiou', 'ADULT'),
(25, 3, 'Antreas', 'Aleksiou', 'MINOR'),
(26, 12, 'Konstantinos', 'Alexopoulos', 'ADULT'),
(26, 13, 'Eleni', 'Alexopoulou', 'ADULT'),
(26, 14, 'Dimitris', 'Alexopoulos', 'MINOR'),
(27, 12, 'Maria', 'Papaioannou', 'ADULT'),
(27, 13, 'Marios', 'Daskalakis', 'ADULT'),
(27, 14, 'Pantelis', 'Manolos', 'ADULT'),
(28, 2, 'Giorgos', 'Makris', 'ADULT'),
(28, 3, 'Grigoris', 'Lagaros', 'ADULT'),
(28, 4, 'Despoina', 'Aritzaki', 'ADULT'),
(29, 5, 'Orestis', 'Oikonomou', 'ADULT'),
(29, 6, 'Kalinikos', 'Oikonomou', 'ADULT'),
(29, 7, 'Dioni', 'Oikonomou', 'MINOR'),
(30, 1, 'Virginia', 'Papaderou', 'ADULT'),
(30, 2, 'Xara', 'Papaderou', 'ADULT'),
(30, 3, 'Konstantinos', 'Papaderos', 'MINOR');

```

```

INSERT INTO offers VALUES
(null , '2023-02-06 14:00:00' , '2023-02-18 22:00:00' , 400, '5'),
(null , '2023-04-06 07:00:00' , '2023-04-18 22:00:00' , 1200, '14'),

```

```

(null , '2023-08-06 07:00:00' , '2023-08-18 22:00:00' , 700, '1');

INSERT INTO worker VALUES
('AK12000001' , 'Artemis' , 'Padadimitriou','1500',1),
('AK12000002' , 'Maria' , 'Prodromou','1500',1),
('AK12000003' , 'John' , 'Stathopoulos','1500',1),
('AK12000004' , 'Andreas' , 'Vasiladiotis','1500',2),
('AK12000005' , 'Iason' , 'Raikos','1500',2),
('AK12000006' , 'Orestis' , 'Makris','1500',3),
('AK12000007' , 'Grigotis' , 'Delibaltadakis','1500',3),
('AK12000008' , 'Alexandros' , 'Alexandrou','1500',4),
('AK12000009' , 'Nikolas' , 'Karavlidis','1500',5),
('AK12000010' , 'Viki' , 'Aleksiou','1500',5);

INSERT INTO it_admin (it_at,it_start_date)VALUES
('AK12000001' , '2015-02-06 14:00:00'),
('AK12000002' , '2012-01-26 14:00:00'),
('AK12000004' , '2008-02-06 14:00:00'),
('AK12000010' , '2017-11-11 10:00:00');

INSERT INTO it_admin (it_at,it_password,it_start_date)VALUES
('AK12000003' , 'John' , '2010-02-06 14:00:00'),
('AK12000005' , '1234' , '2007-01-31 14:00:00'),
('AK12000006' , '1444' , '2019-03-06 12:00:00'),
('AK12000007' , 'ff' , '2012-05-06 10:00:00'),
('AK12000008' , 'AlexAlex' , '2010-09-06 10:00:00'),
('AK12000009' , 'Nik' , '2016-02-04 10:00:00');

call create_user('Padadimitriou','password');
call create_user('Prodromou','password');
call create_user('Stathopoulos','John');
call create_user('Vasiladiotis','password');
call create_user('Raikos','1234');
call create_user('Makris','1444');
call create_user('Delibaltadakis','ff');
call create_user('Alexandrou','AlexAlex');
call create_user('Karavlidis','Nik');
call create_user('Aleksiou','password');

```

Κεφάλαιο 2 - Stored Procedures

3.1.3.1

```
DROP PROCEDURE IF EXISTS insert_driver;
DELIMITER $
CREATE PROCEDURE insert_driver(IN AT char(10),IN name varchar(20),IN lname varchar(20),IN
salary float(7,2),IN license ENUM('A','B','C','D'),IN route ENUM('LOCAL','ABROAD'),IN
experience tinyint(4))
BEGIN
DECLARE code INT;

SELECT br_code INTO code FROM (SELECT branch.br_code,IFNULL(count(wrk_AT),0) AS
'Number of Drivers' FROM driver INNER JOIN worker ON drv_AT=wrk_AT RIGHT JOIN branch
ON br_code=wrk_br_code GROUP BY br_code ORDER BY IFNULL(count(wrk_AT),0) ASC
LIMIT 1) AS minimum_drivers;

INSERT INTO worker VALUES (AT,name,lname,salary,code);

INSERT INTO driver VALUES (AT,license,route,experience);
END$
DELIMITER ;
```

Στο **procedure** αυτό δίνονται ως είσοδοι τα στοιχεία ενός νέου οδηγού (αριθμός ταυτότητας, όνομα, επώνυμο, μισθός τύπος άδειας, τύπος δρομολογίου και μήνες εμπειρίας). Η **procedure** εντοπίζει το υποκατάστημα με τους λιγότερους οδηγούς και εισάγει τον οδηγό ως υπάλληλο του συγκεκριμένου υποκαταστήματος (τον εισάγει στους πίνακες *worker* και *driver*). Ο κώδικας στην ουσία αναθέτει την τιμή του *br_code* του υποκαταστήματος με τους λιγότερους οδηγούς στην τοπική μεταβλητή *code* και μετά κάνει τα κατάλληλα **insert**.

```
SELECT br_code,IFNULL(count(wrk_AT),0) AS 'Number of Drivers' FROM driver INNER JOIN
worker ON drv_AT=wrk_AT RIGHT JOIN branch ON br_code=wrk_br_code GROUP BY br_code
ORDER BY IFNULL(count(wrk_AT),0) ASC;
```

Πρώτα εκτελούμε αυτό το **select** για να δούμε πόσους οδηγούς έχει κάθε *branch*.

```
mysql> SELECT br_code,IFNULL(count(wrk_AT),0) AS 'Number of Drivers' FROM driver INNER JOIN worker ON drv_AT=wrk_AT RIGHT JOIN branch ON br_code=wrk_br_code GROUP BY br_code ORDER BY IFNULL(count(wrk_AT),0) ASC;
+-----+-----+
| br_code | Number of Drivers |
+-----+-----+
|      3 |          1 |
|      4 |          1 |
|      1 |          2 |
|      2 |          2 |
|      5 |          2 |
+-----+-----+
5 rows in set (0.00 sec)

mysql>
```

```
CALL insert_driver('AX10322100','Giorgos','Kapakis','1500.32','C','LOCAL',4);
```

Έπειτα καλούμε την **insert_driver**.

```

mysql> CALL insert_driver('AX10322100','Giorgos','Kapakis','1500.32','C','LOCAL',4);
Query OK, 1 row affected (0.01 sec)

mysql>

```

Και ξαναεκτελούμε το select που είχαμε αναφέρει.

```

mysql> SELECT br_code,IFNULL(count(wrk_AT),0) AS 'Number of Drivers' FROM driver INNER JOIN worker ON drv_AT=wrk_AT RIGHT JOIN branch ON br_code=wrk_br_code GROUP BY br_code ORDER BY IFNULL(count(wrk_AT),0) ASC;
+-----+-----+
| br_code | Number of Drivers |
+-----+-----+
|      4 |          1 |
|      1 |          2 |
|      2 |          2 |
|      3 |          2 |
|      5 |          2 |
+-----+-----+
5 rows in set (0.00 sec)

mysql>

```

Βλέπουμε ότι ο οδηγός προστέθηκε στο branch με br_code=3, γιατί ήταν ένα από τα branches με τους λιγότερους οδηγούς. Αν κάποια branches έχουν ίσο σε αριθμό οδηγούς και είναι αυτά με τους λιγότερους οδηγούς σε σχέση με τα άλλα τότε ο νέος οδηγός προστίθεται στο branch με το μικρότερο id.

3.1.3.2

```

DROP PROCEDURE IF EXISTS search_trip;
DELIMITER $
CREATE PROCEDURE search_trip(IN code INT,IN start_date datetime,IN end_date datetime)
BEGIN
DECLARE trip_id INT;
DECLARE dep DATETIME;
DECLARE ret DATETIME;
DECLARE maxseats TINYINT;
DECLARE cost FLOAT(7,2);
DECLARE br_code INT;
DECLARE guide_AT CHAR(10);
DECLARE driver_AT CHAR(10);
DECLARE finishedFlag INT;
DECLARE no_of_reservations INT;
DECLARE driver_name VARCHAR(20);
DECLARE driver_lname VARCHAR(20);
DECLARE guide_name VARCHAR(20);
DECLARE guide_lname VARCHAR(20);
DECLARE empty_seats INT;

DECLARE tripCurs CURSOR FOR SELECT * FROM trip WHERE tr_departure>=start_date AND
tr_departure<=end_date AND tr_br_code = code;

DECLARE CONTINUE HANDLER FOR NOT FOUND SET finishedFlag=1;

OPEN tripCurs;

```

```

SET finishedFlag=0;

FETCH tripCurs INTO trip_id,dep,ret,maxseats,cost,br_code,guide_AT,driver_AT;
WHILE(finishedFlag=0)
DO
SELECT COUNT(*) INTO no_of_reservations FROM reservation INNER JOIN trip ON
res_tr_id=trip_id WHERE tr_departure>=start_date AND tr_departure<=end_date AND
tr_br_code=code AND res_tr_id=tr_id;

SELECT wrk_name,wrk_lname INTO driver_name,driver_lname FROM trip INNER JOIN worker
ON tr_drv_AT=wrk_AT WHERE tr_id=trip_id;

SELECT wrk_name,wrk_lname INTO guide_name,guide_lname FROM trip INNER JOIN worker ON
tr_gui_AT=wrk_AT WHERE tr_id=trip_id;

SET empty_seats=maxseats-no_of_reservations;

SELECT trip_id AS 'Trip Id',cost AS 'Cost',maxseats AS 'Maxseats',no_of_reservations AS 'Number
of Reservations',empty_seats AS 'Empty Seats',driver_lname AS 'Driver Lastname',driver_name AS
'Driver Name',guide_lname AS 'Guide Lastname',guide_name AS 'Guide Name',dep AS 'Departure',ret
AS 'Return';

FETCH tripCurs INTO trip_id,dep,ret,maxseats,cost,br_code,guide_AT,driver_AT;
END WHILE;

CLOSE tripCurs;
END$  

DELIMITER ;

```

Στο **procedure** αυτό δίνονται ως ορίσματα ο κωδικός ενός υποκαταστήματος και δύο ημερομηνίες. Για τα ταξίδια (trip) που διοργανώνονται από το υποκατάστημα του οποίου δόθηκε ο κωδικός, και των οποίων η ημερομηνία αναχώρησης είναι μέσα στο διάστημα που δόθηκε, επιστρέφονται το κόστος ταξιδιού (tr_cost), οι μέγιστες θέσεις(maxseat), το σύνολο κρατήσεων (reservations), οι κενές θέσεις (maxseat – σύνολο κρατήσεων), το επώνυμο και το όνομα του οδηγού και του ξεναγού και τέλος η ημερομηνία αναχώρησης και επιστροφής. Δημιουργούμε έναν **cursor** με τον οποίο διατρέχουμε τον πίνακα **trip** και αποθηκεύουμε τις ζητούμενες πληροφορίες στις τοπικές μεταβλητές που δηλώσαμε και στο τέλος τις εκτυπώνουμε.

```
CALL search_trip(3,'2022-01-05 00:00:00','2022-08-15 23:59:59');
```

Trip Id	Cost	Maxseats	Number of Reservations	Empty Seats	Driver Lastname	Driver Name	Guide Lastname	Guide Name	Departure	Return
13	1600.00	20	3	17	Gongas	Dimitrios	Makris	Iason	2022-01-05 13:30:00	2022-01-21 03:30:00
1 row in set (0.00 sec)										
14	560.00	30	3	27	Gongas	Dimitrios	Makris	Iason	2022-01-22 17:30:00	2022-01-24 20:00:00
1 row in set (0.01 sec)										
15	300.99	30	3	27	Gongas	Dimitrios	Makris	Iason	2022-02-13 19:30:00	2022-02-24 08:00:00
1 row in set (0.03 sec)										
16	890.00	60	3	57	Gongas	Dimitrios	Makris	Iason	2022-03-17 18:30:00	2022-03-18 21:30:00
1 row in set (0.04 sec)										
17	230.00	30	3	27	Gongas	Dimitrios	Makris	Iason	2022-03-20 16:30:00	2022-03-27 15:30:00
1 row in set (0.04 sec)										
18	670.00	45	3	42	Gongas	Dimitrios	Makris	Iason	2022-04-24 19:00:00	2022-04-28 21:30:00
1 row in set (0.04 sec)										

Καλούμε την συνάρτηση **search_trip**.

```
SELECT * FROM trip WHERE '2022-01-05 00:00:00'<=tr_departure AND '2022-08-15 23:59:59'>=tr_departure AND tr_br_code=3;
```

```
SELECT * FROM reservation;
```

Μετά εκτελούμε τα παραπάνω select για να ελέγξουμε αν λειτουργεί σωστά το procedure.

tr_id	tr_departure	tr_return	tr_maxseats	tr_cost	tr_br_code	tr_gui_AT	tr_drv_AT
13	2022-01-05 13:30:00	2022-01-21 03:30:00	20	1600.00	3	AN10520040	AM10410444
14	2022-01-22 17:30:00	2022-01-24 20:00:00	30	560.00	3	AN10520040	AM10410444
15	2022-02-13 19:30:00	2022-02-24 08:00:00	30	300.99	3	AN10520040	AM10410444
16	2022-03-17 18:30:00	2022-03-18 21:30:00	60	890.00	3	AN10520040	AM10410444
17	2022-03-20 16:30:00	2022-03-27 15:30:00	30	230.00	3	AN10520040	AM10410444
18	2022-04-24 19:00:00	2022-04-28 21:30:00	45	670.00	3	AN10520040	AM10410444

11	7	Alexandras	Kokas	MINOR
12	5	Thanasis	Alexiou	ADULT
12	6	Zoi	Likou	ADULT
12	7	Tzina	Pseudou	ADULT
13	5	Nikos	Kolas	ADULT
13	6	Eleni	Kappa	ADULT
13	7	Oresths	Kappa	MINOR
14	5	Andreas	Ntivakias	ADULT
14	6	Anastasia	Ntivakia	ADULT
14	7	Xara	Ntivakia	MINOR
15	5	Grigoris	Manifavas	MINOR
15	6	Kleanthi	Manifava	ADULT
15	7	Anastasia	Manifava	MINOR
16	5	Iason	Alexakhs	ADULT
16	6	Eleni	Alexakh	ADULT
16	7	Dimitris	Alexakhs	MINOR
17	5	Tzoulia	Alexandratou	ADULT
17	6	Alkhs	Alexandratatos	ADULT
17	7	Manos	Manolos	ADULT
18	5	Giorgos	Georgiou	ADULT
18	6	Anakin	Skywalker	ADULT
18	7	Padme	Skywalker	ADULT

Βλέπουμε ότι επιλέγει τα σωστά trips και ο αριθμός των κρατήσεων για κάθε trip είναι σωστός.

3.1.3.3

```
DROP PROCEDURE IF EXISTS delete_worker;
DELIMITER $
CREATE PROCEDURE delete_worker(IN name varchar(20),IN lname varchar(20))
BEGIN
IF exists(SELECT * FROM worker INNER JOIN admin ON wrk_AT=adm_AT WHERE wrk_lname=lname AND wrk_name=name AND adm_type="ADMINISTRATIVE")
THEN
SELECT "This person is an admin in a branch therefore the deletion is restricted!" AS Error;
ELSEIF exists(SELECT * FROM worker WHERE wrk_lname=lname AND wrk_name=name)
THEN
DELETE FROM worker WHERE wrk_lname=lname AND wrk_name=name;
ELSE
SELECT "This person isn't a worker in any branch!" AS Error;
END IF;
END$
DELIMITER ;
```

Το **procedure** αυτό παίρνει ως όρισμα το όνομα και το επώνυμο ενός υπάλληλου. Αν είναι διοικητικός των διαγράφει. Αν ο υπάλληλος είναι διευθυντής υποκαταστήματος τότε εμφανίζεται μήνυμα ότι είναι διευθυντής του υποκαταστήματος και δεν επιτρέπει τη διαγραφή. Με ένα if ελέγχουμε αν ένας υπάλληλος είναι διευθυντής και αν ισχύει τότε εκτυπώνουμε ένα error message. Αν δεν είναι τότε μεταβαίνουμε στο επόμενο if και ελέγχουμε αν υπάρχει κάποιος υπάλληλος με το ονοματεπώνυμο που δόθηκε. Τέλος, αν δεν υπάρχει υπάλληλος, εκτυπώνουμε το αντίστοιχο error.

```
SELECT * FROM worker;
```

Εκτελούμε το παραπάνω **select**, για να δούμε τους workers.

```

mysql> select * from worker;
+-----+-----+-----+-----+-----+
| wrk_AT | wrk_name | wrk_lname | wrk_salary | wrk_br_code |
+-----+-----+-----+-----+-----+
| AK10310000 | John | Politis | 1400.55 | 4 |
| AK10310111 | Alkis | Eleftheriadis | 1200.35 | 4 |
| AK10310222 | Andreas | Georgiou | 1000.21 | 4 |
| AK10310333 | Giannhs | Stathopoulos | 1900.56 | 5 |
| AK10310444 | Sofia | Politi | 1400.86 | 5 |
| AK10310555 | Nikos | Vasiliou | 1600.96 | 5 |
| AK10311111 | Giannhs | Vasiliou | 1547.55 | 1 |
| AK10322222 | Artemis | Papadopoulou | 1800.34 | 1 |
| AK10333333 | Georgia | Makri | 2000.00 | 1 |
| AK10344444 | Greg | Stephanopoulos | 1600.00 | 2 |
| AK10366666 | Maria | Papadopoulou | 2000.00 | 2 |
| AK10377777 | Orestis | Makris | 1600.69 | 3 |
| AK10388888 | Damianos | Papadopoulos | 1500.00 | 3 |
| AK10399999 | Iris | Oikonomou | 1400.55 | 3 |
| AK12000001 | Artemis | Padadimitriou | 1500.00 | 1 |
| AK12000002 | Maria | Prodromou | 1500.00 | 1 |
| AK12000003 | John | Stathopoulos | 1500.00 | 1 |
| AK12000004 | Andreas | Vasiladiotis | 1500.00 | 2 |
| AK12000006 | Orestis | Makris | 1500.00 | 3 |
| AK12000007 | Grigotis | Delibaltadakis | 1500.00 | 3 |
| AK12000008 | Alexandros | Alexandrou | 1500.00 | 4 |
| AK12000009 | Nikolas | Karavlidis | 1500.00 | 5 |
| AK12000010 | Viki | Aleksiou | 1500.00 | 5 |
| AM10410000 | Antonis | Kokinos | 1000.00 | 1 |
| AM10410111 | Antonis | Eleftheriadis | 1100.00 | 1 |
| AM10410222 | Nora | Raikou | 750.00 | 2 |
| AM10410333 | John | Oikonomou | 1150.00 | 2 |
| AM10410444 | Dimitrios | Gongas | 1500.00 | 3 |
| AM10410555 | Fotios | Patrios | 1400.00 | 4 |
| AM10410666 | Maria | Papadopoulou | 1000.00 | 5 |
| AM10410777 | Andreas | Makris | 750.00 | 5 |
| AN10520010 | Damianos | Diasakos | 1200.00 | 1 |
| AN10520020 | Greg | Delimpaltadakis | 1000.00 | 2 |
| AN10520030 | Orestis | Delimpaltadakis | 1000.00 | 2 |
| AN10520040 | Iason | Makris | 1200.00 | 3 |
| AN10520050 | Orestis | Diasakos | 1000.00 | 4 |
| AN10520060 | Damianos | Delimpaltadakis | 1200.00 | 5 |
| AX10322100 | Giorgos | Kapakis | 1500.32 | 3 |
+-----+-----+-----+-----+-----+
38 rows in set (0.00 sec)

```

SELECT * FROM admin;

Εκτελούμε το παραπάνω select, για να δούμε τους admins.

```

mysql> SELECT * FROM admin;
+-----+-----+-----+
| adm_AT | adm_type | adm_diploma
+-----+-----+-----+
| AK10310000 | ADMINISTRATIVE | Dimploma: Business Administration Patra School of Business
| AK10310111 | ACCOUNTING | Dimploma: Lamia School of Busines
| AK10310222 | LOGISTICS | Dimploma: Mathematics Athens School of Business
| AK10310333 | ADMINISTRATIVE | Dimploma: Economics and Business Administration Lamia School of Business
| AK10310444 | LOGISTICS | Dimploma: Physics Thesalonikh
| AK10310555 | ACCOUNTING | Dimploma: 53 Lykio Thesalonikhs
| AK10311111 | LOGISTICS | Dimploma: Logistics Athens School of Business
| AK10322222 | ACCOUNTING | Dimploma: Accounting Athens School of Business
| AK10333333 | ADMINISTRATIVE | Dimploma: Economics and Business Administration Athens School of Business
| AK10344444 | LOGISTICS | Dimploma: Economics Ionnina School of Busine
| AK10366666 | ADMINISTRATIVE | Dimploma: Tour Guide EKPA
| AK10377777 | ADMINISTRATIVE | Dimploma: Tour Guide Patra School of Business
| AK10388888 | ACCOUNTING | Dimploma: Mathematics Thesalonikh APTH
| AK10399999 | LOGISTICS | Dimploma: Volos Logistics School of Busines
+-----+-----+-----+
14 rows in set (0.00 sec)

```

Έτσι μπορούμε να δούμε τους workers από τους οποίους θα επιλέξουμε να κάνουμε **delete_worker**.

```
CALL delete_worker('Orestis','Diasakos');
```

Εκτελούμε το παραπάνω **call**.

```

mysql> CALL delete_worker('Orestis','Diasakos');
Query OK, 1 row affected (0.01 sec)

mysql>
```

```
CALL delete_worker('Maria','Papadopoulou');
```

Κάνουμε πάλι κλήση της **delete_worker** αλλά με το παραπάνω **call**.

```

mysql> CALL delete_worker('Maria','Papadopoulou');
+-----+
| Error
+-----+
| This person is an admin in a branch therefore the deletion is restricted!
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

mysql>
```

Εκτελούμε ξανά τα δύο προηγούμενα **select** με την ίδια σειρά.

```

mysql> SELECT * FROM worker;
+-----+-----+-----+-----+-----+
| wrk_AT | wrk_name | wrk_lname | wrk_salary | wrk_br_code |
+-----+-----+-----+-----+-----+
| AK10310000 | John | Politis | 1400.55 | 4 |
| AK10310111 | Alkis | Eleftheriadis | 1200.35 | 4 |
| AK10310222 | Andreas | Georgiou | 1000.21 | 4 |
| AK10310333 | Giannhs | Stathopoulos | 1900.56 | 5 |
| AK10310444 | Sofia | Politi | 1400.86 | 5 |
| AK10310555 | Nikos | Vasilou | 1600.96 | 5 |
| AK10311111 | Giannhs | Vasilou | 1547.55 | 1 |
| AK10322222 | Artemis | Papadopoulou | 1800.34 | 1 |
| AK10333333 | Georgia | Makri | 2000.00 | 1 |
| AK10344444 | Greg | Stephanopoulos | 1600.00 | 2 |
| AK10366666 | Maria | Papadopoulou | 2000.00 | 2 |
| AK10377777 | Orestis | Makris | 1600.69 | 3 |
| AK10388888 | Damianos | Papadopoulou | 1500.00 | 3 |
| AK10399999 | Iris | Oikonomou | 1400.55 | 3 |
| AK12000001 | Artemis | Padadimitriou | 1500.00 | 1 |
| AK12000002 | Maria | Prodromou | 1500.00 | 1 |
| AK12000003 | John | Stathopoulos | 1500.00 | 1 |
| AK12000004 | Andreas | Vasiladiotis | 1500.00 | 2 |
| AK12000006 | Orestis | Makris | 1500.00 | 3 |
| AK12000007 | Grigotis | Delibaltadakis | 1500.00 | 3 |
| AK12000008 | Alexandros | Alexandrou | 1500.00 | 4 |
| AK12000009 | Nikolas | Karavlidis | 1500.00 | 5 |
| AK12000010 | Viki | Aleksiou | 1500.00 | 5 |
| AM10410000 | Antonis | Kokinos | 1000.00 | 1 |
| AM10410111 | Antonis | Eleftheriadis | 1100.00 | 1 |
| AM10410222 | Nora | Raikou | 750.00 | 2 |
| AM10410333 | John | Oikonomou | 1150.00 | 2 |
| AM10410444 | Dimitrios | Gongas | 1500.00 | 3 |
| AM10410555 | Fotios | Patrios | 1400.00 | 4 |
| AM10410666 | Maria | Papadopoulou | 1000.00 | 5 |
| AM10410777 | Andreas | Makris | 750.00 | 5 |
| AN10520010 | Damianos | Diasakos | 1200.00 | 1 |
| AN10520020 | Greg | Delimpaltadakis | 1000.00 | 2 |
| AN10520030 | Orestis | Delimpaltadakis | 1000.00 | 2 |
| AN10520040 | Iason | Makris | 1200.00 | 3 |
| AN10520060 | Damianos | Delimpaltadakis | 1200.00 | 5 |
| AX10322100 | Giorgos | Kapakis | 1500.32 | 3 |
+-----+-----+-----+-----+-----+
37 rows in set (0.00 sec)

```

```

mysql> SELECT * FROM admin;
+-----+-----+-----+
| adm_AT | adm_type | adm_diploma |
+-----+-----+-----+
| AK10310000 | ADMINISTRATIVE | Dimploma: Business Administration Patra School of Business |
| AK10310111 | ACCOUNTING | Dimploma: Lamia School of Busines |
| AK10310222 | LOGISTICS | Dimploma: Mathematics Athens School of Business |
| AK10310333 | ADMINISTRATIVE | Dimploma: Economics and Business Administration Lamia School of Business |
| AK10310444 | LOGISTICS | Dimploma: Physics Thesalonikh |
| AK10310555 | ACCOUNTING | Dimploma: 53 Lykio Thesalonikhs |
| AK10311111 | LOGISTICS | Dimploma: Logistics Athens School of Business |
| AK10322222 | ACCOUNTING | Dimploma: Accounting Athens School of Business |
| AK10333333 | ADMINISTRATIVE | Dimploma: Economics and Business Administration Athens School of Business |
| AK10344444 | LOGISTICS | Dimploma: Economics Ioannina School of Busine |
| AK10366666 | ADMINISTRATIVE | Dimploma: Tour Guide EKPA |
| AK10377777 | ADMINISTRATIVE | Dimploma: Tour Guide Patra School of Business |
| AK10388888 | ACCOUNTING | Dimploma: Mathematics Thesalonikh APTH |
| AK10399999 | LOGISTICS | Dimploma: Volos Logistics School of Busines |
+-----+-----+-----+
14 rows in set (0.00 sec)

mysql>

```

Βλέπουμε ότι ο Orestis Diasakos που διαγράψαμε στην αρχή, διαγράφηκε με επιτυχία ενώ η Maria Papadopoulou δεν διαγράφηκε επειδή είναι διευθύντρια του υποκαταστήματος με branch_id = 2.

3.1.3.4

```

DROP INDEX res_ind ON reservation_offers;
CREATE INDEX res_ind ON reservation_offers(deposit_amount, rsv_lastname, rsv_offer_id);

```

Πρώτα από όλα λόγω του μεγάλου πλήθους εγγραφών, δημιουργούμε ένα ευρετήριο στον πίνακα reservation_offers ώστε το πρόγραμμα να αναζητεί πιο αποδοτικά τις εγγραφές του πίνακα. Κάνουμε πρώτα **drop** σε περίπτωση που ήδη υπάρχει και το δημιουργούμε για τα πεδία **rsv_lastname**, **deposit_amount** και **rsv_offer_id**. Δημιουργούμε το index για την στήλη **deposit_amount**, επειδή χρησιμοποιούμε αυτό το πεδίο μέσα σε **WHERE condition** για το **procedure** του υποερωτήματος **α** και για τις **rsv_lastname**, **rsv_offer_id**, αντίστοιχα επειδή τα χρησιμοποιούμε σε πολλά **conditions** του **procedure** του υποερωτήματος **β**).

α)

```

DROP PROCEDURE IF EXISTS res_range;
DELIMITER $
CREATE PROCEDURE res_range(IN r1 INT, IN r2 INT)
BEGIN
    SELECT rsv_name AS 'Firstname', rsv_lastname AS 'Lastname'
    FROM reservation_offers
    WHERE deposit_amount >= r1 AND deposit_amount<=r2;
END$
DELIMITER ;

```

Το **procedure** αυτό παίρνει ως παραμέτρους εισόδου δύο τιμές (π.χ. 50, 200) και τυπώνει τους πελάτες (επώνυμο, όνομα) που έκαναν κρατήσεις σε προσφορές ταξιδιών και πλήρωσαν για προκαταβολή κάποιο ποσό ανάμεσα στις δύο τιμές.

Ελεγχος

Έχουμε τον πίνακα reservation_offers, ο οποίος έχει 75000 εγγραφές.

```
select count(*) from reservation_offers;
+-----+
| count(*) |
+-----+
|    75000 |
+-----+
```

```
mysql> select * from reservation_offers limit 20;
+-----+-----+-----+-----+-----+
| rsv_id | rsv_name | rsv_lastname | deposit_amount | rsv_offer_id |
+-----+-----+-----+-----+-----+
|     1 | Itzel    | Moyer        |          85 |           2 |
|     2 | Thalia   | Hernandez    |         186 |           1 |
|     3 | Myla     | Craig         |         134 |           1 |
|     4 | Jazmine  | Alvarez       |         106 |           3 |
|     5 | Tristin  | Banks         |         134 |           2 |
|     6 | Aliyah   | Holmes        |         169 |           2 |
|     7 | Joselyn  | Curtis        |          86 |           2 |
|     8 | Harper   | Walters       |         115 |           3 |
|     9 | Augustus | Kent          |         184 |           2 |
|    10 | Gaige    | Compton       |          93 |           1 |
|    11 | Tommy   | Ewing         |         145 |           2 |
|    12 | Denzel   | Mathis        |         196 |           2 |
|    13 | Karli    | Vaughan       |         173 |           1 |
|    14 | Milagros | Tate          |         150 |           2 |
|    15 | Cordell  | Richard       |         107 |           1 |
|    16 | Adrien   | Miranda       |         167 |           1 |
|    17 | Denise   | Wolf          |          83 |           2 |
|    18 | Genesis  | Zamora        |         169 |           1 |
|    19 | Manuel   | Livingston    |         160 |           3 |
|    20 | Layla    | Buckley       |         180 |           2 |
+-----+-----+-----+-----+-----+
20 rows in set (0.00 sec)
```

Εστω ότι καλούμε την procedure res_range για το εύρος προκαταβολών [80,95].

Χωρίς το ευρετήριο:

```
mysql> call res_range(80,95);
```

Yamilet	Wong
Ayanna	Gould
Kai	Stout
Jeremy	Briggs
Hector	Craig
Ana	Mason
Humberto	Sharp
Kamren	Leon
Albert	Collier
Jacoby	Barnett
Elaine	Rivers
Destiny	Russo
Cristofer	Fisher
Javier	Forbes
Hadassah	Finley
Scarlett	Berger

+-----+-----+
7389 rows in set (0.02 sec)
Query OK, 0 rows affected (6.18 sec)

Βλέπουμε ότι το procedure εκτελέστηκε σε 0.02 s.

Με το ευρετήριο:

Waylon	Wilkinson
Elyse	Wilkinson
Eliza	wilkinson
Kadence	williams
Silas	Wilson
Patience	wise
Konner	wolfe
Keenan	Wood
Bryant	Woodward
Niko	Woodward
Chris	Wu
Madisyn	Wyatt
Annie	Yates
Avery	Yoder
Kristopher	Yu
Trace	Zimmerman

+-----+-----+
7389 rows in set (0.01 sec)
Query OK, 0 rows affected (6.06 sec)

To procedure εκτελείται σε 0.01 s.

β)

```
DROP PROCEDURE IF EXISTS res_names;
DELIMITER $
CREATE PROCEDURE res_names(IN lname VARCHAR(20))
BEGIN
    DECLARE flag INT;
    DECLARE offer_id INT;
    DECLARE no_of_res INT;
    DECLARE finishedFlag INT;
    DECLARE multResCurs CURSOR FOR
        SELECT rsv_offer_id, COUNT(rsv_offer_id)
        FROM reservation_offers
        WHERE rsv_lastname=lname
        GROUP BY rsv_offer_id
        HAVING COUNT(rsv_offer_id)>1
        ORDER BY rsv_offer_id;

    DECLARE singleResCurs CURSOR FOR
        SELECT rsv_offer_id, COUNT(rsv_offer_id)
        FROM reservation_offers
        WHERE rsv_lastname=lname
        GROUP BY rsv_offer_id
        HAVING COUNT(rsv_offer_id)=1
        ORDER BY rsv_offer_id;

    DECLARE CONTINUE HANDLER FOR NOT FOUND SET finishedFlag=1;
    OPEN multResCurs;
    SET finishedFlag=0;
    FETCH multResCurs INTO offer_id, no_of_res;
    SET flag = 0;
    WHILE(finishedFlag=0) DO
        IF(flag = 0) THEN
            SELECT 'Reserved offers for last name' AS ", lname AS ";
        END IF;
        SELECT offer_id AS 'Offer Id', no_of_res AS 'Number of reserved offers';
        FETCH multResCurs INTO offer_id,no_of_res;
        SET flag = 1;
    END WHILE;
    CLOSE multResCurs;
    OPEN singleResCurs;
    SET finishedFlag=0;
    SET flag = 0;
    FETCH singleResCurs INTO offer_id, no_of_res;
    WHILE(finishedFlag=0) DO
        IF(flag = 0) THEN
            SELECT 'Reserved offers with one reservation per offer' AS ";
        END IF;
        SELECT rsv_name, rsv_lastname, rsv_offer_id
        FROM reservation_offers
        WHERE rsv_offer_id = offer_id AND rsv_lastname = lname;
        SET flag = 1;
        FETCH singleResCurs INTO offer_id,no_of_res;
    END WHILE;
END$
```

```
DELIMITER ;
```

Στο **procedure** αυτό δίνεται ως παράμετρος εισόδου το επώνυμο ενός πελάτη και εκτυπώνει τα ονοματεπώνυμα των πελατών με το επώνυμο αυτό και την προσφορά ταξιδιού στην οποία έχουν κάνει κράτηση. Σε περίπτωση που υπάρχουν πάνω από ένας επιστρέφει το πλήθος των πελατών με το επώνυμο αυτό, ανά προσφορά ταξιδιού.

Η υλοποίηση έγινε με χρήση δύο cursors, **DECLARE multResCurs CURSOR** και **DECLARE singleResCurs CURSOR** τα οποία διατρέχουν το πίνακα `reservation_offers` και εντοπίζουν και εκτυπώνουν πολλαπλές και μονές κρατήσεις αντίστοιχα.

Έλεγχος:

Χωρίς ευρετήριο:

```
mysql> call res_names('Goodman');
+-----+-----+
| | |
+-----+-----+
| Reserved offers for last name | Goodman |
+-----+-----+
1 row in set (0.07 sec)

+-----+-----+
| Offer Id | Number of reserved offers |
+-----+-----+
| 1 | 17 |
+-----+-----+
1 row in set (0.07 sec)

+-----+-----+
| Offer Id | Number of reserved offers |
+-----+-----+
| 2 | 22 |
+-----+-----+
1 row in set (0.07 sec)

+-----+-----+
| Offer Id | Number of reserved offers |
+-----+-----+
| 3 | 21 |
+-----+-----+
1 row in set (0.08 sec)

Query OK, 0 rows affected (0.14 sec)
```

Με ευρετήριο:

```
mysql> call res_names('Goodman');
+-----+-----+
| |-----+-----+
| Reserved offers for last name | Goodman |
|-----+-----+
1 row in set (0.07 sec)

+-----+-----+
| Offer Id | Number of reserved offers |
|-----+-----+
| 1 | 17 |
|-----+-----+
1 row in set (0.07 sec)

+-----+-----+
| Offer Id | Number of reserved offers |
|-----+-----+
| 2 | 22 |
|-----+-----+
1 row in set (0.07 sec)

+-----+-----+
| Offer Id | Number of reserved offers |
|-----+-----+
| 3 | 21 |
|-----+-----+
1 row in set (0.07 sec)

Query OK, 0 rows affected (0.14 sec)
```

Με την χρήση ευρετηρίου η εκτέλεση είναι κατά 0.01 s πιο γρήγορη.

Ο πίνακας reservation_offers δημιουργήθηκε με την χρήση του δοθέντος αρχείου names.txt που περιέχει 10000 ονόματα, με τα οποία εκτελέσαμε τα INSERT για την εισαγωγή 75000 εγγραφών. Έτσι κάθε επώνυμο έχει κάνει πολλαπλές κρατήσεις σε κάθε προσφορά και για αυτό παραπάνω εκτυπώνεται ένας πίνακας με πολλαπλές κρατήσεις ανά offer.

Για να γίνει σωστός έλεγχος του procedure λοιπόν, εισάγουμε μερικές επιπλέον κρατήσεις:

```
INSERT INTO reservation_offers VALUES(null,'Greg','Deli',50,1);
INSERT INTO reservation_offers VALUES(null,'Maria','Deli',50,1);
INSERT INTO reservation_offers VALUES(null,'Greg','Deli',50,2);
INSERT INTO reservation_offers VALUES(null,'Greg','Deli',50,3);
```

Δηλαδή εισάγουμε 3 κρατήσεις για τον πελάτη Greg Deli, μία σε κάθε offer και μία κράτηση για την Maria Deli στο offer me id=1.

Αποτελέσματα:

```
mysql> call res_names('Deli');
+-----+-----+
| | |
+-----+-----+
| Reserved offers for last name | Deli |
+-----+-----+
1 row in set (0.07 sec)

+-----+-----+
| Offer Id | Number of reserved offers |
+-----+-----+
| 1 | 2 |
+-----+-----+
1 row in set (0.07 sec)

+-----+-----+
| | |
+-----+-----+
| Reserved offers with one reservation per offer |
+-----+-----+
1 row in set (0.14 sec)

+-----+-----+-----+
| rsv_name | rsv_lastname | rsv_offer_id |
+-----+-----+-----+
| Greg | Deli | 2 |
+-----+-----+-----+
1 row in set (0.16 sec)

+-----+-----+-----+
| rsv_name | rsv_lastname | rsv_offer_id |
+-----+-----+-----+
| Greg | Deli | 3 |
+-----+-----+-----+
1 row in set (0.19 sec)

Query OK, 0 rows affected (0.19 sec)
```

Βλέπουμε λοιπόν ότι για το επώνυμο Deli έχουμε δύο κρατήσεις για την προσφορά 1 (μία από τον Greg και μία από την Maria) και από μία κράτηση στις άλλες δυο προσφορές από τον Greg.

Επιπλέον Procedures

1. `create_user()` και `create_select_user()`

Πέρα από τα stored procedures που ζητούνταν προσθέσαμε δυο επιπλέον τα οποία δημιουργούν ένα user για την βάση με όλα τα privileges ή μόνο με select privileges.

```
/*Procedure pou dhmioygei enan neo user gia tin vasi travel_agency. Prepei na tin kalesoume afou kanoume insert enan it_admin*/
DROP PROCEDURE IF EXISTS create_user;
DELIMITER $
CREATE PROCEDURE create_user(IN it_username VARCHAR(20),IN it_password CHAR(10))
BEGIN
    /*prepei na xrisimopoiisw tin CONCAT() giati den mas epitrepei na ektelesoume tin CREATE USER me metavlities*/
    SET @cr_user = CONCAT
    (
        CREATE USER "",it_username,""@"localhost" IDENTIFIED BY "",it_password,""
    );
    PREPARE cr FROM @cr_user;
    EXECUTE cr;
    DEALLOCATE PREPARE cr;

    /*omoiws gia to GRANT PRIVILEGES*/
    SET @gr_user = CONCAT
    (
        GRANT ALL ON travel_agency.* TO "",it_username,""@"localhost" "
    );
    PREPARE gr FROM @gr_user;
    EXECUTE gr;
    DEALLOCATE PREPARE gr;

    /*gia na mporei na kanei select kai delete to user ston pinaka mysql.db*/
    SET @gr_user = CONCAT
    (
        GRANT SELECT,DELETE ON mysql.db TO "",it_username,""@"localhost" "
    );
    PREPARE gr FROM @gr_user;
    EXECUTE gr;
    DEALLOCATE PREPARE gr;

    /*gia na mporei na kanei create user*/
    SET @gr_cr_user = CONCAT
    (
        GRANT CREATE USER ON *.* TO "",it_username,""@"localhost" "
    );
    PREPARE gr_cr FROM @gr_cr_user;
    EXECUTE gr_cr;
```

```

DEALLOCATE PREPARE gr_cr;

SET @flush = "FLUSH PRIVILEGES";
PREPARE stmt FROM @flush;
EXECUTE stmt;
DEALLOCATE PREPARE stmt;

END$ 
DELIMITER ;

/*user mono me select privilages*/

DROP PROCEDURE IF EXISTS create_select_user;
DELIMITER $
CREATE PROCEDURE create_select_user(IN it_username VARCHAR(20),IN it_password CHAR(10))
BEGIN
    #prepei na xrisimopoiisw tin CONCAT() giati den mas epitrepei na ekteleseoume tin CREATE USER me
metavlities
    SET @cr_user = CONCAT
    (
    CREATE USER "",it_username,""@"localhost" IDENTIFIED BY "",it_password,""
    );
    PREPARE cr FROM @cr_user;
    EXECUTE cr;
    DEALLOCATE PREPARE cr;

/*PRIVILEGES SELECT kai EXECUTE gia na mporei na kalei procedures*/

SET @gr_user = CONCAT
(
GRANT EXECUTE, SELECT ON travel_agency.* TO "",it_username,""@"localhost" '
);
PREPARE gr FROM @gr_user;
EXECUTE gr;
DEALLOCATE PREPARE gr;

/*gia na mporei na kanei select kai delete to user ston pinaka mysql.db*/

SET @gr_user = CONCAT
(
GRANT SELECT ON mysql.db TO "",it_username,""@"localhost" '
);
PREPARE gr FROM @gr_user;
EXECUTE gr;
DEALLOCATE PREPARE gr;

SET @flush = "FLUSH PRIVILEGES";
PREPARE stmt FROM @flush;
EXECUTE stmt;
DEALLOCATE PREPARE stmt;

END$ 
DELIMITER ;

```

Το ιδανικό θα ήταν να μπορούσαμε να δημιουργήσουμε τον user μέσα σε ένα trigger για τον πίνακα `it_admin` κάθε φορά που κάνουμε insert σε αυτόν. Όμως η mySQL δεν επιτρέπει την εκτέλεση της εντολής CREATE USER ούτε την κλήση procedure μέσα σε trigger.

Τα procedures παίρνουν ως ορίσματα ένα username και password και εκτελούνται τα queries:

- `CREATE USER <username> IDENTIFIED BY <password>`, για την δημιουργία του user.
- `GRANT ALL ON travel_agency.* TO <username>`, για να έχει όλα τα δικαιώματα στην βάση μας
- `GRANT EXECUTE, SELECT ON travel_agency.* TO <username>`, στην περίπτωση που δημιουργούμε έναν χρήστη με δικαιώματα select και execute μόνο.
- `GRANT SELECT,DELETE ON mysql.db TO <username>` και `GRANT CREATE USER ON *.* TO <username>`, για να μπορεί να δημιουργεί και να διαγράφει χρήστες.

Έλεγχος:

Κλήση του procedure:

```
mysql> call create_user('new_user','password');
Query OK, 0 rows affected (0.06 sec)
```

Έλεγχος του πίνακα `mysql.user` και `mysql.db`:

```
mysql> SELECT Host, User FROM mysql.user;
+-----+-----+
| Host | User |
+-----+-----+
| localhost | Aleksiou |
| localhost | Alexandrou |
| localhost | Delibaltadakis |
| localhost | Karavlidis |
| localhost | Makris |
| localhost | Nora |
| localhost | Padadimitriou |
| localhost | Prodromou |
| localhost | Raikos |
| localhost | Stathopoulos |
| localhost | Vasiladiotis |
| localhost | mysql.infoschema |
| localhost | mysql.session |
| localhost | mysql.sys |
| localhost | new_user |
| localhost | orestis |
| localhost | root |
+-----+-----+
17 rows in set (0.00 sec)
```

Host	Db	User
localhost	travel_agency	Aleksiou
localhost	travel_agency	Alexandrou
localhost	travel_agency	Delibaltadakis
localhost	travel_agency	Karavlidis
localhost	travel_agency	Makris
localhost	travel_agency	Nora
localhost	travel_agency	Padadimitriou
localhost	travel_agency	Prodromou
localhost	travel_agency	Raikos
localhost	travel_agency	Stathopoulos
localhost	travel_agency	Vasiladiotis
localhost	performance_schema	mysql.session
localhost	sys	mysql.sys
localhost	travel_agency	new_user
localhost	travel_agency	orestis

15 rows in set (0.00 sec)

Βλέπουμε ότι ο new_user προστέθηκε και στους δύο.

Είσοδος στην βάση ως τον καινούριος user:

```
MySQL [SQL] > \connect new_user@localhost
Creating a session to 'new_user@localhost'
Please provide the password for 'new_user@localhost': *****
Save password for 'new_user@localhost'? [Y]es/[N]o/Ne[v]er (default No): y
Fetching global names for auto-completion... Press ^C to stop.
Error during auto-completion cache update: Access denied; you need (at least
of) the PROCESS privilege(s) for this operation
Your MySQL connection id is 593 (X protocol)
Server version: 8.0.31 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL [localhost:33060+ ssl] SQL > _
```

Εκτέλεση ενός query:

MySQL localhost:33060+ ssl travel_agency SQL > select * from worker limit 10;				
wrk_AT	wrk_name	wrk_lname	wrk_salary	wrk_br_code
AK10310000	John	Politis	1400.55	4
AK10310111	Alkis	Eleftheriadis	1200.35	4
AK10310222	Andreas	Georgiou	1000.21	4
AK10310333	Giannis	Stathopoulos	1900.56	5
AK10310444	Sofia	Politi	1400.86	5
AK10310555	Nikos	Vasiliou	1600.96	5
AK10311111	Giannis	Vasiliou	1547.55	1
AK10322222	Artemis	Papadopoulou	1800.34	1
AK10333333	Georgia	Makri	2000	1
AK10344444	Greg	Stephanopoulos	1600	2

10 rows in set (0.0006 sec)

Συνδεθήκαμε και εκτελέσαμε με επιτυχία ένα querry στην βάση μας.

2. branch_info()

Αυτό το stored procedure εμφανίζει για κάθε υποκατάστημα τα στοιχεία του, το ονοματεπώνυμο του διευθυντή του, το σύνολο κρατήσεων και το σύνολο εσόδων (κρατήσεις επί κόστος ταξιδιού).

Δημιουργήθηκε για να διευκολύνει την εμφάνιση των ζητουμένων πληροφοριών των υποκαταστημάτων στο GUI.

```
DROP PROCEDURE IF EXISTS branch_info;
DELIMITER $$
CREATE PROCEDURE branch_info()
BEGIN
DECLARE branch_code INT(11);
DECLARE branch_street VARCHAR(30);
DECLARE branch_num INT(4);
DECLARE branch_city VARCHAR(30);
DECLARE finishedFlag INT;
DECLARE admin_name VARCHAR(20);
DECLARE admin_lname VARCHAR(20);
DECLARE total_of_reservations INT;
DECLARE income FLOAT;

DECLARE branchCurs CURSOR FOR SELECT * FROM branch;
DECLARE CONTINUE HANDLER FOR NOT FOUND SET finishedFlag=1;

OPEN branchCurs;
SET finishedFlag=0;

FETCH branchCurs INTO branch_code,branch_street,branch_num,branch_city;
WHILE(finishedFlag=0)
```

```

DO
SELECT COUNT(*) INTO total_of_reservations FROM reservation INNER JOIN trip ON
res_tr_id=tr_id WHERE tr_br_code=branch_code;

SELECT wrk_name,wrk_lname INTO admin_name,admin_lname FROM admin INNER JOIN worker
ON adm_AT=wrk_AT WHERE wrk_br_code=branch_code AND adm_type='ADMINISTRATIVE';

SET income=(SELECT SUM(tr_cost*res_count) FROM trip JOIN (SELECT res_tr_id,COUNT(*) as
res_count FROM reservation GROUP BY res_tr_id) as res_counts ON trip.tr_id = res_counts.res_tr_id
WHERE tr_br_code = branch_code);

SELECT branch_code AS 'Branch code',branch_street AS 'Street',branch_num AS
'Number',branch_city AS 'City',admin_name AS 'Admin name',admin_lname AS 'Admin last
name',total_of_reservations AS 'Total of Reservations',income AS 'Income';

FETCH branchCurs INTO branch_code,branch_street,branch_num,branch_city;
END WHILE;

CLOSE branchCurs;
END$  

DELIMITER ;

```

To **procedure** αυτό δεν παίρνει κάποιο όρισμα. Δημιουργούμε έναν **cursor** με τον οποίο διατρέχουμε του πίνακα **branch** και αποθηκεύουμε τις ζητούμενες πληροφορίες στις τοπικές μεταβλητές που δηλώσαμε και στο τέλος τις εκτυπώνουμε.

```
CALL branch_info();
```

Καλούμε τον **branch_info** με την παραπάνω εντολή.

```

mysql> call branch_info();
+-----+-----+-----+-----+-----+-----+-----+
| Branch code | Street | Number | City | Admin name | Admin last name | Total of Reservations | Income |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | Kifisis | 355 | Athens | Georgia | Makri | 18 | 10206.1 |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.01 sec)

+-----+-----+-----+-----+-----+-----+-----+
| Branch code | Street | Number | City | Admin name | Admin last name | Total of Reservations | Income |
+-----+-----+-----+-----+-----+-----+-----+
| 2 | Amarisias Artemidos | 5 | Athens | Maria | Papadopoulou | 18 | 16202.6 |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.01 sec)

+-----+-----+-----+-----+-----+-----+-----+
| Branch code | Street | Number | City | Admin name | Admin last name | Total of Reservations | Income |
+-----+-----+-----+-----+-----+-----+-----+
| 3 | Mezonos | 44 | Patra | Orestis | Makris | 18 | 12753 |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.02 sec)

+-----+-----+-----+-----+-----+-----+-----+
| Branch code | Street | Number | City | Admin name | Admin last name | Total of Reservations | Income |
+-----+-----+-----+-----+-----+-----+-----+
| 4 | Aristomenous | 5 | Kalamata | John | Politis | 18 | 21512.3 |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.02 sec)

+-----+-----+-----+-----+-----+-----+-----+
| Branch code | Street | Number | City | Admin name | Admin last name | Total of Reservations | Income |
+-----+-----+-----+-----+-----+-----+-----+
| 5 | Tsimiskh | 55 | Thesalonikh | Giannhs | Stathopoulos | 18 | 58804.2 |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.03 sec)

query OK, 0 rows affected (0.03 sec)

```

Έλεγχος:

Κάνουμε τα παρακάτω τρία **select** για να ελέγξουμε ότι λειτουργεί σωστά το procedure.

```
SELECT branch.* , wrk_name , wrk_lname FROM admin INNER JOIN worker ON adm_AT=wrk_AT  
INNER JOIN branch ON wrk_br_code=br_code WHERE adm_type='ADMINISTRATIVE';
```

```
SELECT * FROM trip;
```

```
SELECT br_code , COUNT(*) AS total_of_reservations FROM reservation INNER JOIN trip ON  
res_tr_id=tr_id INNER JOIN branch ON tr_br_code=br_code GROUP BY br_code;
```

```
mysql> SELECT branch.* , wrk_name , wrk_lname FROM admin INNER JOIN worker ON adm_AT=wrk_AT INNER JOIN branch ON wrk_br_code=br_code WHERE adm_type='ADMINISTRATIVE';  
+----+----+----+----+----+  
| br_code | br_street | br_num | br_city | wrk_name | wrk_lname |  
+----+----+----+----+----+  
| 4 | Aristomenous | 5 | Kalamata | John | Politis |  
| 5 | Tsimiskh | 55 | Thesalonikh | Giannhs | Stathopoulos |  
| 1 | Kifisia | 355 | Athens | Georgia | Makri |  
| 2 | Amarisias Artemidos | 5 | Athens | Maria | Papadopoulou |  
| 3 | Mezonos | 44 | Patra | Orestis | Makris |  
+----+----+----+----+----+  
5 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM trip;  
+----+----+----+----+----+----+----+----+  
| tr_id | tr_departure | tr_return | tr_maxseats | tr_cost | tr_br_code | tr_gui_AT | tr_drv_AT |  
+----+----+----+----+----+----+----+----+  
| 1 | 2022-03-05 15:30:00 | 2022-03-08 12:30:00 | 30 | 300.00 | 1 | AK10311111 | AM10410000 |  
| 2 | 2022-03-10 15:00:00 | 2022-03-16 17:00:00 | 30 | 500.00 | 1 | AK10311111 | AM10410000 |  
| 3 | 2022-04-15 17:30:00 | 2022-04-17 01:30:00 | 60 | 1000.65 | 1 | AK10311111 | AM10410000 |  
| 4 | 2022-03-08 15:00:00 | 2022-03-27 13:00:00 | 20 | 200.85 | 1 | AN10520010 | AM10410111 |  
| 5 | 2022-04-03 17:00:00 | 2022-04-19 22:00:00 | 30 | 500.52 | 1 | AN10520010 | AM10410111 |  
| 6 | 2022-06-18 22:30:00 | 2022-06-29 18:30:00 | 30 | 900.00 | 1 | AN10520010 | AM10410111 |  
| 7 | 2022-07-05 18:30:00 | 2022-07-15 16:30:00 | 70 | 1500.00 | 2 | AN10520020 | AM10410222 |  
| 8 | 2022-07-18 18:30:00 | 2022-07-19 22:00:00 | 30 | 800.00 | 2 | AN10520020 | AM10410222 |  
| 9 | 2022-08-02 15:30:00 | 2022-08-03 21:30:00 | 30 | 300.00 | 2 | AN10520020 | AM10410222 |  
| 10 | 2022-07-12 16:00:00 | 2022-07-29 19:30:00 | 30 | 2000.00 | 2 | AN10520030 | AM10410333 |  
| 11 | 2022-08-10 18:30:00 | 2022-08-23 19:00:00 | 50 | 100.00 | 2 | AN10520030 | AM10410333 |  
| 12 | 2022-09-09 18:30:00 | 2022-09-26 12:00:00 | 30 | 700.88 | 2 | AN10520030 | AM10410333 |  
| 13 | 2022-01-05 13:30:00 | 2022-01-21 03:30:00 | 20 | 1600.00 | 3 | AN10520040 | AM10410444 |  
| 14 | 2022-01-22 17:30:00 | 2022-01-24 20:00:00 | 30 | 560.00 | 3 | AN10520040 | AM10410444 |  
| 15 | 2022-02-13 19:30:00 | 2022-02-24 08:00:00 | 30 | 300.99 | 3 | AN10520040 | AM10410444 |  
| 16 | 2022-03-17 18:30:00 | 2022-03-18 21:30:00 | 60 | 890.00 | 3 | AN10520040 | AM10410444 |  
| 17 | 2022-03-20 16:30:00 | 2022-03-27 15:30:00 | 30 | 230.00 | 3 | AN10520040 | AM10410444 |  
| 18 | 2022-04-24 19:00:00 | 2022-04-28 21:30:00 | 45 | 670.00 | 3 | AN10520040 | AM10410444 |  
| 25 | 2022-08-18 05:30:00 | 2022-08-22 21:00:00 | 20 | 9000.74 | 5 | AK10310444 | AM10410666 |  
| 26 | 2022-10-20 14:30:00 | 2022-10-27 21:00:00 | 90 | 1800.23 | 5 | AK10310444 | AM10410666 |  
| 27 | 2022-11-11 15:15:00 | 2022-11-26 21:00:00 | 30 | 800.00 | 5 | AK10310444 | AM10410666 |  
| 28 | 2022-12-05 12:30:00 | 2022-12-21 20:30:00 | 7 | 3400.00 | 5 | AN10520060 | AM10410777 |  
| 29 | 2023-02-17 19:45:00 | 2023-02-26 18:00:00 | 7 | 3900.43 | 5 | AN10520060 | AM10410777 |  
| 30 | 2023-06-12 18:30:00 | 2023-06-29 10:30:00 | 7 | 700.00 | 5 | AN10520060 | AM10410777 |  
+----+----+----+----+----+----+----+----+  
24 rows in set (0.01 sec)
```

```
+----+----+  
| br_code | total_of_reservations |  
+----+----+  
| 1 | 18 |  
| 2 | 18 |  
| 3 | 18 |  
| 4 | 18 |  
| 5 | 18 |  
+----+----+
```

Όπως φαίνεται το procedure λειτουργεί σωστά. Μιας και το δεύτερο select φανερώνει πως κάθε branch έχει 18 κρατήσεις.

Κεφάλαιο 3 - Triggers

3.1.4.1

Δημιουργήσαμε triggers για την καταγραφή **εισαγωγής**, **ενημέρωσης** ή **διαγραφής** σε έναν από τους πίνακες **trip**, **reservation**, **event**, **travel_to**, **destination**. Για κάθε πίνακα από αυτούς δημιουργούμε trigger triggers για όλες τις πιθανές δράσεις και μέσα σε αυτά εισάγουμε μια νέα εγγραφή στην οποία αποτυπώνεται η αλλαγή που κάναμε καθώς επίσης και ο χρήστης που την εκτέλεσε μαζί με την ώρα και ημερομηνία που την εκτέλεσε.

```
/*triggers gia ton log_trip*/
DROP TRIGGER IF EXISTS log_trip_insert;
DELIMITER $
CREATE TRIGGER log_trip_insert AFTER INSERT ON trip
FOR EACH ROW
BEGIN
    INSERT INTO log_trip VALUES
    ('INSERT',CURRENT_USER(),NOW(),NEW.tr_id,NEW.tr_departure,NEW.tr_return,
    NEW.tr_maxseats,NEW.tr_cost,NEW.tr_br_code,NEW.tr_gui_AT,NEW.tr_drv_AT);
END$
DELIMITER ;

DROP TRIGGER IF EXISTS log_trip_update;
DELIMITER $
CREATE TRIGGER log_trip_update AFTER UPDATE ON trip
FOR EACH ROW
BEGIN
    INSERT INTO log_trip VALUES
    ('UPDATE',CURRENT_USER(),NOW(),OLD.tr_id,OLD.tr_departure,OLD.tr_return,
    OLD.tr_maxseats,OLD.tr_cost,OLD.tr_br_code,OLD.tr_gui_AT,OLD.tr_drv_AT);
END$
DELIMITER ;

DROP TRIGGER IF EXISTS log_trip_delete;
DELIMITER $
CREATE TRIGGER log_trip_delete AFTER DELETE ON trip
FOR EACH ROW
BEGIN
    INSERT INTO log_trip VALUES
    ('DELETE',CURRENT_USER(),NOW(),OLD.tr_id,OLD.tr_departure,OLD.tr_return,
    OLD.tr_maxseats,OLD.tr_cost,OLD.tr_br_code,OLD.tr_gui_AT,OLD.tr_drv_AT);
END$
DELIMITER ;

UPDATE trip SET tr_departure = '2069-03-05 15:30:06'
WHERE tr_id = 33;
```

```

DELETE FROM trip where tr_id = 33;

/*triggers gia ton log_reservation*/
DROP TRIGGER IF EXISTS log_reservation_insert;
DELIMITER $
CREATE TRIGGER log_reservation_insert AFTER INSERT ON reservation
FOR EACH ROW
BEGIN
    INSERT INTO log_reservation VALUES
    ('INSERT',CURRENT_USER(),NOW(),NEW.res_tr_id,NEW.res_seatnum,
    NEW.res_name,NEW.res_lname,NEW.res_isadult);
END$
DELIMITER ;

DROP TRIGGER IF EXISTS log_reservation_update;
DELIMITER $
CREATE TRIGGER log_reservation_update AFTER UPDATE ON reservation
FOR EACH ROW
BEGIN
    INSERT INTO log_reservation VALUES
    ('UPDATE',CURRENT_USER(),NOW(),OLD.res_tr_id,OLD.res_seatnum,
    OLD.res_name,OLD.res_lname,OLD.res_isadult);
END$
DELIMITER ;

DROP TRIGGER IF EXISTS log_reservation_delete;
DELIMITER $
CREATE TRIGGER log_reservation_delete AFTER DELETE ON reservation
FOR EACH ROW
BEGIN
    INSERT INTO log_reservation VALUES
    ('DELETE',CURRENT_USER(),NOW(),OLD.res_tr_id,OLD.res_seatnum,
    OLD.res_name,OLD.res_lname,OLD.res_isadult);
END$
DELIMITER ;

/*triggers gia ton log_event*/
DROP TRIGGER IF EXISTS log_event_insert;
DELIMITER $
CREATE TRIGGER log_event_insert AFTER INSERT ON event
FOR EACH ROW
BEGIN
    INSERT INTO log_event VALUES
    ('INSERT',CURRENT_USER(),NOW(),NEW.ev_tr_id,NEW.ev_start,
    NEW.ev_end,NEW.ev_descr);
END$
DELIMITER ;

```

```

DROP TRIGGER IF EXISTS log_event_update;
DELIMITER $
CREATE TRIGGER log_event_update AFTER UPDATE ON event
FOR EACH ROW
BEGIN
    INSERT INTO log_event VALUES
    ('UPDATE',CURRENT_USER(),NOW(),OLD.ev_tr_id,OLD.ev_start,
     OLD.ev_end,OLD.ev_descr);
END$
DELIMITER ;

DROP TRIGGER IF EXISTS log_event_delete;
DELIMITER $
CREATE TRIGGER log_event_delete AFTER DELETE ON event
FOR EACH ROW
BEGIN
    INSERT INTO log_event VALUES
    ('DELETE',CURRENT_USER(),NOW(),OLD.ev_tr_id,OLD.ev_start,
     OLD.ev_end,OLD.ev_descr);
END$
DELIMITER ;

/*triggers gia ton log_travel_to*/
DROP TRIGGER IF EXISTS log_travel_to_insert;
DELIMITER $
CREATE TRIGGER log_travel_to_insert AFTER INSERT ON travel_to
FOR EACH ROW
BEGIN
    INSERT INTO log_travel_to VALUES
    ('INSERT',CURRENT_USER(),NOW(),NEW.to_tr_id,NEW.to_dst_id,
     NEW.to_arrival,NEW.to_departure);
END$
DELIMITER ;

DROP TRIGGER IF EXISTS log_travel_to_update;
DELIMITER $
CREATE TRIGGER log_travel_to_update AFTER UPDATE ON travel_to
FOR EACH ROW
BEGIN
    INSERT INTO log_travel_to VALUES
    ('UPDATE',CURRENT_USER(),NOW(),OLD.to_tr_id,OLD.to_dst_id,
     OLD.to_arrival,OLD.to_departure);
END$
DELIMITER ;

DROP TRIGGER IF EXISTS log_travel_to_delete;

```

```

DELIMITER $
CREATE TRIGGER log_travel_to_delete AFTER DELETE ON travel_to
FOR EACH ROW
BEGIN
    INSERT INTO log_travel_to VALUES
    ('DELETE',CURRENT_USER(),NOW(),OLD.to_tr_id,OLD.to_dst_id,
    OLD.to_arrival,OLD.to_departure);
END$
DELIMITER ;

/*triggers gia ton log_destination*/
DROP TRIGGER IF EXISTS log_destination_insert;
DELIMITER $
CREATE TRIGGER log_destination_insert AFTER INSERT ON destination
FOR EACH ROW
BEGIN
    INSERT INTO log_destination VALUES
    ('INSERT',CURRENT_USER(),NOW(),NEW.dst_id,NEW.dst_name,NEW.dst_dscr,
    NEW.dst_rtype,NEW.dst_language,NEW.dst_location);
END$
DELIMITER ;

DROP TRIGGER IF EXISTS log_destination_update;
DELIMITER $
CREATE TRIGGER log_destination_update AFTER UPDATE ON destination
FOR EACH ROW
BEGIN
    INSERT INTO log_destination VALUES
    ('UPDATE',CURRENT_USER(),NOW(),OLD.dst_id,OLD.dst_name,OLD.dst_dscr,
    OLD.dst_rtype,OLD.dst_language,OLD.dst_location);
END$
DELIMITER ;

DROP TRIGGER IF EXISTS log_destination_delete;
DELIMITER $
CREATE TRIGGER log_destination_delete AFTER DELETE ON destination
FOR EACH ROW
BEGIN
    INSERT INTO log_destination VALUES
    ('DELETE',CURRENT_USER(),NOW(),OLD.dst_id,OLD.dst_name,OLD.dst_dscr,
    OLD.dst_rtype,OLD.dst_language,OLD.dst_location);
END$
DELIMITER ;

```

Έλεγχος

Θα ελέγξουμε την λειτουργία των triggers εκτελώντας ένα insert, update και delete στον πίνακα trip.

1. Αρχικά εισάγουμε ένα νέο trip

Ο πίνακας trip πριν την εισαγωγή:

```
mysql> select * from trip where tr_id > 25;
+-----+-----+-----+-----+-----+-----+-----+-----+
| tr_id | tr_departure | tr_return | tr_maxseats | tr_cost | tr_br_code | tr_gui_AT | tr_drv_AT |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 26 | 2022-10-20 14:30:00 | 2022-10-27 21:00:00 | 90 | 1800.23 | 5 | AK10310444 | AM10410666 |
| 27 | 2022-11-11 15:15:00 | 2022-11-26 21:00:00 | 30 | 800.00 | 5 | AK10310444 | AM10410666 |
| 28 | 2022-12-05 12:30:00 | 2022-12-21 20:30:00 | 7 | 3400.00 | 5 | AN10520060 | AM10410777 |
| 29 | 2023-02-17 19:45:00 | 2023-02-26 18:00:00 | 7 | 3900.43 | 5 | AN10520060 | AM10410777 |
| 30 | 2023-06-12 18:30:00 | 2023-06-29 10:30:00 | 7 | 700.00 | 5 | AN10520060 | AM10410777 |
+-----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

Μετά την εισαγωγή:

```
mysql> INSERT INTO trip VALUES
-> (null, '2023-03-05 15:30:00', '2023-03-08 12:30:00', 30, 300, 1, 'AK10311111', 'AM10410000');
Query OK, 1 row affected (0.02 sec)

mysql> select * from trip where tr_id > 25;
+-----+-----+-----+-----+-----+-----+-----+-----+
| tr_id | tr_departure | tr_return | tr_maxseats | tr_cost | tr_br_code | tr_gui_AT | tr_drv_AT |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 26 | 2022-10-20 14:30:00 | 2022-10-27 21:00:00 | 90 | 1800.23 | 5 | AK10310444 | AM10410666 |
| 27 | 2022-11-11 15:15:00 | 2022-11-26 21:00:00 | 30 | 800.00 | 5 | AK10310444 | AM10410666 |
| 28 | 2022-12-05 12:30:00 | 2022-12-21 20:30:00 | 7 | 3400.00 | 5 | AN10520060 | AM10410777 |
| 29 | 2023-02-17 19:45:00 | 2023-02-26 18:00:00 | 7 | 3900.43 | 5 | AN10520060 | AM10410777 |
| 30 | 2023-06-12 18:30:00 | 2023-06-29 10:30:00 | 7 | 700.00 | 5 | AN10520060 | AM10410777 |
| 31 | 2023-03-05 15:30:00 | 2023-03-08 12:30:00 | 30 | 300.00 | 1 | AK10311111 | AM10410000 |
+-----+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

Έλεγχος του πίνακα log_trip:

```
mysql> select * from log_trip;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| log_type | log_it_lname | log_timestamp | log_tr_id | log_tr_departure | log_tr_return | log_tr_maxseats | log_tr_cost | log_tr_br_code | log_tr_gui_AT | log_tr_drv_AT |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| INSERT | root@localhost | 2023-02-02 16:12:58 | 31 | 2023-03-05 15:30:00 | 2023-03-08 12:30:00 | 30 | 300.00 | 1 | AK10311111 | AM10410000 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

Βλέπουμε πως στον πίνακα log_trip αποθηκεύτηκε μια εγγραφή στην οποία καταγράφονται το είδος της ενέργειας (INSERT), το username του χρήστη που την εκτέλεσε (root) και τα στοιχεία της εγγραφής που εισάχθηκε στον πίνακα trip.

2. Στην συνέχεια ενημερώνουμε ένα trip

Έστω ότι αλλάζουμε την ημερομηνία αναχώρησης του καινούριου trip.

```
mysql> UPDATE trip SET tr_departure = '2023-04-05 15:30:06'  
      -> WHERE tr_id = 31;  
Query OK, 1 row affected (0.01 sec)  
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select * from trip where tr_id>25;  
+-----+-----+-----+-----+-----+-----+-----+-----+  
| tr_id | tr_departure | tr_return | tr_maxseats | tr_cost | tr_br_code | tr_gui_AT | tr_drv_AT |  
+-----+-----+-----+-----+-----+-----+-----+-----+  
| 26   | 2022-10-20 14:30:00 | 2022-10-27 21:00:00 | 90 | 1800.23 | 5 | AK10310444 | AM10410666 |  
| 27   | 2022-11-11 15:15:00 | 2022-11-26 21:00:00 | 30 | 800.00 | 5 | AK10310444 | AM10410666 |  
| 28   | 2022-12-05 12:30:00 | 2022-12-21 20:30:00 | 7 | 3400.00 | 5 | AN10520060 | AM10410777 |  
| 29   | 2023-02-17 19:45:00 | 2023-02-26 18:00:00 | 7 | 3900.43 | 5 | AN10520060 | AM10410777 |  
| 30   | 2023-06-12 18:30:00 | 2023-06-29 10:30:00 | 7 | 700.00 | 5 | AN10520060 | AM10410777 |  
| 31   | 2023-04-05 15:30:06 | 2023-03-08 12:30:00 | 30 | 300.00 | 1 | AK10311111 | AM10410000 |  
+-----+-----+-----+-----+-----+-----+-----+-----+  
6 rows in set (0.00 sec)
```

Βλέπουμε στην τελευταία γραμμή την ενημερωμένη ημερομηνία.

Έλεγχος του πίνακα log_trip:

```
mysql> select * from log_trip;  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
| log_type | log_it_lname | log_timestamp | log_tr_id | log_tr_departure | log_tr_return | log_tr_maxseats | log_tr_cost | log_tr_br_code | log_tr_gui_AT | log_tr_drv_AT |  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
| INSERT   | root@localhost | 2023-02-02 16:12:58 | 31 | 2023-03-05 15:30:00 | 2023-03-08 12:30:00 | 30 | 300.00 | 1 | AK10311111 | AM10410000 |  
| UPDATE   | root@localhost | 2023-02-02 16:21:57 | 31 | 2023-03-05 15:30:00 | 2023-03-08 12:30:00 | 30 | 300.00 | 1 | AK10311111 | AM10410000 |  
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
2 rows in set (0.00 sec)
```

Βλέπουμε πως εκτελέστηκε ένα UPDATE και αποθηκεύτηκε η ημερομηνία αναχώρησης που είχε το ταξίδι πριν την ενημέρωση.

3. Τέλος διαγράφουμε ένα trip

```
mysql> DELETE FROM trip where tr_id = 31;  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from trip where tr_id>25;  
+-----+-----+-----+-----+-----+-----+-----+-----+  
| tr_id | tr_departure | tr_return | tr_maxseats | tr_cost | tr_br_code | tr_gui_AT | tr_drv_AT |  
+-----+-----+-----+-----+-----+-----+-----+-----+  
| 26   | 2022-10-20 14:30:00 | 2022-10-27 21:00:00 | 90 | 1800.23 | 5 | AK10310444 | AM10410666 |  
| 27   | 2022-11-11 15:15:00 | 2022-11-26 21:00:00 | 30 | 800.00 | 5 | AK10310444 | AM10410666 |  
| 28   | 2022-12-05 12:30:00 | 2022-12-21 20:30:00 | 7 | 3400.00 | 5 | AN10520060 | AM10410777 |  
| 29   | 2023-02-17 19:45:00 | 2023-02-26 18:00:00 | 7 | 3900.43 | 5 | AN10520060 | AM10410777 |  
| 30   | 2023-06-12 18:30:00 | 2023-06-29 10:30:00 | 7 | 700.00 | 5 | AN10520060 | AM10410777 |  
+-----+-----+-----+-----+-----+-----+-----+-----+  
5 rows in set (0.00 sec)
```

Διαγράψαμε το trip με id = 31.

Έλεγχος του πίνακα log_trip:

```
mysql> select * from log_trip;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| log_type | log_it_lname | log_timestamp | log_tr_id | log_tr_departure | log_tr_return | log_tr_maxseats | log_tr_cost | log_tr_br_code | log_tr_gui_AT | log_tr_drv_AT |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| DELETE | root@localhost | 2023-02-02 16:36:08 | 31 | 2023-04-05 15:30:06 | 2023-03-08 12:30:00 | 30 | 300.00 | 1 | AK10311111 | AM10410000 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

Με αντίστοιχο τρόπο δουλεύουν και τα triggers των υπολοίπων πινάκων.

3.1.4.2

```
DROP TRIGGER IF EXISTS check_reservations;
DELIMITER $$
CREATE TRIGGER check_reservations BEFORE UPDATE ON trip
FOR EACH ROW
BEGIN
IF exists(SELECT * FROM reservation WHERE res_tr_id=OLD.tr_id)
THEN
SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT='This trip already has reservations therefore
updates are restricted!';
END IF;
END$$
DELIMITER ;
```

Το **trigger** αυτό αποτρέπει την αλλαγή της ημερομηνίας αναχώρησης, της ημερομηνίας επιστροφής και του κόστους του ταξιδιού, αν έχουν ήδη γίνει κρατήσεις για αυτό. Ο έλεγχος γίνεται με ένα **if** που αν ισχύει τότε εκτυπώνεται κατάλληλο error.

```
SELECT * FROM reservation;
```

```
SELECT * FROM trip;
```

Εκτελούμε τα δύο παραπάνω **select** για να δούμε ποια **trips** έχουν κρατήσεις και ποια όχι.

```
UPDATE trip SET tr_cost=452.18 WHERE tr_id=30;
```

Στη συνέχεια Εκτελούμε το παραπάνω **update**.

```
mysql> UPDATE trip SET tr_cost=452.18 WHERE tr_id=30;
ERROR 1644 (45000): This trip already has reservations therefore updates are restricted!
mysql>
```

Εκτελούμε το **select** για το **trip** και βλέπουμε αν έχει γίνει αλλαγή.

```
mysql> SELECT * FROM trip;
+-----+-----+-----+-----+-----+-----+-----+
| tr_id | tr_departure | tr_return | tr_maxseats | tr_cost | tr_br_code | tr_gui_AT | tr_drv_AT |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | 2022-03-05 15:30:00 | 2022-03-08 12:30:00 | 30 | 300.00 | 1 | AK10311111 | AM10410000 |
| 2 | 2022-03-10 15:00:00 | 2022-03-16 17:00:00 | 30 | 500.00 | 1 | AK10311111 | AM10410000 |
| 3 | 2022-04-15 17:30:00 | 2022-04-17 01:30:00 | 60 | 1000.65 | 1 | AK10311111 | AM10410000 |
| 4 | 2022-03-08 15:00:00 | 2022-03-27 13:00:00 | 20 | 200.85 | 1 | AN10520010 | AM10410111 |
| 5 | 2022-04-03 17:00:00 | 2022-04-19 22:00:00 | 30 | 500.52 | 1 | AN10520010 | AM10410111 |
| 6 | 2022-06-18 22:30:00 | 2022-06-29 18:30:00 | 30 | 900.00 | 1 | AN10520010 | AM10410111 |
| 7 | 2022-07-05 18:30:00 | 2022-07-15 16:30:00 | 70 | 1500.00 | 2 | AN10520020 | AM10410222 |
| 8 | 2022-07-18 18:30:00 | 2022-07-19 22:00:00 | 30 | 800.00 | 2 | AN10520020 | AM10410222 |
| 9 | 2022-08-02 15:30:00 | 2022-08-03 21:30:00 | 30 | 300.00 | 2 | AN10520020 | AM10410222 |
| 10 | 2022-07-12 16:00:00 | 2022-07-29 19:30:00 | 30 | 2000.00 | 2 | AN10520030 | AM10410333 |
| 11 | 2022-08-10 18:30:00 | 2022-08-23 19:00:00 | 50 | 100.00 | 2 | AN10520030 | AM10410333 |
| 12 | 2022-09-09 18:30:00 | 2022-09-26 12:00:00 | 30 | 700.88 | 2 | AN10520030 | AM10410333 |
| 13 | 2022-01-05 13:30:00 | 2022-01-21 03:30:00 | 20 | 1600.00 | 3 | AN10520040 | AM10410444 |
| 14 | 2022-01-22 17:30:00 | 2022-01-24 20:00:00 | 30 | 560.00 | 3 | AN10520040 | AM10410444 |
| 15 | 2022-02-13 19:30:00 | 2022-02-24 08:00:00 | 30 | 300.99 | 3 | AN10520040 | AM10410444 |
| 16 | 2022-03-17 18:30:00 | 2022-03-18 21:30:00 | 60 | 890.00 | 3 | AN10520040 | AM10410444 |
| 17 | 2022-03-20 16:30:00 | 2022-03-27 15:30:00 | 30 | 230.00 | 3 | AN10520040 | AM10410444 |
| 18 | 2022-04-24 19:00:00 | 2022-04-28 21:30:00 | 45 | 670.00 | 3 | AN10520040 | AM10410444 |
| 25 | 2022-08-18 05:30:00 | 2022-08-22 21:00:00 | 20 | 9000.74 | 5 | AK10310444 | AM10410666 |
| 26 | 2022-10-20 14:30:00 | 2022-10-27 21:00:00 | 90 | 1800.23 | 5 | AK10310444 | AM10410666 |
| 27 | 2022-11-11 15:15:00 | 2022-11-26 21:00:00 | 30 | 800.00 | 5 | AK10310444 | AM10410666 |
| 28 | 2022-12-05 12:30:00 | 2022-12-21 20:30:00 | 7 | 3400.00 | 5 | AN10520060 | AM10410777 |
| 29 | 2023-02-17 19:45:00 | 2023-02-26 18:00:00 | 7 | 3900.43 | 5 | AN10520060 | AM10410777 |
| 30 | 2023-06-12 18:30:00 | 2023-06-29 10:30:00 | 7 | 700.00 | 5 | AN10520060 | AM10410777 |
+-----+-----+-----+-----+-----+-----+-----+
24 rows in set (0.00 sec)

mysql>
```

Όπως το περιμέναμε δεν έγινε κάποια αλλαγή.

3.1.4.3

```
DROP TRIGGER IF EXISTS check_salary;
DELIMITER $
CREATE TRIGGER check_salary BEFORE UPDATE ON worker
FOR EACH ROW
BEGIN
IF OLD.wrk_salary >= NEW.wrk_salary
THEN
SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT='The new salary must be greater than the
older!';
END IF;
END$
DELIMITER ;
```

Το **trigger** αυτό δεν επιτρέπει τη μείωση του μισθού ενός υπαλλήλου. Με ένα if ελέγχουμε αν ο παλιός μισθός είναι μεγαλύτερος ή ίσος από τον καινούριο και αν είναι τότε εκτυπώνεται ένα error.

```
SELECT * FROM worker;
```

Εκτελούμε πρώτα αυτό το **select** για να διαλέξουμε τον worker του οποίου θα προσπαθήσουμε να αλλάξουμε τον μισθό.

```
mysql> SELECT * FROM worker;
+-----+-----+-----+-----+-----+
| wrk_AT | wrk_name | wrk_lname | wrk_salary | wrk_br_code |
+-----+-----+-----+-----+-----+
| AK10310000 | John | Politis | 1400.55 | 4 |
| AK10310111 | Alkis | Eleftheriadis | 1200.35 | 4 |
| AK10310222 | Andreas | Georgiou | 1000.21 | 4 |
| AK10310333 | Giannhs | Stathopoulos | 1900.56 | 5 |
| AK10310444 | Sofia | Politi | 1400.86 | 5 |
| AK10310555 | Nikos | Vasiliou | 1600.96 | 5 |
| AK10311111 | Giannhs | Vasiliou | 1547.55 | 1 |
| AK10322222 | Artemis | Papadopoulou | 1800.34 | 1 |
| AK10333333 | Georgia | Makri | 2000.00 | 1 |
| AK10344444 | Greg | Stephanopoulos | 1600.00 | 2 |
| AK10366666 | Maria | Papadopoulou | 2000.00 | 2 |
| AK10377777 | Orestis | Makris | 1600.69 | 3 |
| AK10388888 | Damianos | Papadopoulos | 1500.00 | 3 |
| AK10399999 | Iris | Oikonomou | 1400.55 | 3 |
| AK12000001 | Artemis | Padadimitriou | 1500.00 | 1 |
| AK12000002 | Maria | Prodromou | 1500.00 | 1 |
| AK12000003 | John | Stathopoulos | 1500.00 | 1 |
| AK12000004 | Andreas | Vasiladiotis | 1500.00 | 2 |
| AK12000006 | Orestis | Makris | 1500.00 | 3 |
| AK12000007 | Grigotis | Delibaltadakis | 1500.00 | 3 |
| AK12000008 | Alexandros | Alexandrou | 1500.00 | 4 |
| AK12000009 | Nikolas | Karavlidis | 1500.00 | 5 |
| AK12000010 | Viki | Aleksiou | 1500.00 | 5 |
| AM10410000 | Antonis | Kokinos | 1000.00 | 1 |
| AM10410111 | Antonis | Eleftheriadis | 1100.00 | 1 |
| AM10410222 | Nora | Raikou | 750.00 | 2 |
| AM10410333 | John | Oikonomou | 1150.00 | 2 |
| AM10410444 | Dimitrios | Gongas | 1500.00 | 3 |
| AM10410555 | Fotios | Patrios | 1400.00 | 4 |
| AM10410666 | Maria | Papadopoulou | 1000.00 | 5 |
| AM10410777 | Andreas | Makris | 750.00 | 5 |
| AN10520010 | Damianos | Diasakos | 1200.00 | 1 |
| AN10520020 | Greg | Delimpaltadakis | 1000.00 | 2 |
| AN10520030 | Orestis | Delimpaltadakis | 1000.00 | 2 |
| AN10520040 | Iason | Makris | 1200.00 | 3 |
| AN10520060 | Damianos | Delimpaltadakis | 1200.00 | 5 |
| AX10322100 | Giorgos | Kapakis | 1500.32 | 3 |
+-----+-----+-----+-----+-----+
37 rows in set (0.00 sec)
```

```
UPDATE worker SET wrk_salary=500 WHERE wrk_AT="AK10333333";
```

Εκτελούμε το παραπάνω **update**.

```
mysql> UPDATE worker SET wrk_salary=500 WHERE wrk_AT="AK10333333";
ERROR 1644 (45000): The new salary must be greater than the older!
mysql>
```

Εκτελούμε πάλι το **select** με το worker για να δούμε αν έχει γίνει αλλαγή.

```
mysql> SELECT * FROM worker;
+-----+-----+-----+-----+-----+
| wrk_AT | wrk_name | wrk_lname | wrk_salary | wrk_br_code |
+-----+-----+-----+-----+-----+
| AK10310000 | John | Politis | 1400.55 | 4 |
| AK10310111 | Alkis | Eleftheriadis | 1200.35 | 4 |
| AK10310222 | Andreas | Georgiou | 1000.21 | 4 |
| AK10310333 | Giannhs | Stathopoulos | 1900.56 | 5 |
| AK10310444 | Sofia | Politi | 1400.86 | 5 |
| AK10310555 | Nikos | Vasiliou | 1600.96 | 5 |
| AK10311111 | Giannhs | Vasiliou | 1547.55 | 1 |
| AK10322222 | Artemis | Papadopoulou | 1200.24 | 1 |
| AK10333333 | Georgia | Makri | 2000.00 | 1 |
| AK10344444 | Greg | Stephanopoulos | 1600.00 | 2 |
| AK10366666 | Maria | Papadopoulou | 2000.00 | 2 |
| AK10377777 | Orestis | Makris | 1600.69 | 3 |
| AK10388888 | Damianos | Papadopoulos | 1500.00 | 3 |
| AK10399999 | Iris | Oikonomou | 1400.55 | 3 |
| AK12000001 | Artemis | Padadimitriou | 1500.00 | 1 |
| AK12000002 | Maria | Prodromou | 1500.00 | 1 |
| AK12000003 | John | Stathopoulos | 1500.00 | 1 |
| AK12000004 | Andreas | Vasiladiotis | 1500.00 | 2 |
| AK12000006 | Orestis | Makris | 1500.00 | 3 |
| AK12000007 | Grigoris | Delibaltadakis | 1500.00 | 3 |
| AK12000008 | Alexandros | Alexandrou | 1500.00 | 4 |
| AK12000009 | Nikolas | Karavlidis | 1500.00 | 5 |
| AK12000010 | Viki | Aleksiou | 1500.00 | 5 |
| AM10410000 | Antonis | Kokinos | 1000.00 | 1 |
| AM10410111 | Antonis | Eleftheriadis | 1100.00 | 1 |
| AM10410222 | Nora | Raikou | 750.00 | 2 |
| AM10410333 | John | Oikonomou | 1150.00 | 2 |
| AM10410444 | Dimitrios | Gongas | 1500.00 | 3 |
| AM10410555 | Fotios | Patrios | 1400.00 | 4 |
| AM10410666 | Maria | Papadopoulou | 1000.00 | 5 |
| AM10410777 | Andreas | Makris | 750.00 | 5 |
| AN10520010 | Damianos | Diasakos | 1200.00 | 1 |
| AN10520020 | Greg | Delimpaltadakis | 1000.00 | 2 |
| AN10520030 | Orestis | Delimpaltadakis | 1000.00 | 2 |
| AN10520040 | Iason | Makris | 1200.00 | 3 |
| AN10520060 | Damianos | Delimpaltadakis | 1200.00 | 5 |
| AX10322100 | Giorgos | Kapakis | 1500.32 | 3 |
+-----+-----+-----+-----+-----+
37 rows in set (0.00 sec)

mysql>
```

Απ' ότι φαίνεται δεν έχει γίνει αλλαγή.

Μέρος Β: GUI

Κεφάλαιο 4 – Java

Το GUI υλοποιήθηκε με απόλυτη επιτυχία με την χρήση του IDE NetBeans και της βιβλιοθήκης JDK 15 για την αλληλεπίδραση με την βάση δεδομένων σε MySQL. Αποτελείται από τις ακόλουθες κλάσης οποίες θα επεξηγούν αναλυτικά :

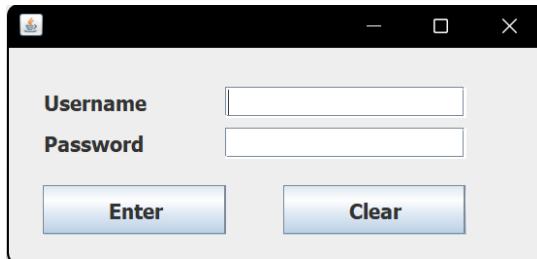
AdminWorker	Log_Destination	Offers
Branches	Log_Events	ProcedureResults
BranchInfo	Log_Reservation	ReservationOffers
Destination	Log_Travel_To	Reservations
DriverWorker	Log_Trip	Travel_To
Events	Login	TripEvent
GuideWorker	Main	
ItAdmin	Menu	

Κλάση Main:

Αποτελεί την κλάση εκκίνησης του application μας η οποία με την σειρά της καλεί την Login ώστε να πραγματοποίηση την είσοδο στην βάση δεδομένων ο χρήστης.

Κλάση Login:

Αποτελεί την κλάση εισόδου του User με Username: το Last Name του και έχει την ακόλουθη οπτική μορφή:



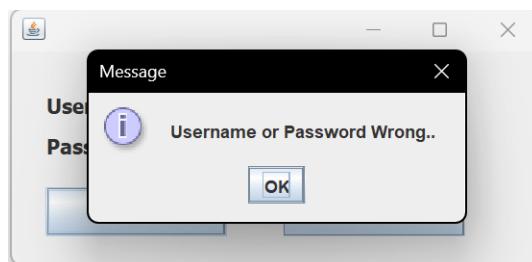
Αποτελείται από τον Constructor Login, την μέθοδο insert , την μέθοδο connect, την μέθοδο enterButtonActionPerformed και την μέθοδο resetButtonActionPerformed.

Ο Constructor Login με την χρήση του key Listener επιτρέπει στον χρήστη με το πάτημα του πλήκτρου enter να μεταβεί από το text field username στο text field password και από εκεί στο να πατήσει το Enter.

Η μέθοδος connect δέχεται σαν ορίσματα το username και το password και τα αξιοποιεί για να πραγματοποιήσει την σύνδεση με την βάση δεδομένων με την χρήση του jdbc.

Η μέθοδος insert σε πρώτη φάση διαβάζει τα ονόματα και τα επίθετα που βρίσκονται στο αρχείο names.txt (τοποθεσία στο folder classes του project) και τα αποθηκεύει σε δύο arrays. Εν συνεχείᾳ με την χρήση της συνάρτησης random της java περνούμε τυχαία indexes για τα παραπάνω arrays αλλά και τυχαίες τιμές μεταξύ 70-200 για την προκαταβολή του πελάτη τυχαία επιλογή αυτών των τιμών επαναλαμβάνατε 25.000 φορές για την εισαγωγή των τιμών στο πίνακα reservation_offers με την χρήση ενός for loop. Εκτελούμε την παραπάνω διαδικασία 3 φορές (σύνολο εγγραφών 75.000) για id offers από 1 έως 3 με την χρήση ενός εξωτερικού for loop. Με αυτήν την συνάρτηση επιτυγχάνουμε την αυτόματη εισαγωγή 75.000 εγγράφων στον πίνακα reservation_offers της βάσης.

Η μέθοδος enterButtonActionPerformed εκτελείτε όταν πατήσουμε το κουμπί enter στη διεπαφή και καλεί την συνάρτηση connect στην οποία περνάει το username και το password που διάβασε από τα αντίστοιχα πεδία της διεπαφής για να πραγματοποιήσει το connection του χρήστη με τα κατάλληλα δικαιώματα που έχει στην βάση και στην περίπτωση λανθασμένου username ή password ή μη υπάρχοντος χρήστη καθαρίζει τα πεδία και εκτυπώνει το παρακάτω μήνυμα σε ένα νέο παράθυρο με την χρήση της μεθόδου JOptionPane από την βιβλιοθήκη swing. Στην συνέχεια με την επιτυχή εκτέλεση του connection ελέγχουμε αν ο πίνακας reservation offers είναι empty, στην περίπτωση που είναι απλά εκτελείτε η συνάρτηση insert για να εισαχθούν οι 75.000 εγγραφές.



Σε περίπτωση που πρέπει να πραγματοποιηθούν εγγραφές υπάρχει αναμονή που κινείτε μεταξύ 1 με 3 λεπτά.

To log in εξυπηρετεί και χρήστες με διαφορετικά δικαιώματα πχ admins με δικαίωμα view μόνο.

Χρήστες για Log In :

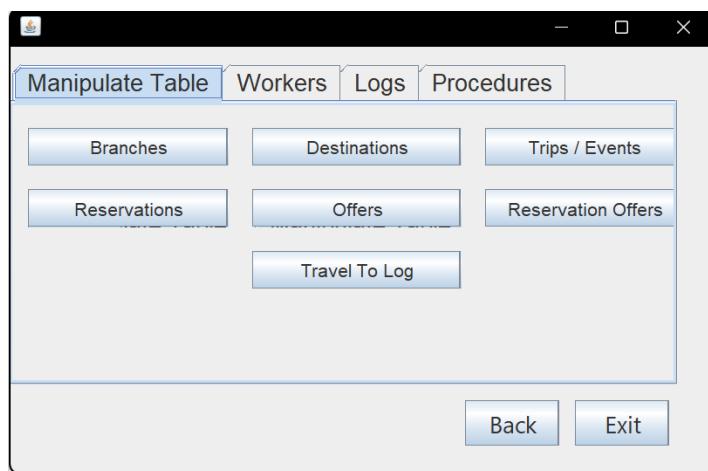
Last Name	Password
Padadimitriou	password
Prodromou	password
Stathopoulos	John
Vasiladiotis	password
Raikos	1234
Makris	1444
Delibaltadakis	ff
Alexandrou	AlexAlex
Karavlidis	Nik
Aleksiou	password

Κλάση Menu:

Είναι η κλάση που υλοποιεί το menu της εφαρμογής. Κάθε κουμπί αποτελεί μια ξεχωριστή μέθοδο της κλάσης αυτής και περιέχει κώδικα ο οποίος ανοίγει τα κατάλληλα παράθυρα. Σχετικά με την δομή του menu :

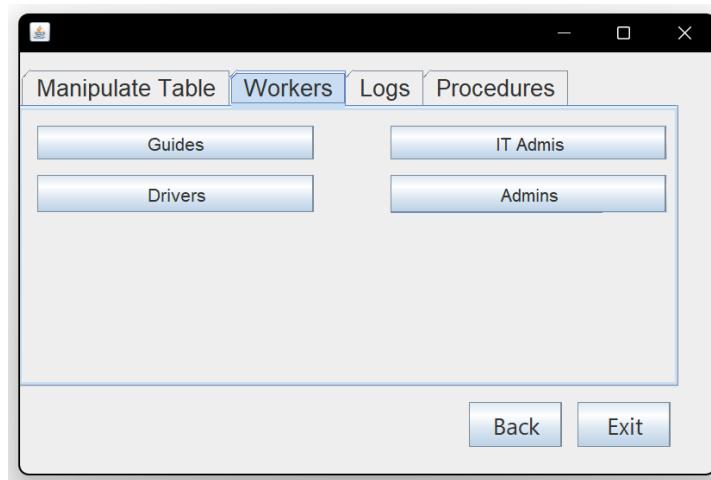
Manipulate Tables:

Περιέχει τα κουμπιά τα οποία οδηγούν σε παράθυρα που αφορούν τις λειτουργίες insert delete update and search για τους ακολούθους πίνακες Branches (Πίνακες Branches & Phones), Destinations, Trips/Events (Πίνακες Trip & Events), Reservations , Offers , Reservation_Offers και Travel_To.



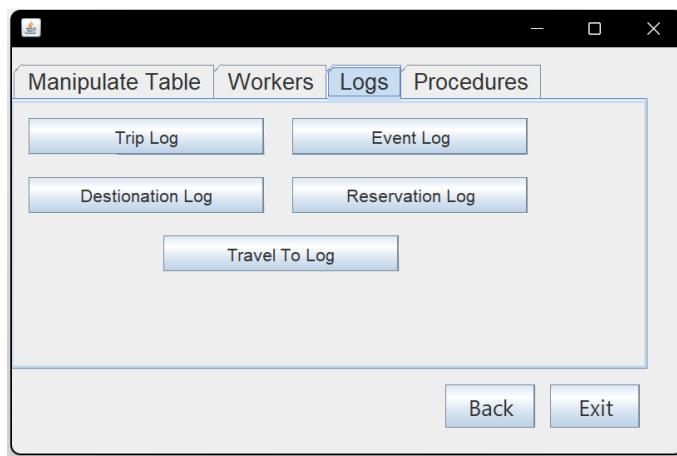
Workers:

Περιέχει τα κουμπιά τα οποία οδηγούν σε παράθυρα που αφορούν το της λειτουργίες insert delete update and search για τους ακολούθους πίνακες Guides (Πίνακες guide , worker & languages), IT Admins (Πίνακες it_admin & worker) , Drivers (worker & driver) and Admins (worker, manages & admin).



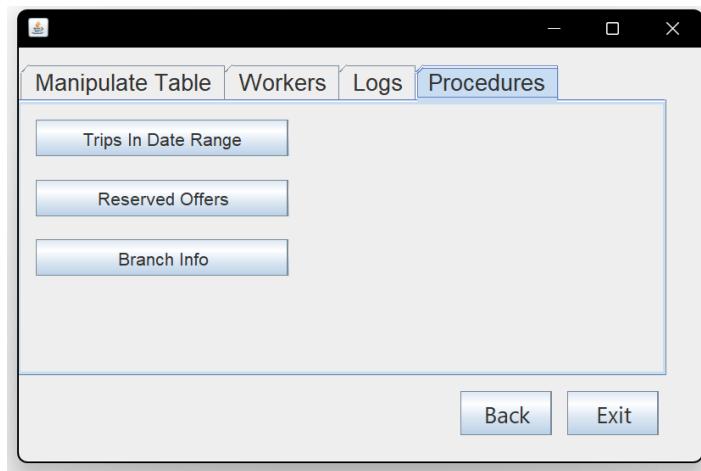
Logs:

Περιέχει τα κουμπιά τα οποία οδηγούν σε παράθυρα που παρουσιάζουν το περιεχόμενο των ακόλουθων πινάκων log_destination , log_event , log_event , log_reservation , log_travel_to , log_trip .



Procedures:

Περιέχει τα κουμπιά τα οποία οδηγούν σε παράθυρα που παρουσιάζουν τα αποτελέσματα εκτέλεσης των stored procedures search_trip(), reservation_offers() και branch_info().



Κλάση AdminWorker:

Admin Worker

Branches	Worker AT	Name	Last Name	Salary	Branch Code	Diploma	Admin Type
1	AK1031111	Gianths	Vasilou	1547.55	1	Diploma: Lo...	LOGISTICS
2	AK1032222	Artemis	Papadopoulou	1800.34	1	Diploma: Acc...	ACCOUNTING
3	AK1033333	Georgia	Makri	2000.0	1	Diploma: Ec...	ADMINISTRAT...
4	AK1034444	Greg	Stephanopoulos	1600.0	2	Diploma: Ec...	LOGISTICS
5	AK1035555	Iason	Ralkos	1800.99	2	Diploma: Ec...	ACCOUNTING
6	AK1036666	Maria	Papadopoulou	2000.0	2	Diploma: To...	ADMINISTRAT...
AK1038888	Damianos	Papadopoulou	1500.0	3	Diploma: Ma...	ACCOUNTING	
AK1039999	Iris	Oikonomou	1400.55	3	Diploma: Vol...	LOGISTICS	
esfdgfh	Maria	Papadopoulou	2000.0	3	Diploma: To...	ACCOUNTING	
AK1031000	John	Politis	1400.55	4	Diploma: Bu...	ADMINISTRAT...	
AK10310111	Aikis	Eleftheriadis	1200.35	4	Diploma: La...	ACCOUNTING	
AK10310222	Andreas	Georgiou	1000.21	4	Diploma: Ma...	LOGISTICS	
AK10310333	Gianths	Stathopoulos	1900.56	5	Diploma: Ec...	ADMINISTRAT...	
AK10310444	Sofia	Politi	1400.86	5	Diploma: Ph...	LOGISTICS	
AK10310555	Nikos	Vasilou	1600.96	5	Diploma: 53 ...	ACCOUNTING	
AK10310554	Nikos	Vasilou	1600.96	6	Diploma: 53 ...	LOGISTICS	
werfg	Nikos	Vasilou	1600.96	6	Diploma: 53 ...	ACCOUNTING	

Add Worker

Name	Greg
Last Name	Stephanopoulos
ID Number	AK10344444
Salary	1600.0
Branch Code	2
Diploma	Diploma: Economics Ionian School of Business
Role	LOGISTICS

Search

ID Number	AK10344444
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Buttons: Save, Update, Delete, Clear, Exit

Αφορά τις λειτουργίες insert delete update and search για ένα admin worker και επηρεάζει τους πίνακες admin worker and manages. Αποτελείται από τις ακόλουθες μεθόδους table_load() , table_load_Branches(), SaveButtonActionPerformed() , ExitButtonActionPerformed() , ClearButtonActionPerformed() , jTable2MouseClicked() , UpdateButton2ActionPerformed() , jTable4MouseClicked() , SearchFieldKeyReleased() , DeleteButtonActionPerformed().

table_load() : Πραγματοποιεί ένα inner join select στους πίνακες admin, worker, manages και περνάει τα αποτελέσματα της απάντησης του σε έναν Jtable.

table_load_Branches(): Πραγματοποιεί ένα select στον πίνακα Branches και περνάει τα αποτελέσματα της απάντησης του σε έναν Jtable ώστε όταν πάμε να κάνουμε insert ή update έναν admin ο χρηστής να έχει γνώση των υπάρχοντων branches ώστε να επιλέξει ένα.

SaveButtonActionPerformed(): διαβάζει τα περιεχόμενα των πεδίων Name , Last Name , ID Number, Salary, Branch Code, Diploma και του drop bar Role (enum var) και πραγματοποιεί το insert στους πίνακες Admin worker and manages. Σε περίπτωση error με την χρήση του sql exception το πιάνουμε και τυπώνουμε το μήνυμα error στον χρήστη με μορφή ενός νέου παραθύρου.

ExitButtonActionPerformed() : exit από το application.

ClearButtonActionPerformed(): Καθαρίζει όλα τα πεδία του παραθύρου.

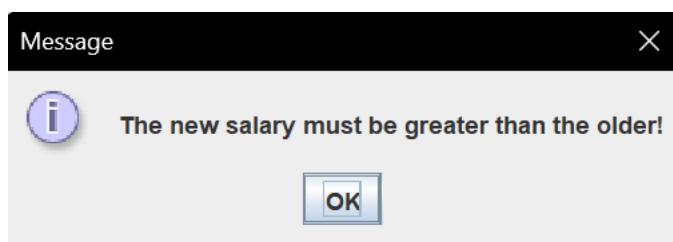
jTable2MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table admin περνάει το περιεχόμενο της κάθε στήλης του στα κατάλληλα text πεδία, drop fields και στο search πεδίο.

jTable4MouseClicked(): Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table branch περνάει το id του branch που περιέχει στο πεδίο Branch Code ώστε όταν πάμε να κάνουμε insert ή update έναν admin ο χρήστης να έχει γνώση των υπάρχοντων branches ώστε να επιλέξει ένα.

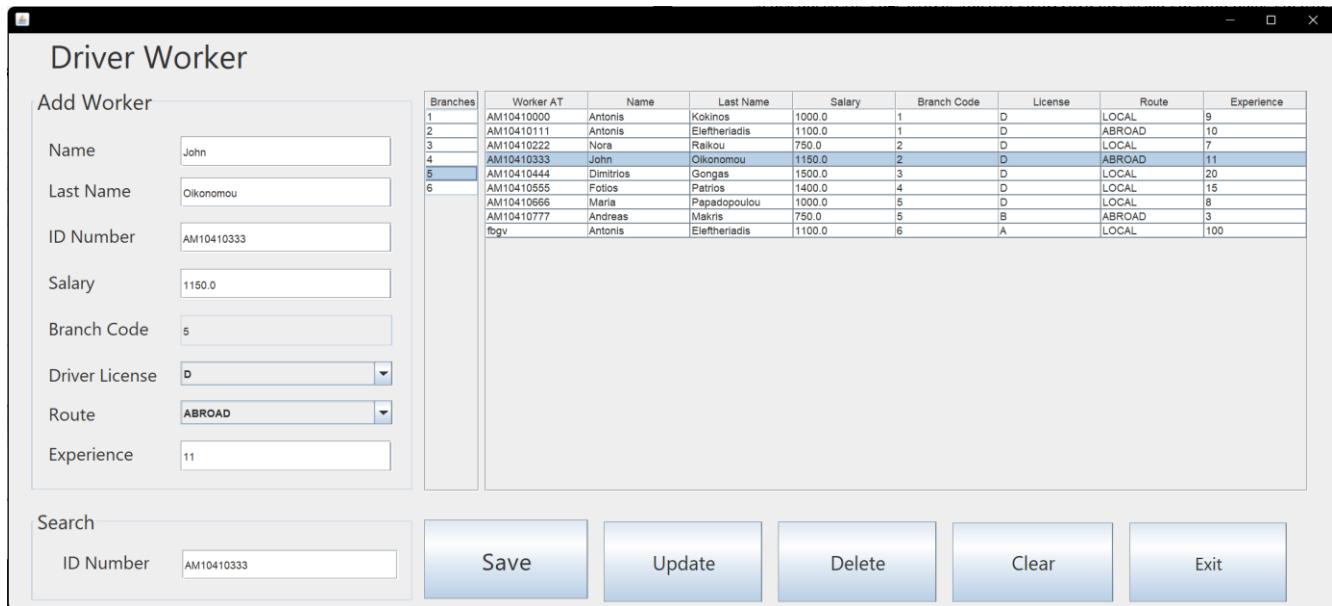
DeleteButtonActionPerformed() : Διαβάζει το κλειδί του worker που είναι προς διαγραφή από το πεδίο ID Number στο search και τον διαγράφει με χρήση του stored procedure delete_worker(). Αν ο admin που διαγράφουμε είναι τύπου ADMINISTRATIVE δεν διαγράφεται.

SearchFieldKeyReleased(): Διαβάζει το κλειδί (ID) του worker που θέλουμε να βρούμε από το πεδίο ID Number στο search και μόλις τον βρει μεταφέρει τα στοιχεία του από τους πίνακες admin worker και manages στα κατάλληλα πεδία. Η λειτουργία search υπάρχει για ευκολία του user στα operations Delete and Update .

UpdateButton2ActionPerformed(): Αξιοποιεί την συνάρτηση SearchFieldKeyReleased ώστε να προσφέρει στον χρήστη την τρέχουσα κατάσταση των στοιχείων του admin ώστε να αλλάξει αυτά που επιθυμεί και αξιοποιώντας το τωρινό id (key) από το πεδίο ID Number στο search και πραγματοποιεί το update. Σε περίπτωση που μειώσει το μισθό του υπαλλήλου καλείται το κατάλληλο trigger που εμποδίζει το update τυπώνουμε το κατάλληλο μήνυμα error στον χρήστη με μορφή ενός νέου παραθύρου.



Κλάση DriverWorker:



Αφορά τις λειτουργίες insert delete update and search για ένα Driver worker και επηρεάζει τους πίνακες worker and driver. Αποτελείται από τις ακόλουθες μεθόδους που αξιοποιούνται table_load() , table_load_Branches(), SaveButtonActionPerformed() , ExitButtonActionPerformed() , ClearButtonActionPerformed() , jTable2MouseClicked() , UpdateButton2ActionPerformed() , jTable4MouseClicked() , SearchFieldKeyReleased() , DeleteButtonActionPerformed().

table_load() : Πραγματοποιεί ένα inner join select στους πίνακες driver και worker και περνάει τα αποτελέσματα της απάντησης του σε έναν Jtable.

table_load_Branches(): Πραγματοποιεί ένα select στον πίνακα Branches και περνάει τα αποτελέσματα της απάντησης του σε έναν Jtable ώστε όταν πάμε να κάνουμε insert ή update έναν driver, ο χρηστής να έχει γνώση των υπάρχοντων branches ώστε να επιλέξει ένα.

SaveButtonActionPerformed(): διαβάζει τα περιεχόμενα των πεδίων Name , Last Name , ID Number , Salary, Branch Code , Driver License , Route και Experience και πραγματοποιεί το insert στους πίνακες driver, worker Για την εισαγωγή ενός driver με την χρήσει του procedure insert_driver. Σε περίπτωση error με την χρήση του sql exception το πιάνουμε και τυπώνουμε το μήνυμα error με μορφή ενός νέου παραθύρου.

ExitButtonActionPerformed() : exit από το application.

ClearButtonActionPerformed(): Καθαρίζει όλα τα πεδία του παραθύρου.

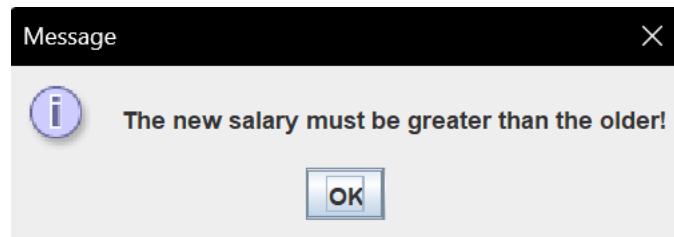
jTable2MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table driver περνάει το περιεχόμενο της κάθε στήλης του στα κατάλληλα text πεδία, drop fields και στο search πεδίο.

jTable4MouseClicked(): Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table branch περνάει το id του branch που περιέχει στο πεδίο Branch Code ώστε όταν πάμε να κάνουμε insert ή update έναν admin ο χρηστής να έχει γνώση των υπάρχοντων branches ώστε να επιλέξει ένα.

DeleteButtonActionPerformed() : Διαβάζει το κλειδί του worker που είναι προς διαγραφή από το πεδίο ID Number στο search και τον διαγράφει.

SearchFieldKeyReleased(): Διαβάζει το κλειδί (ID) του worker που θέλουμε να βρούμε από το πεδίο ID Number στο search και μόλις τον βρει μεταφέρει τα στοιχεία του από τους πίνακες driver and worker στα κατάλληλα πεδία. Η λειτουργία search υπάρχει για ευκολία του user στα operations Delete και Update .

UpdateButton2ActionPerformed(): Αξιοποιεί την συνάρτηση SearchFieldKeyReleased ώστε να προσφέρει στον χρήστη την τρέχουσα κατάσταση των στοιχείων του driver ώστε να αλλάξει αυτά που επιθυμεί και αξιοποιώντας το τωρινό id (key) από το πεδίο ID Number στο search και πραγματοποιεί το update. Σε περίπτωση που μειώσει το μισθό του υπαλλήλου διεγείρεται το κατάλληλο trigger που εμποδίζει το update τυπώνοντας το κατάλληλο μήνυμα error στον χρηστεί με μορφή ενός νέου παραθύρου.



Κλάση GuideWorker:

Branches	Worker AT	Name	Last Name	Salary	Branch Code	Language	Guide CV
1	Aggggggg	Damianos	Delimpaltadakis	1200.0	5	Greek,English,German	Employment History...
2	AK10310444	Sofia	Politi	1400.86	5	Greek,English	Employment History...
3	AK10311111	Giannis	Vassilou	1547.55	1	Greek,English,French	Employment History...
4	AN	Damianos	Delimpaltadakis	1200.0	5	Greek,English,German	Employment History...
5	AN10520010	Damianos	Disakos	1200.0	1	Greek,English,French	Employment History...
6	AN10520020	Greg	Delimpaltadakis	1000.0	2	Greek,English,German	Employment History...
	AN10520040	Iason	Makris	1200.0	3	Greek,English,Italian	Employment History...
	AN10520060	Damianos	Delimpaltadakis	1200.0	5	Greek,English,German	Employment History...
	g60	Damianos	Delimpaltadakis	1200.0	6	Greek,English,German	Employment History...

Αφορά τις λειτουργίες insert delete update and search για ένα Guide worker και επηρεάζει τους πίνακες guide worker και language . Αποτελείται από τις ακόλουθες μεθόδους table_load() , table_load_Branches(), SaveButtonActionPerformed() , ExitButtonActionPerformed() ; ClearButtonActionPerformed() , jTable2MouseClicked() , UpdateButton2ActionPerformed() , jTable4MouseClicked() , SearchFieldKeyReleased() , DeleteButtonActionPerformed().

table_load() : Πραγματοποιεί ένα inner join select στους πίνακες guide, worker και language και περνάει τα αποτελέσματα της απάντησης του σε έναν Jtable.

table_load_Branches(): Πραγματοποιεί ένα select στον πίνακα Branches και περνάει τα αποτελέσματα της απάντησης του σε έναν Jtable ώστε όταν πάμε να κάνουμε insert ή update έναν admin ο χρηστής να έχει γνώση των υπάρχοντων branches ώστε να επιλέξει ένα.

SaveButtonActionPerformed(): Διαβάζει τα περιεχόμενα των πεδίων Name , Last Name , ID Number , Salary, Branch Code , Language και Guide CV και πραγματοποιεί το insert στους πίνακες guide worker and language για την εισαγωγή ενός guide. Σε περίπτωση error με την χρήση του sql exception το πιάνουμε και τυπώνουμε το μήνυμα error στον χρήστη με μορφή ενός νέου παραθύρου.

ExitButtonActionPerformed() : Exit από το application.

ClearButtonActionPerformed(): Καθαρίζει όλα τα πεδία του παραθύρου.

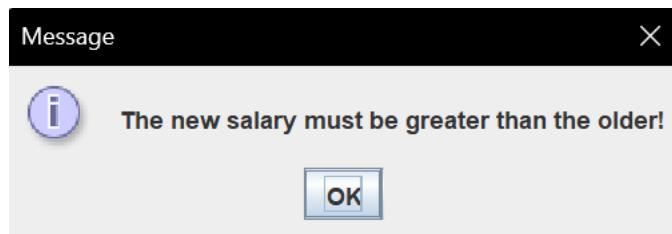
jTable2MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table guide περνάει το περιεχόμενο της κάθε στήλης του στα κατάλληλα text πεδία και drop fields και στο search πεδίο.

jTable4MouseClicked(): Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table branch περνάει το id του branch που περιέχει στο πεδίο Branch Code ώστε όταν πάμε να κάνουμε insert ή update έναν admin ο χρηστής να έχει γνώση των υπάρχοντων branches ώστε να επιλέξει ένα.

DeleteButtonActionPerformed() : Διαβάζει το κλειδί του worker που είναι προς διαγραφή από το πεδίο ID Number στο search και τον διαγράφει.

SearchFieldKeyReleased(): Διαβάζει το κλειδί (ID) του worker που θέλουμε να βρούμε από το πεδίο ID Number στο search και μόλις τον βρει μεταφέρει τα στοιχεία του από τους πίνακες guide worker and language στα κατάλληλα πεδία η λειτουργία search υπάρχει για ευκολία του user στα operations Delete and Update .

UpdateButton2ActionPerformed(): Αξιοποιεί την συνάρτηση SearchFieldKeyReleased ώστε να προσφέρει στον χρήστη την τρέχουσα κατάσταση των στοιχείων του guide ώστε να αλλάξει αυτά που επιθυμούμε και αξιοποιώντας το τωρινό id (key) από το πεδίο ID Number στο search και πραγματοποιεί το update. Σε περίπτωση που μειώσει το μισθό του υπαλλήλου διεγείρεται το κατάλληλο trigger που εμποδίζει το update τυπώνουμε το κατάλληλο μήνυμα error με μορφή ενός νέου παραθύρου.



Κλάση Branches:

Branch Code	Street Name	Street Number	City
1	Kifissias	355	Athens
2	Amarisias Artemidos	5	Athens
3	Mezonos	44	Patra
4	Aristomenous	5	Kalamata
5	Tsimiskh	55	Thesalonikh
6	Ginanitson	44	Patra

Branch Code	Phone
1	2101111111
1	2101222222
2	2102222222
2	2102333333
3	2103333333
4	2104444444
5	2105555555
6	2106666666

Αφορά τις λειτουργίες insert delete update and search για ένα branch και αλληλοεπιδρά με τον πίνακα branche. Αποτελείται από τις ακόλουθες μεθόδους που αξιοποιούνται table_load(), table_load2(), SaveButtonActionPerformed() , ExitButtonActionPerformed(), ClearButtonActionPerformed() , jTable1MouseClicked() , UpdateButtonActionPerformed() , jTable2MouseClicked() , SearchFieldKeyReleased() , DeleteButtonActionPerformed() , AddPhoneButtonActionPerformed().

table_load() : Πραγματοποιεί ένα select στον πίνακα branche και περνάει τα αποτελέσματα από το query σε έναν Jtable.

table_load2() : Πραγματοποιεί ένα select για τις στήλες ph_br_code _id και ph_number του πίνακα phones και περνάει τα αποτελέσματα από το query σε έναν Jtable , ώστε ο χρήστης να έχει μια καλύτερη εικόνα για τους διαθέσιμους προορισμός που μπορεί να επιλέξει για το πεδίο phone για τα operations insert delete update enός τηλεφώνου του branch.

SearchFieldKeyReleased(): Διαβάζει το κλειδί (ID) του branch και το τηλέφωνο που θέλουμε να βρούμε από το πεδίο Branch Code και New Phone στο search και μόλις το βρει μεταφέρει τα στοιχεία του destination από τον πίνακα destination στο κατάλληλα πεδία. Η λειτουργία search υπάρχει για ευκολία του user στα operations Delete and Update.

ExitButtonActionPerformed() : Exit από το application.

ClearButtonActionPerformed(): Καθαρίζει όλα τα πεδία του παραθύρου.

jTable1MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον jTable branch και περνάει το περιεχόμενο της κάθε στήλης του στα κατάλληλα text πεδία και drop fields και στο search πεδίο.

jTable2MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον πίνακα phone jTable περνάει το περιεχόμενο του τηλεφώνου , στο PhoneField και στο NewPhoneField πεδίο.

DeleteButtonActionPerformed() : Διαβάζει το κλειδί του branch που είναι προς διαγραφή από το πεδίο Branch code στο search και το διαγράφει.

UpdateButtonActionPerformed(): Αξιοποιεί την συνάρτηση SearchFieldKeyReleased ώστε να προσφέρει στον χρήστη την τρέχουσα κατάσταση των στοιχείων του destination ώστε να τροποποιήσει αυτά που επιθυμεί και αξιοποιώντας το τωρινό Branch Code (key) από το πεδίο Branch Code και το New Phone για το τηλέφωνο που είναι προς αλλαγή στο search και πραγματοποιεί το update.

SaveButtonActionPerformed(): Διαβάζει τα περιεχόμενα των πεδίων Street Name , Street Number , City , Phone και πραγματοποίει το insert στον πίνακα branch για την εισαγωγή ενός νέου υποκαταστήματος . Σε περίπτωση error με την χρήση του sql exception το πιάνουμε και τυπώνουμε το μήνυμα error στον χρήστη με μορφή ενός νέου παραθύρου.

AddPhoneButtonActionPerformed(): Διαβάζει τα περιεχόμενα των πεδίων Branch code and New Phone και πραγματοποίει το insert στον πίνακα phones για ένα νέο τηλέφωνο . Σε περίπτωση error με την χρήση του sql exception το πιάνουμε και τυπώνουμε το μήνυμα error στον χρήστη με μορφή ενός νέου παραθύρου.

Κλάση Destination:

Destination ID	Name	Description	Type	Language	Location
1	Santorini	The awesome island of Sa...	LOCAL	Greek	0
2	Mykonos	The awesome island of My...	LOCAL	Greek	0
3	Paros	The awesome island of Pa...	LOCAL	Greek	0
4	Zakynthos	The awesome island of Za...	LOCAL	Greek	0
5	Kalavryta	The awesome village of K...	LOCAL	Greek	0
6	Kalavryta ski resort	The awesome ski resort of...	LOCAL	Greek	5
7	Arachova	The awesome village of Ar...	LOCAL	Greek	0
8	Parnassos	The awesome mountain of P...	LOCAL	Greek	7
9	Heraklion	The awesome island of Cr...	LOCAL	Greek	0
10	Mani	The awesome Peloponnes...	LOCAL	Greek	0
11	Rhodes	The awesome island of Rh...	LOCAL	Greek	0
12	Nafplaktos	The awesome Nafplaktos ...	LOCAL	Greek	0
13	Ano Hora	The awesome village of A...	LOCAL	Greek	12
14	London	The capital of Great Britain...	ABROAD	English	0
15	Paris	The capital of France with ...	ABROAD	French	0
16	Rome	The capital of Italy with the...	ABROAD	Italian	0
17	Milan	A city of Italy with the magn...	ABROAD	Italian	0

Destination ID	Name
11	Rhodes
12	Nafplaktos
13	Ano Hora
14	London
15	Paris

Αφορά τις λειτουργίες insert delete update and search για ένα destination και αλληλοεπιδρά με τον πίνακα destination. Αποτελείται από τις ακόλουθες μεθόδους που αξιοποιούνται table_load(), table_load2(), SaveButtonActionPerformed() , ExitButtonActionPerformed(), ClearButtonActionPerformed() , jTable1MouseClicked() , UpdateButton2ActionPerformed() , jTable2MouseClicked() , SearchFieldKeyReleased() , DeleteButton1ActionPerformed().

table_load() : Πραγματοποιεί ένα select στον πίνακα destination και περνάει τα αποτελέσματα από το query σε έναν Jtable.

table_load2() : Πραγματοποιεί ένα select για τις στήλες dst_id και dst_name του πίνακα destination και περνάει τα αποτελέσματα από το query σε έναν Jtable , ώστε ο χρήστης να έχει μια καλύτερη εικόνα για τους διαθέσιμους προορισμός που μπορεί να επιλέξει για το πεδίο location αυτό αναφορά.

SearchFieldKeyReleased(): Διαβάζει το κλειδί (ID) του destination που θέλουμε να βρούμε από το πεδίο Destination ID στο search και μόλις το βρει μεταφέρει τα στοιχεία του destination από τον πίνακα destination στο κατάλληλο πεδίο. Η λειτουργία search υπάρχει για ευκολία του user στα operations Delete and Update.

ExitButtonActionPerformed() : Exit από το application.

ClearButtonActionPerformed(): Καθαρίζει όλα τα πεδία του παραθύρου.

jTable1MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table destination περνάει το περιεχόμενο της κάθε στήλης του στα κατάλληλα text πεδία και drop fields και search πεδίο.

jTable2MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον αυτό αναφορικό destination selector jtable περνάει το περιεχόμενο της κάθε στήλης του, στο Location Text πεδίο.

DeleteButtonActionPerformed() : Διαβάζει το κλειδί του destination που είναι προς διαγραφή από το πεδίο Destination ID στο search και το διαγράφει.

UpdateButton2ActionPerformed(): Αξιοποιεί την συνάρτηση SearchFieldKeyReleased ώστε να προσφέρει στον χρήστη την τρέχουσα κατάσταση των στοιχείων του destination ώστε να τροποποιήσει αυτά που επιθυμεί και αξιοποιώντας το τωρινό id (key) από το πεδίο Destination ID στο search και πραγματοποιεί το update. Το update εκτελείτε σε δυο περίπτωσης αν το location είναι zero (null) τότε ο προορισμός δεν περιέχει sub location άρα στο update query προς την sql δεν τροποποιεί η στήλη dst_location ενώ στην περίπτωση non zero στο update queries τροποποιούμε κατά βούληση το dst_location.

SaveButtonActionPerformed(): Διαβάζει τα περιεχόμενα των πεδίων Name , Description , Type , Salary, Language και Location και πραγματοποίει το insert στον πίνακα destination για την εισαγωγή ενός προορισμού. Το insert εκτελείτε σε δυο περίπτωσης αν το location είναι zero (null) τότε ο προορισμός δεν περιέχει sub location άρα στο insert query προς την sql η στήλη dst_location πενει default τιμή (null) ενώ στην περίπτωση non zero στο insert query τοποθετούμε κατά βούληση στο dst_location. Σε περίπτωση error με την χρήση του sql exception το πιάνουμε και τυπώνουμε το μήνυμα error στον χρήστη με μορφή ενός νέου παραθύρου.

Kλάση TripEvent

Trip & Events

Add Trip Trip Departure <input type="text" value="2022-04-03 17:00:00"/> Trip Return <input type="text" value="2022-04-19 22:00:00"/> Max Seats <input type="text" value="30"/> Cost <input type="text" value="500.52"/> Branch Code <input type="text" value="1"/> Guide AT <input type="text" value="AN10520010"/> Driver AT <input type="text" value="AM10410111"/>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Trip ID</th> <th>Departure</th> <th>Return</th> <th>Max Seats</th> <th>Cost</th> <th>Branch Code</th> <th>Guide AT</th> <th>Driver AT</th> </tr> </thead> <tbody> <tr><td>1</td><td>2022-03-05 15:30:00</td><td>2022-03-08 12:30:00</td><td>30</td><td>300.0</td><td>1</td><td>AK10311111</td><td>AM10410000</td></tr> <tr><td>2</td><td>2022-03-10 15:00:00</td><td>2022-03-16 17:00:00</td><td>30</td><td>500.0</td><td>1</td><td>AK10311111</td><td>AM10410000</td></tr> <tr><td>3</td><td>2022-04-15 17:30:00</td><td>2022-04-17 01:30:00</td><td>60</td><td>1000.65</td><td>1</td><td>AK10311111</td><td>AM10410000</td></tr> <tr><td>4</td><td>2022-03-08 15:00:00</td><td>2022-03-27 13:00:00</td><td>20</td><td>200.85</td><td>1</td><td>AN10520010</td><td>AM10410111</td></tr> <tr><td>5</td><td>2022-04-03 17:00:00</td><td>2022-04-19 22:00:00</td><td>30</td><td>500.52</td><td>1</td><td>AN10520010</td><td>AM10410111</td></tr> <tr><td>6</td><td>2022-06-18 22:30:00</td><td>2022-06-29 18:30:00</td><td>30</td><td>900.0</td><td>1</td><td>AN10520010</td><td>AM10410111</td></tr> <tr><td>7</td><td>2022-07-05 18:30:00</td><td>2022-07-15 16:30:00</td><td>70</td><td>1500.0</td><td>2</td><td>AN10520020</td><td>AM10410222</td></tr> <tr><td>8</td><td>2022-07-19 18:30:00</td><td>2022-07-19 22:00:00</td><td>30</td><td>800.0</td><td>2</td><td>AN10520020</td><td>AM10410222</td></tr> <tr><td>9</td><td>2022-08-02 15:30:00</td><td>2022-08-03 21:30:00</td><td>30</td><td>300.0</td><td>2</td><td>AN10520020</td><td>AM10410222</td></tr> <tr><td>13</td><td>2022-01-05 13:30:00</td><td>2022-01-21 03:30:00</td><td>20</td><td>1600.0</td><td>3</td><td>AN10520040</td><td>AM10410444</td></tr> <tr><td>14</td><td>2022-01-22 17:30:00</td><td>2022-01-24 20:00:00</td><td>30</td><td>560.0</td><td>3</td><td>AN10520040</td><td>AM10410444</td></tr> <tr><td>15</td><td>2022-02-13 19:30:00</td><td>2022-02-24 08:00:00</td><td>30</td><td>300.99</td><td>3</td><td>AN10520040</td><td>AM10410444</td></tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Branches</th> <th>Driver AT</th> <th>Name</th> <th>Last Name</th> <th>Branch Code</th> <th>Route</th> </tr> </thead> <tbody> <tr><td>1</td><td>AM10410000</td><td>Antonis</td><td>Kokinos</td><td>1</td><td>LOCAL</td></tr> <tr><td>2</td><td>AM10410111</td><td>Antonis</td><td>Eleftheriadis</td><td>1</td><td>ABROAD</td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Guide AT</th> <th>Name</th> <th>Last Name</th> <th>Branch Code</th> <th>Language</th> </tr> </thead> <tbody> <tr><td>AK10311111</td><td>Gianrh</td><td>Vasilou</td><td>1</td><td>Greek,English...</td></tr> <tr><td>AN10520010</td><td>Damianos</td><td>Diasakos</td><td>1</td><td>Greek,English...</td></tr> </tbody> </table>	Trip ID	Departure	Return	Max Seats	Cost	Branch Code	Guide AT	Driver AT	1	2022-03-05 15:30:00	2022-03-08 12:30:00	30	300.0	1	AK10311111	AM10410000	2	2022-03-10 15:00:00	2022-03-16 17:00:00	30	500.0	1	AK10311111	AM10410000	3	2022-04-15 17:30:00	2022-04-17 01:30:00	60	1000.65	1	AK10311111	AM10410000	4	2022-03-08 15:00:00	2022-03-27 13:00:00	20	200.85	1	AN10520010	AM10410111	5	2022-04-03 17:00:00	2022-04-19 22:00:00	30	500.52	1	AN10520010	AM10410111	6	2022-06-18 22:30:00	2022-06-29 18:30:00	30	900.0	1	AN10520010	AM10410111	7	2022-07-05 18:30:00	2022-07-15 16:30:00	70	1500.0	2	AN10520020	AM10410222	8	2022-07-19 18:30:00	2022-07-19 22:00:00	30	800.0	2	AN10520020	AM10410222	9	2022-08-02 15:30:00	2022-08-03 21:30:00	30	300.0	2	AN10520020	AM10410222	13	2022-01-05 13:30:00	2022-01-21 03:30:00	20	1600.0	3	AN10520040	AM10410444	14	2022-01-22 17:30:00	2022-01-24 20:00:00	30	560.0	3	AN10520040	AM10410444	15	2022-02-13 19:30:00	2022-02-24 08:00:00	30	300.99	3	AN10520040	AM10410444	Branches	Driver AT	Name	Last Name	Branch Code	Route	1	AM10410000	Antonis	Kokinos	1	LOCAL	2	AM10410111	Antonis	Eleftheriadis	1	ABROAD	3						4						5						6						Guide AT	Name	Last Name	Branch Code	Language	AK10311111	Gianrh	Vasilou	1	Greek,English...	AN10520010	Damianos	Diasakos	1	Greek,English...
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<input type="button" value="Save"/> <input type="button" value="Add Event"/>		<input type="button" value="Update"/>		<input type="button" value="Delete"/>		<input type="button" value="Clear"/> <input type="button" value="Exit"/>																																																																																																																																																												

Αφορά τις της λειτουργίες insert delete update and search για ένα Trip & Event και αλληλοεπιδρά σε πρώτη φάση με τον πίνακα Trip και σε δεύτερη με τον πίνακα Events (νέο παράθυρο) . Αποτελείται από τις ακόλουθες μεθόδους που αξιοποιούνται table_load(), table_loadDriver(), table_loadGuide() , table_load_Branches() ,SaveButtonActionPerformed() , ExitButtonActionPerformed() , ClearButtonActionPerformed() , jTable4MouseClicked() , UpdateButton2ActionPerformed() , jTable2MouseClicked() , SearchFieldKeyReleased() , DeleteButtonActionPerformed() , jTabledriverMouseClicked() , jTableguideMouseClicked() , AddEventButtonActionPerformed() .

table_load() : Πραγματοποιεί ένα select στον πίνακα Trip της βάσης και περνάει τα αποτελέσματα από το query σε έναν Jtable.

table_load_Branches(): Πραγματοποιεί ένα select στον πίνακα Branches και περνάει τα αποτελέσματα της απάντησης του σε έναν Jtable ώστε όταν πάει να κάνει insert ή update ένα trip o χρηστής, να έχει γνώση των υπάρχοντων branches ώστε, να επιλέξει ένα.

table_loadDriver (String bf) : Δέχεται σαν όρισμα τον branch code που έχουμε επιλέξει μέχρι τώρα από το πεδίο Branch Code και πραγματοποιεί ένα inner join select στους πίνακες worker και driver, για βρεί τους διαθέσιμους drivers του επιλεγμένου branch. Περνάει τα αποτελέσματα της απάντησης του σε έναν Jtable ώστε όταν πάει να κάνει insert ή update ένα trip o χρηστής να έχει γνώση των διαθέσιμων drivers και των στοιχείων τους ώστε να επιλέξει ένα.

table_loadGuide (String bf) : Δέχεται σαν όρισμα τον branch code που έχουμε επιλέξει μέχρι τώρα από το πεδίο Branch Code και πραγματοποιεί ένα inner join select στους πίνακες worker , guide και languages , για βρεί τους διαθέσιμους guides του επιλεγμένου branch. Περνάει τα αποτελέσματα της απάντησης του σε έναν Jtable ώστε όταν πάει να κάνει insert ή update ένα trip o χρηστής να έχει γνώση των διαθέσιμων guides και των στοιχείων τους ώστε να επιλέξει ένα.

jTable4MouseClicked(): Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table branch περνάει το id του branch που περιέχει στο πεδίο Branch Code ώστε όταν πάμε να κάνουμε insert ή update ένα trip o χρηστής να έχει γνώση των υπάρχοντων branches ώστε να επιλέξει ένα.

jTable2MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table trip περνάει το περιεχόμενο της κάθε στήλης του στα κατάλληλα text πεδία και drop fields και στο search πεδίο.

UpdateButton2ActionPerformed(): Αξιοποιεί την συνάρτηση SearchFieldKeyReleased ώστε να προσφέρει στον χρήστη την τρέχουσα κατάσταση των στοιχείων του trip, ώστε να τροποποιήσει αυτά που επιθυμεί και αξιοποιώντας το τωρινό id (key) από το πεδίο Trip ID στο search πραγματοποιεί το update στην εγγραφή.

DeleteButtonActionPerformed() : Διαβάζει το κλειδί του trip που είναι προς διαγραφή από το πεδίο Trip ID στο search και το διαγράφει.

SearchFieldKeyReleased(): Διαβάζει το κλειδί (ID) του trip που θέλουμε να βρούμε από το πεδίο Trip ID στο search και μόλις το βρει μεταφέρει τα στοιχεία του από τον πίνακα trip στα κατάλληλα πεδία η λειτουργία search υπάρχει για ευκολία του user στα operations Delete and Update.

ExitButtonActionPerformed() : Exit από το application.

ClearButtonActionPerformed(): Καθαρίζει όλα τα πεδία του παραθύρου

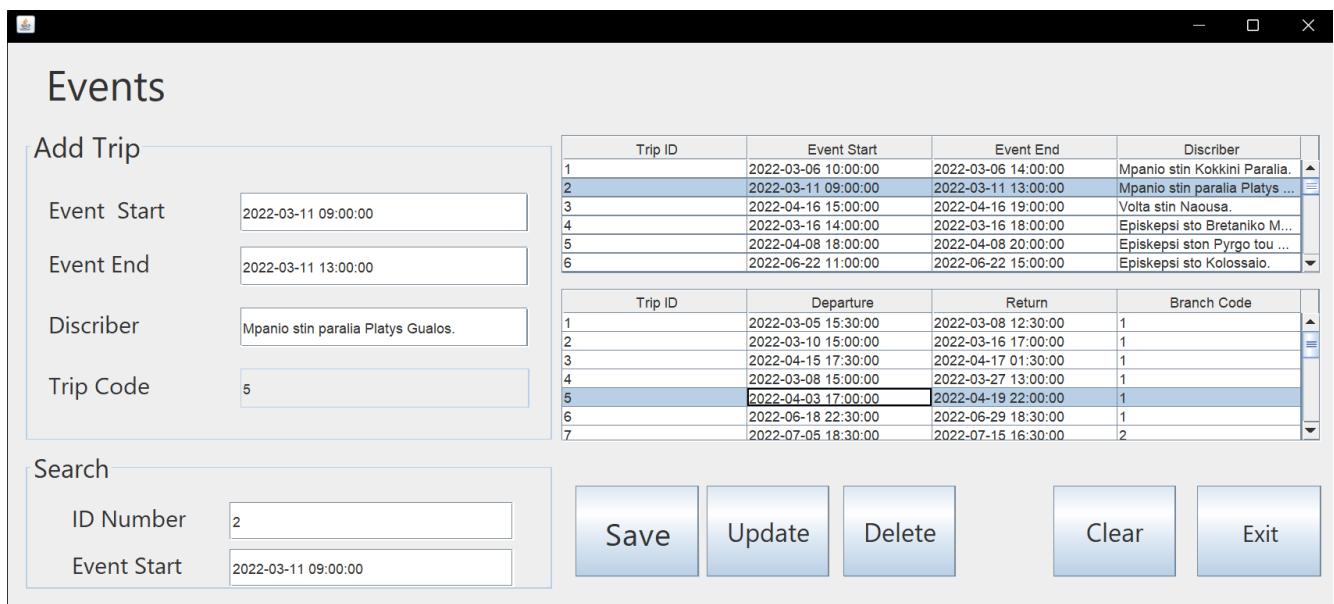
SaveButtonActionPerformed(): Διαβάζει τα περιεχόμενα των πεδίων Trip Departure , Trip Return , Max seats ,Cost , Branch Code , Guide AT , Driver AT και πραγματοποιεί το insert στον πίνακα trip για την εισαγωγή ενός νέου trip. Σε περίπτωση error με την χρήση του sql exception το πιάνουμε και τυπώνουμε το μήνυμα error στον χρήστη με μορφή ενός νέου παραθύρου.

jTabledriverMouseClicked(): Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον jtable driver περνάει το id του driver που περιέχει στο πεδίο Driver AT ώστε όταν πάμε να κάνουμε insert ή update ένα trip ο χρηστής να έχει γνώση των υπάρχοντων Drivers ώστε να επιλέξει ένα.

jTableguideMouseClicked(): Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον jtable guide περνάει το id του guide που περιέχει στο πεδίο Guide AI ώστε όταν πάμε να κάνουμε insert ή update ένα trip ο χρηστής να έχει γνώση των υπάρχοντων guides ώστε να επιλέξει ένα.

AddEventButtonActionPerformed() : αποτελεί το κουμπί που οδηγεί τον χρήστη σε ένα νέο γραφικό παράθυρο που αφορά τα operations για τον πίνακα Event.

Κλάση Events



Αφορά τις λειτουργίες insert delete update and search για ένα event και αλληλοεπιδρά με τον πίνακα event. Η πρόσβαση σε αυτό το παράθυρο του gui πραγματοποιείται μέσα από το παράθυρο trip για λογούς συνέχειας, διότι τα γεγονότα συσχετίζονται άμεσα με το ένα ταξίδι . Αποτελείται από τις ακόλουθες μεθόδους που αξιοποιούνται table_load(), table_load2(), SaveButtonActionPerformed() , ExitButtonActionPerformed() , ClearButtonActionPerformed() , jTable1MouseClicked() , UpdateButton2ActionPerformed() , jTable2MouseClicked() , SearchField2KeyReleased() , DeleteButton1ActionPerformed().

table_load() : Πραγματοποιεί ένα select στον πίνακα Events και περνάει τα αποτελέσματα από το query σε έναν Jtable.

table_load2() : Πραγματοποιεί ένα select για τις στήλες tr_id , tr_departure , tr_return και tr_br_code του πίνακα trip και περνάει τα αποτελέσματα από το query σε έναν Jtable . Για να έχει ο χρήστης μια καλύτερη εικόνα για τους διαθέσιμα ταξίδια που μπορεί να επιλέξει για το πεδίο Trip Code του event το οποί συνδέει ένα event με το ταξίδι στο οποίο ανήκει .

ExitButtonActionPerformed() : Exit από το application.

ClearButtonActionPerformed(): Καθαρίζει όλα τα πεδία του παραθύρου.

DeleteButtonActionPerformed() : Διαβάζει τα δυο κλειδιά του event που είναι προς διαγραφή από τα πεδία ID Number and Event Start στο σύνολο πεδίων search και διαγράφει το event που επιθυμούμε.

SaveButtonActionPerformed(): Διαβάζει τα περιεχόμενα των πεδίων Event Start , Event End , Describer , Trip Code και πραγματοποιεί το insert στον πίνακα event για την εισαγωγή ενός event. Σε περίπτωση error με την χρήση του sql exception το πιάνουμε και τυπώνουμε το μήνυμα error στον χρήστη με μορφή ενός νέου παραθύρου.

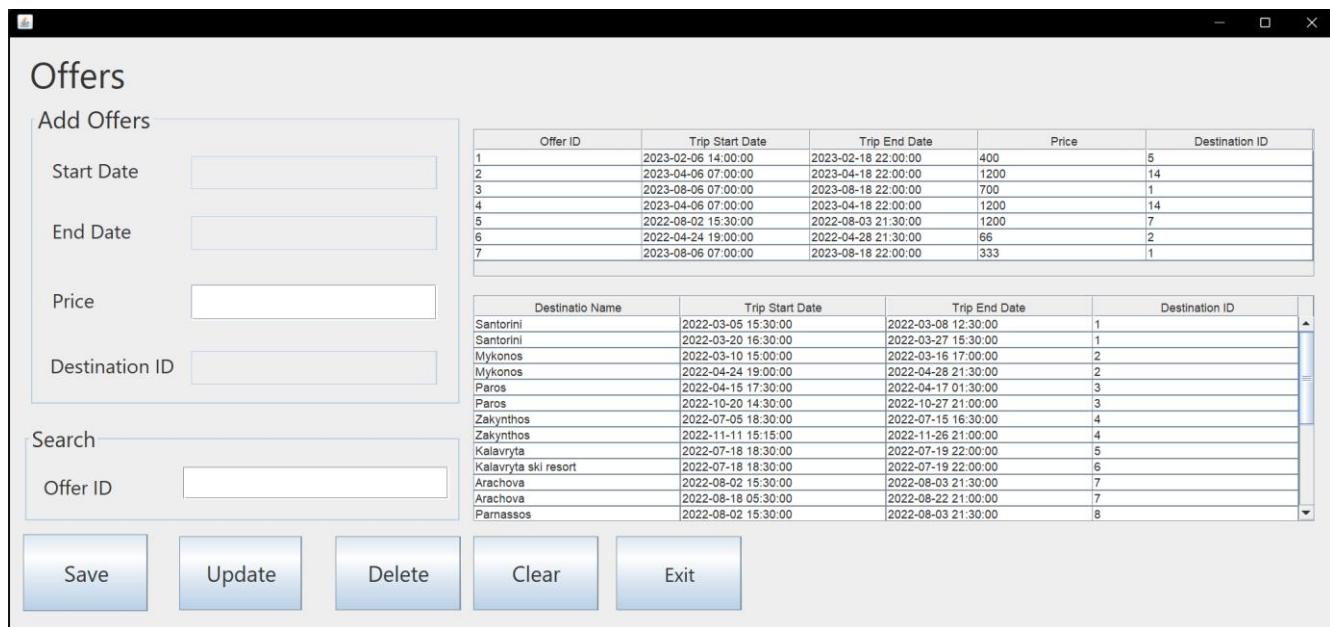
UpdateButton2ActionPerformed(): Αξιοποιεί την συνάρτηση SearchFieldKeyReleased ώστε να προσφέρει στον χρήστη την τρέχουσα κατάσταση των στοιχείων του guide, για να τροποποιήσει αυτά που επιθυμεί. Αξιοποιώντας τα τωρινά κλειδιά του event από τα πεδία ID Number and Event Start στο σύνολο πεδίων search, πραγματοποιεί το update.

SearchFieldKeyReleased(): Διαβάζει τα κλειδιά του event που θέλουμε να βρούμε από τα πεδία ID Number and Event Start στο σύνολο πεδίων και μόλις το βρει μεταφέρει τα στοιχεία του event από τον πίνακα event στα κατάλληλα πεδία, η λειτουργία search υπάρχει για ευκολία του user στα operations Delete and Update.

jTable1MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table trip περνάει το περιεχόμενο της στήλης id του στο text πεδίο Trip Code.

jTable2MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον jTable event περνάει το περιεχόμενο της κάθε στήλης του στα κατάλληλα text πεδία και drop fields και search πεδία.

Κλάση Offers :



Αφορά τις λειτουργίες insert delete and search για ένα offer και αλληλοεπιδρά τον πίνακα doffers. Αποτελείται από τις ακόλουθες μεθόδους που αξιοποιούνται table_load(), table_load2(), SaveButtonActionPerformed() , ExitButtonActionPerformed(), ClearButtonActionPerformed() , jTable1MouseClicked() , UpdateButton2ActionPerformed() , jTable2MouseClicked() , SearchFieldKeyReleased() , DeleteButton1ActionPerformed().

table_load() : Πραγματοποιεί ένα select στον πίνακα offers και περνάει τα αποτελέσματα από το query σε έναν Jtable.

table_load2() : Πραγματοποιεί ένα select για τις στήλες dst_id ,dst_name, tr_departure και tr_return του πίνακα trip και περνάει τα αποτελέσματα από το query σε έναν Jtable , ώστε ο χρήστης να έχει μια καλύτερη εικόνα για τα διαθέσιμους προορισμούς μπορεί να επιλέξει έναν για το offer (πεδίο Destination id).

SearchFieldKeyReleased(): Διαβάζει το κλειδί (ID) του offer που θέλουμε να βρούμε από το πεδίο Offer ID στο search και μόλις το βρει μεταφέρει τα στοιχεία του offer από τον πίνακα offers στα κατάλληλα πεδία η λειτουργία search υπάρχει για ευκολία του user στα operations Delete and Update.

ExitButtonActionPerformed() : Exit από το application.

ClearButtonActionPerformed(): Καθαρίζει όλα τα πεδία του παραθύρου.

jTable1MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον jTable offers περνάει το περιεχόμενο της κάθε στήλης του στα κατάλληλα text πεδία και drop fields και στο search πεδίο.

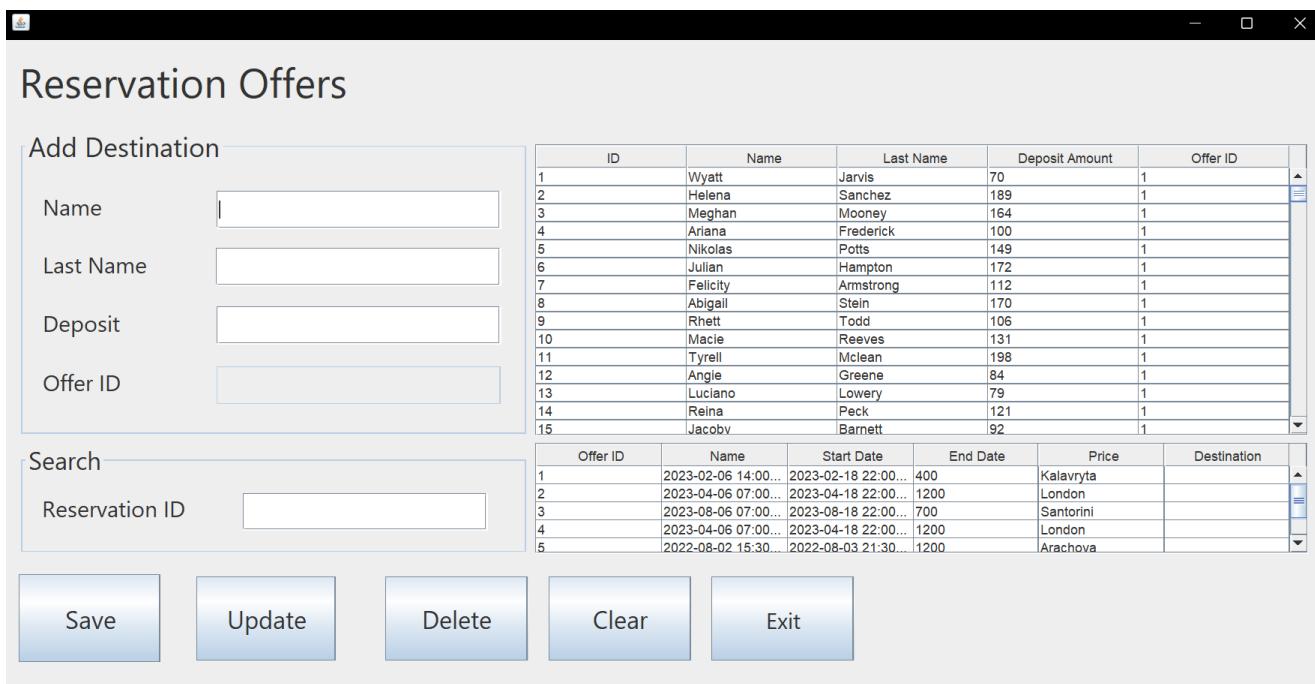
jTable2MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από destination s jTable περνάει το περιεχόμενο του της id στήλης του στο Destination ID Text πεδίο.

DeleteButtonActionPerformed() : Διαβάζει το κλειδί του offer που είναι προς διαγραφή από το πεδίο Destination ID στο search και το διαγράφει.

UpdateButton2ActionPerformed(): Αξιοποιεί την συνάρτηση SearchFieldKeyReleased ώστε να προσφέρει στον χρήστη την τρέχουσα κατάσταση των στοιχείων του offer ώστε να τροποποιήσει αυτά που επιθυμεί και αξιοποιώντας το τωρινό id (key) από το πεδίο Offer ID στο search πραγματοποιεί το update.

SaveButtonActionPerformed(): Διαβάζει τα περιεχόμενα των πεδίων Start Date , End Date , Price , Destiantion ID και πραγματοποιεί το insert στον πίνακα offers για την εισαγωγή ενός offer. Σε περίπτωση error με την χρήση του sql exception το πιάνουμε και τυπώνουμε το μήνυμα error στον χρήστη με μορφή ενός νέου παραθύρου.

Κλάση ReservationOffers :



Αφορά τις λειτουργίες insert delete update and search για ένα offer και αλληλοεπιδρά των πίνακα reservation_offers. Αποτελείται από τις ακόλουθες μεθόδους που αξιοποιούνται table_load(), table_load2(), SaveButtonActionPerformed() , ExitButtonActionPerformed(), ClearButtonActionPerformed() , jTable1MouseClicked() , UpdateButton2ActionPerformed() , jTable2MouseClicked() , SearchFieldKeyReleased() , DeleteButton1ActionPerformed().

table_load() : Πραγματοποιεί ένα select στον πίνακα reservation_offers και περνάει τα αποτελέσματα από το query σε έναν Jtable.

table_load2() : Πραγματοποιεί ένα inner join select για τις στήλες offer_id ,offer_trip_start_date , offer_trip_end_date ,Price_per_Person και dst_name των πινάκων offers και destination και περνάει τα αποτελέσματα από το query σε έναν Jtable , ώστε ο χρήστης να έχει μια καλύτερη εικόνα για τα διαθέσιμες προσφορές που μπορεί να επιλέξει έναν για το reservation offer (πεδίο Offer id).

SearchFieldKeyReleased(): Διαβάζει το κλειδί (ID) του reservation offer που θέλουμε να βρούμε από το πεδίο Reservation ID στο search και μόλις το βρει μεταφέρει τα στοιχεία του reservation offer από τον πίνακα reservation_offers στα κατάλληλα πεδία. Η λειτουργία search υπάρχει για ευκολία του user στα operations Delete and Update.

ExitButtonActionPerformed() : Exit από το application.

ClearButtonActionPerformed(): Καθαρίζει όλα τα πεδία του παραθύρου.

jTable1MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από το jTable reservation_offers περνάει το περιεχόμενο της κάθε στήλης του στα κατάλληλα text πεδία και drop fields και στο search πεδίο.

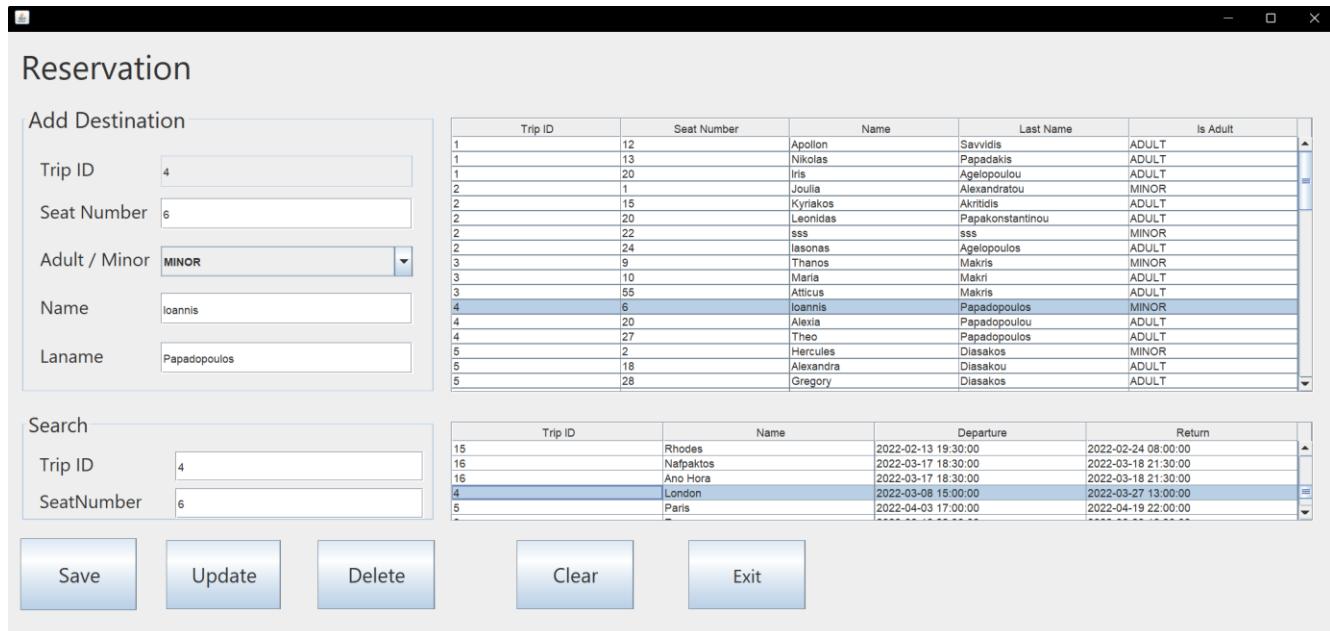
jTable2MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από το jTable περνάει το περιεχόμενο του της id στήλης του στο Offer ID Text πεδίο.

DeleteButtonActionPerformed() : Διαβάζει το κλειδί του reservation offer που είναι προς διαγραφή από το πεδίο Destination ID στο search και το διαγράφει.

UpdateButton2ActionPerformed(): Αξιοποιεί την συνάρτηση SearchFieldKeyReleased ώστε να προσφέρει στον χρήστη την τρέχουσα κατάσταση των στοιχείων του offer ώστε να τροποποιήσει αυτά που επιθυμεί και αξιοποιώντας το τωρινό id (key) από το πεδίο Reservation ID στο search πραγματοποιεί το update.

SaveButtonActionPerformed(): Διαβάζει τα περιεχόμενα των πεδίων Name , Last Name , Deposit , Offer ID και πραγματοποιεί το insert στον πίνακα reservation_offers για την εισαγωγή ενός reservation offer. Σε περίπτωση error με την χρήση του sql exception το πιάνουμε και τυπώνουμε το μήνυμα error στον χρήστη με μορφή ενός νέου παραθύρου.

Κλάση Reservations:



Αφορά τις λειτουργίες insert delete and search για ένα Reservation και αλληλοεπιδρά με τον πίνακα reservation. Αποτελείται από τις ακόλουθες μεθόδους που αξιοποιούνται table_load(), table_load2(), SaveButtonActionPerformed() , ExitButtonActionPerformed(), ClearButtonActionPerformed() , jTable1MouseClicked() , UpdateButton2ActionPerformed() , jTable2MouseClicked() , SearchField2KeyReleased() , DeleteButton1ActionPerformed().

table_load() : Πραγματοποιεί ένα select στον πίνακα reservation και περνάει τα αποτελέσματα από το query σε έναν Jtable.

table_load2() : Πραγματοποιεί ένα inner join select για τις στήλες tr_id ,tr_departure, tr_return και dst_name τους πίνακες trip και destination περνάει τα αποτελέσματα από το query σε έναν Jtable,

ώστε ο χρήστης να έχει μια καλύτερη εικόνα για τους διαθέσιμα ταξίδια που μπορεί να επιλέξει για το πεδίο Trip ID του reservation το οποίο συνδέει ένα reservation με το ταξίδι.

ExitButtonActionPerformed() : Exit από το application.

ClearButtonActionPerformed(): Καθαρίζει όλα τα πεδία του παραθύρου.

DeleteButtonActionPerformed() : Διαβάζει τα δυο κλειδιά του reservation που είναι προς διαγραφή από τα πεδία Trip ID and SeatNumber στο σύνολο πεδίων search και διαγράφει το reservation που επιθυμούμε.

SaveButtonActionPerformed(): Διαβάζει τα περιεχόμενα των πεδίων Trip ID , Seat Number , Adult / Minor, Name and Lname και πραγματοποιεί το insert στον πίνακα reservation για την εισαγωγή ενός reservation. Ωστόσο πριν πραγματοποίηση την εισαγωγή ελέγχει αν ο αριθμός της θέσεις που επέλεξε ο πελάτης για το ταξίδι είναι μικρότερος ή ίσος με τον μέγιστο αριθμού θέσεων του ταξιδιού που έκανε την κράτηση ο πελάτης . Στην περίπτωση που είναι τυπώνει το κατάλληλο μήνυμα σε ένα νέο παράθυρο. Ενώ για την ύπαρξη άλλου error με την χρήση του sql exception το πιάνουμε και τυπώνουμε το μήνυμα error στον χρήστη με μορφή ενός νέου παραθύρου.

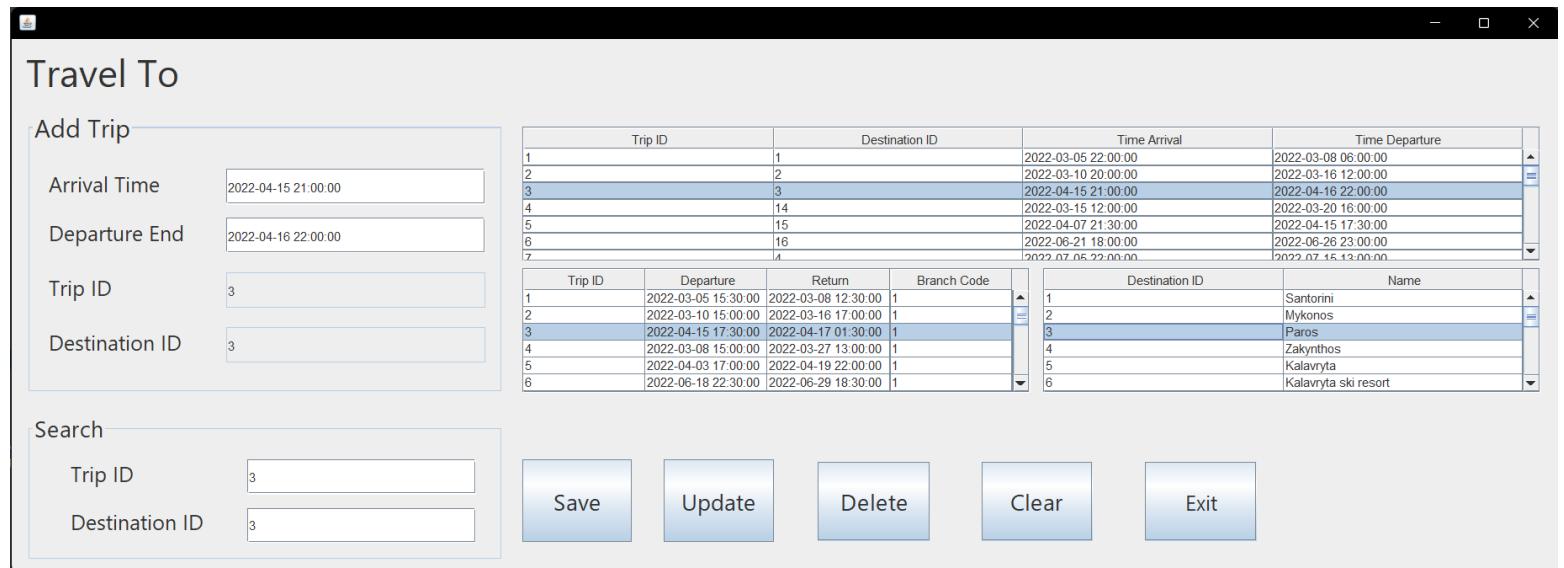
UpdateButton2ActionPerformed(): Αξιοποιεί την συνάρτηση SearchFieldKeyReleased ώστε να προσφέρει στον χρήστη την τρέχουσα κατάσταση των στοιχείων του reservation ώστε να τροποποιήσει αυτά που επιθυμεί και αξιοποιώντας τα τωρινά κλειδιά του reservation από τα πεδία Trip ID and Seat Start στο σύνολο πεδίων search και πραγματοποιεί το update. Ωστόσο πριν πραγματοποιήσει το update ελέγχει αν ο αριθμός της θέσεις που επέλεξε για το ταξίδι είναι μικρότερος ή ίσος από τον μέγιστο αριθμού θέσεων του ταξιδιού που έκανε την κράτηση ο πελάτης . Στην περίπτωση που είναι τυπώνει το κατάλληλο μήνυμα σε ένα νέο παράθυρο.

SearchFieldKeyReleased(): Διαβάζει τα κλειδιά του reservation που θέλουμε να βρούμε από τα πεδία Trip ID and Seat Start στο σύνολο πεδίων και μόλις το βρει μεταφέρει τα στοιχεία του reservation από τον πίνακα event στα κατάλληλα πεδία. Η λειτουργία search υπάρχει για ευκολία του user στα operations Delete and Update.

jTable1MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table reservation περνάει το περιεχόμενο της στήλης id του στο text πεδίο Trip Code.

jTable2MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον jTable destination περνάει το περιεχόμενο της κάθε στήλης του στα κατάλληλα text πεδία και drop fields και search πεδία.

Κλάση Travel_To



Αφορά τις λειτουργίες insert delete update and search για ένα Travel To και αλληλοεπιδρά με τον πίνακα travel_to. Αποτελείται από τις ακόλουθες μεθόδους που αξιοποιούνται table_load(), table_load2(), table_load3() , SaveButtonActionPerformed() , ExitButtonActionPerformed(), ClearButtonActionPerformed() , jTable1MouseClicked() , UpdateButton2ActionPerformed() , jTable2MouseClicked() , SearchField2KeyReleased() , DeleteButton1ActionPerformed().

table_load() : Πραγματοποιεί ένα select στον πίνακα Travel To και περνάει τα αποτελέσματα από το query σε έναν Jtable.

table_load2() : Πραγματοποιεί ένα inner join select για τις στήλες tr_id ,tr_departure, tr_return και dst_name τους πίνακες trip και destination περνάει τα αποτελέσματα από το query σε έναν Jtable, ώστε ο χρήστης να έχει μια καλύτερη εικόνα για τους διαθέσιμα ταξίδια που μπορεί να επιλέξει για το πεδίο Trip ID του reservation το οποίο συνδέει ένα reservation με το ταξίδι.

table_load3() : Πραγματοποιεί ένα inner join select για τις στήλες tr_id ,tr_departure, tr_return και dst_name τους πίνακες trip και destination περνάει τα αποτελέσματα από το query σε έναν Jtable , ώστε ο χρήστης να έχει μια καλύτερη εικόνα για τους διαθέσιμα ταξίδια που μπορεί να επιλέξει για το πεδίο Trip ID του reservation το οποίο συνδέει ένα reservation με το ταξίδι.

ExitButtonActionPerformed() : Exit από το application.

ClearButtonActionPerformed(): Καθαρίζει όλα τα πεδία του παραθύρου.

DeleteButtonActionPerformed() : Διαβάζει τα δυο κλειδιά του travel_to που είναι προς διαγραφή από τα πεδία Trip ID and Destionation Id στο σύνολο πεδίων search και διαγράφει το travel_to που επιθυμούμε.

SaveButtonActionPerformed(): Διαβάζει τα περιεχόμενα των πεδίων Trip ID , Destination ID, Arrival Time Departure και πραγματοποιεί το insert στον πίνακα travel_to.

UpdateButton2ActionPerformed(): Αξιοποιεί την συνάρτηση SearchFieldKeyReleased ώστε να προσφέρει στον χρήστη την τρέχουσα κατάσταση των στοιχείων του travel_to ώστε να τροποποιήσει αυτά που επιθυμεί και αξιοποιώντας τα τωρινά κλειδιά του travel_to από τα πεδία Trip ID and Destination ID στο σύνολο πεδίων search και πραγματοποιεί το update.

SearchFieldKeyReleased(): Διαβάζει τα κλειδιά του travel_to που θέλουμε να βρούμε από τα πεδία Trip ID and Destination ID στο σύνολο πεδίων και μόλις το βρει μεταφέρει τα στοιχεία του travel_to από τον πίνακα travel_to στα κατάλληλα πεδία. Η λειτουργία search υπάρχει για ευκολία του user στα operations Delete and Update.

jTable1MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον table trip περνάει το περιεχόμενο της στήλης id του στο text πεδίο Trip Code.

jTable2MouseClicked() : Διασφαλίζει ότι όταν επιλέγουμε ένα row από τον jTable destination περνάει το περιεχόμενο της κάθε στήλης του στα κατάλληλα text πεδία και drop fields και search πεδία.

Κλάση ItAdmin

The screenshot shows a Java Swing application window titled "IT Admin". On the left, there is a form titled "Add Worker" with fields for Name (Maria), Last Name (Prodromou), ID Number (AK12000002), Salary (1500.0), Branch Code (1), Password (password), Start Date (2012-01-26 14:00:00), End Date (leave empty for default value), and Privileges (All Privileges). On the right, there is a table titled "Branches" with columns: Worker AT, Name, Last Name, Salary, Branch Code, Password, Start Date, End Date, and All Privileges. The table contains 12 rows of data. At the bottom, there are buttons for Show All, Insert, Delete, Clear, and Back.

Branches	Worker AT	Name	Last Name	Salary	Branch Code	Password	Start Date	End Date	All Privileges
1	AK12000010	Viki	Aleksiou	1500.0	5	password	2017-11-11 10:00:00		Y
2	AK12000008	Alexandros	Alexandrou	1500.0	4	AlexAlex	2010-09-06 10:00:00		Y
3	AK12000007	Grigoris	Delibaltadakis	1500.0	3	ff	2012-05-06 10:00:00		Y
4	AK12000009	Nikolas	Karavidis	1500.0	5	Nik	2016-02-04 10:00:00		Y
5	AK12000001	Artemis	Padadimitriou	1500.0	1	password	2015-02-06 14:00:00		Y
6	AK12000002	Maria	Prodromou	1500.0	1	password	2012-01-26 14:00:00		Y
	AK12000003	John	Stathopoulos	1500.0	1	John	2010-02-06 14:00:00		Y
	AK12000004	Andreas	Vasiliadiotis	1500.0	2	password	2008-02-06 14:00:00		Y
	AK1	e	e	1.0	6	fff	2012-05-06 10:00:00		N

Αφορά τις λειτουργίες insert, delete για ένα ItAdmin και αλληλοεπιδρά με τον πίνακα it_admin.

Constructor:

```
public ItAdmin() {  
    initComponents();  
  
    tmodel = (DefaultTableModel) jTable.getModel();  
  
    branch_tmodel = (DefaultTableModel) jTable.getModel();  
  
    selectAll();  
  
    tableLoadBranches();  
}
```

Στον δημιουργό της κλάσης φορτώνουμε τα μοντέλα του βασικού πίνακα και του πίνακα των branches και γεμίζουμε τους πίνακες με τις κατάλληλες εγγραφές

Εμφάνιση των διαχειριστών:

Η συμπλήρωση του βασικού πίνακα γίνεται με την χρήση της μεθόδου selectAll(). Σε αυτή την μέθοδο εκτελείται το ακόλουθο query:

```
ResultSet rs = stmt.executeQuery("SELECT wrk_AT,wrk_name,wrk_lname,wrk_salary,wrk_br_code, " +  
    "it_password,it_start_date,it_end_date,Insert_priv FROM worker " +  
    "INNER JOIN it_admin ON it_at = wrk_AT " +  
    "INNER JOIN mysql.db ON wrk_lname = User");
```

Έτσι μπορούμε να δούμε όλα τα γνωρίσματα ενός it_admin τα οποία λαμβάνουμε από τους πίνακες it_admin, worker και mysql.db (για τα δικαιώματα του χρήστη).

Κουμπί Insert:

Το πάτημα αυτού του κουμπιού καλεί την μέθοδο insertItAdmin().

insertItAdmin() και insertItAdminDefPass():

Σκοπός της μεθόδου είναι να προσθέσει έναν νέο διαχειριστή πληροφορική στην βάση. Αρχικά συμπληρώνουμε τα πεδία κειμένου του παραθύρου μας με τις ζητούμενες πληροφορίες και επιλέγουμε το branch στο οποίο θα εισαχθεί και το είδος των δικαιωμάτων που θα έχει. Έπειτα καλείται η μέθοδος createUser(), η οποία εκτελεί τις stored procedure create_user() ή create_select_user() ανάλογα με τα Privileges που επιλέξαμε. Αφού δημιουργηθεί ο χρήστης στην βάση με επιτυχία, εισάγουμε μία εγγραφή με τα στοιχεία του στον πίνακα worker και μετά ανάλογα με το αν έχουμε συμπληρώσει το πεδίο password ή όχι, τον εισάγουμε και στον πίνακα it_admin με τον κωδικό που δόθηκε ή με τον default κωδικό (χρήση της insertItAdminDefPass()). Εάν παρουσιαστεί SQLException στην εκτέλεση των insert, διαγράφουμε τον χρήστη από τον πίνακα mysql.db και κάνουμε drop user.

Κουμπί Insert:

Το πάτημα αυτού του κουμπιού καλεί την μέθοδο deleteItAdmin().

deleteItAdmin():

Με αυτή την μέθοδο διαγράφεται ένας it_admin. Αρχικά διαβάζουμε τις τιμές που χρειάζονται για την διαγραφή (Lastname, AT) από τα κατάλληλα πεδία. Για να γραφτούν σε αυτά τα πεδία οι τιμές πρέπει να πατήσουμε την εγγραφή που θέλουμε να διαγράψουμε στον πίνακα του παραθύρου. Η διαγραφή πραγματοποιείται με την εκτέλεση των παρακάτω queries:

```
PreparedStatement stmt= conn.prepareStatement("drop user <it_lname>@localhost");
stmt = conn.prepareStatement("delete from worker WHERE wrk_AT = <ti_at>");
stmt = conn.prepareStatement("delete from mysql.db WHERE User = ,<it_lname>");
```

Φυσικά κανένας user δεν μπορεί να διαγράψει τον εαυτό του και ένας χρήστης με select privileges δεν μπορεί να διαγράψει, ούτε να εισάγει κάποιον it_admin αλλα μόνο να τους δει.

Κουμπί Clear:

Αδειάζει όλα τα text fields.

Κλάση BranchInfo:

Έχει την ακόλουθη οπτική μορφή:

The screenshot shows a Windows application window titled "BranchInfo". On the left side, there are two blue rectangular buttons: "Get branch info" and "Clear". To the right of these buttons is a table with 5 rows and 8 columns. The columns are labeled: Branch code, Street, Number, City, Admin name, Admin last name, Total of reservatio..., and Income. The data in the table is as follows:

Branch code	Street	Number	City	Admin name	Admin last name	Total of reservatio...	Income
1	Kifissias	355	Athens	Georgia	Makri	18	10206.1
2	Amarisias Artemi...	5	Athens	Maria	Papadopoulou	18	16202.6
3	Mezonos	44	Patra	Orestis	Makris	18	12753.0
4	Aristomenous	5	Kalamata	John	Politis	18	21512.3
5	Tsimiskh	55	Thesalonikh	Giannhs	Stathopoulos	18	58804.2

Below the first table, there is another blue rectangular button labeled "Get branch employees". To its right is a second table with 18 rows and 5 columns. The columns are labeled: Branch code, Worker name, Worker last name, Worker salary, and Total branch salaries. The data in the table is as follows:

Branch code	Worker name	Worker last name	Worker salary	Total branch salaries
1	Giannhs	Vasiliou	1547.55	13147.89
1	Artemis	Papadopoulou	1800.34	13147.89
1	Georgia	Makri	2000.0	13147.89
1	Artemis	Padadimitriou	1500.0	13147.89
1	Maria	Prodromou	1500.0	13147.89
1	John	Stathopoulos	1500.0	13147.89
1	Antonis	Kokinos	1000.0	13147.89
1	Antonis	Eleftheriadis	1100.0	13147.89
1	Damianos	Diasakos	1200.0	13147.89
2	Greg	Stephanopoulos	1600.0	12300.99
2	Iason	Raikos	1800.99	12300.99
2	Maria	Papadopoulou	2000.0	12300.99
2	Andreas	Vasiladiotis	1500.0	12300.99
2	Iason	Raikos	1500.0	12300.99
2	Nora	Raikü	750.0	12300.99
2	John	Oikonomou	1150.0	12300.99
2	Greg	Delimpaladakis	1000.0	12300.99
2	Orestis	Delimpaladakis	1000.0	12300.99

At the bottom right of the window, there is a blue rectangular button labeled "Back".

Στο **BranchInfo** παράθυρο θέλουμε να βάλουμε τις πληροφορίες σε ένα **table** για κάθε υποκατάστημα τα στοιχεία του, το ονοματεπώνυμο του διευθυντή του, το σύνολο κρατήσεων και το σύνολο εσόδων (κράτηση επί κόστος ταξιδιού) και σε ένα άλλο **table** για κάθε υποκατάστημα το όνομα, επώνυμο και μισθό όλων των υπάλληλων του και το συνολικό ποσό μισθών που πληρώνει.

Επομένως φτιάχνουμε τα δύο **tables** με δύο **buttons** δίπλα από το καθένα. Και τα δύο **tables** έχουν ένα **button** "Clear" που "καθαρίζει" τους πίνακες και ένα **button** "Get branch info" και "Get branch employees" αντίστοιχα που βάζουνε τις αντίστοιχες πληροφορίες που εξηγήσαμε παραπάνω.

Η μέθοδος **branch_info()** εκτελεί στην βάση την εντολή **call branch_info()** την οποία έχουμε εξηγήσει στα **Επιπλέον Procedures** και παίρνει τα αποτελέσματα της βάσης και τα βάζει στο ένα **table**.

Η μέθοδος **branch_employees()** εκτελεί στην βάση την εντολή:

```
SELECT br_code,wrk_name,wrk_lname,wrk_salary,(SELECT SUM(wrk_salary) from worker  
WHERE wrk_br_code=br_code) AS 'Total salaries' FROM worker INNER JOIN branch ON  
br_code=wrk_br_code;
```

Η παραπάνω εντολή εμφανίζει τις πληροφορίες που έχουμε εξηγήσει παραπάνω. Έτσι, παίρνουμε τα αποτελέσματα της βάσης και τα βάζουμε στο άλλο table.

Κλάση Log_Destination:

Έχει την ακόλουθη οπτική μορφή:

History of Destinations Table									
Action Type	Admin Last Name	Timestamp	Destination ID	Destination Name	Describer	Type	Language	Location	
INSERT	root@localhost	2023-02-06 11:20:36	20	Kithira	The awesome island of S...	LOCAL	Greek		

Στο Log_Destination παράθυρο θέλουμε να βλέπουμε όλες τις πληροφορίες που έχουν καταγραφεί στον πίνακα log_destination της βάσης μας, ο οποίος περιέχει το είδος της ενέργειας, το επώνυμο Υπευθύνου Πληροφορικής που έκανε την ενέργεια, το timestamp και τις πληροφορίες της παλιάς ή καινούργιας γραμμής του πίνακα destination ανάλογα αν έχουμε κάνει update ή delete και insert αντίστοιχα.

Η μέθοδος table_load() εκτελεί στην βάση την εντολή SELECT * FROM log_destination η οποία εμφανίζει όλες τις πληροφορίες του συγκεκριμένου πίνακα και τις βάζει σε ένα table του παραθύρου.

Κλάση Log_Event:

Έχει την ακόλουθη οπτική μορφή:

History of Event Table						
Action Type	Admin Last Name	Timestamp	Event Travel ID	Event Start Date	Event End Date	Event Describe
INSERT	root@localhost	log_timestamp	31	2022-03-11 09:00:00	2022-03-11 13:00:00	g

Στο Log_Event παράθυρο θέλουμε να βλέπουμε όλες τις πληροφορίες που έχουν καταγραφεί στον πίνακα log_event της βάσης μας, ο οποίος περιέχει το είδος της ενέργειας, το επώνυμο Υπευθύνου Πληροφορικής που έκανε την ενέργεια, το timestamp και τις πληροφορίες της παλιάς ή καινούργιας γραμμής του πίνακα event ανάλογα αν έχουμε κάνει update ή delete και insert αντίστοιχα.

Η μέθοδος table_load() εκτελεί στην βάση την εντολή SELECT * FROM log_event η οποία εμφανίζει όλες τις πληροφορίες του συγκεκριμένου πίνακα και τις βάζει σε ένα table του παραθύρου.

Kλάση Log_Reservation:

Έχει την ακόλουθη οπτική μορφή:

History of Reservation Table								
Action Type	Admin Last Name	Timestamp	Reservation Travel ID	Reservation Seat Number	Name	Last Name	Adult / Minor	
INSERT	root@localhost	log_timestamp	2	22	sss	sss	MINOR	
INSERT	root@localhost	log_timestamp	2	1	Joulla	Alexandratou	MINOR	

Στο Log_Reservation παράθυρο θέλουμε να βλέπουμε όλες τις πληροφορίες που έχουν καταγραφεί στον πίνακα log_reservation της βάσης μας, ο οποίος περιέχει το είδος της ενέργειας, το επώνυμο Υπευθύνου Πληροφορικής που έκανε την ενέργεια, το timestamp και τις πληροφορίες της παλιάς ή καινούργιας γραμμής του πίνακα reservation ανάλογα αν έχουμε κάνει update ή delete και insert αντίστοιχα.

Η μέθοδος table_load() εκτελεί στην βάση την εντολή SELECT * FROM log_reservation η οποία εμφανίζει όλες τις πληροφορίες του συγκεκριμένου πίνακα και τις βάζει σε ένα table του παραθύρου.

Κλάση Log_Travel_To:

Έχει την ακόλουθη οπτική μορφή:

Action Type	Admin Last Name	Timestamp	Travel ID	Destination ID	Arrival	Departure
INSERT	root@localhost	log_timestamp	8	4	2022-08-03 13:00:00	2022-08-03 20:00:00

Στο Log_Travel_To παράθυρο θέλουμε να βλέπουμε όλες τις πληροφορίες που έχουν καταγραφεί στον πίνακα log_travel_to της βάσης μας, ο οποίος περιέχει το είδος της ενέργειας, το επώνυμο Υπευθύνου Πληροφορικής που έκανε την ενέργεια, το timestamp και τις πληροφορίες της παλιάς ή καινούργιας γραμμής του πίνακα travel_to ανάλογα αν έχουμε κάνει update ή delete και insert αντίστοιχα.

Η μέθοδος table_load() εκτελεί στην βάση την εντολή:

```
SELECT log_type , log_it_lname , log_timestamp , log_to_tr_id  
,log_to_dst_id,log_to_arrival,log_to_departure FROM log_travel_to
```

Η παραπάνω εντολή εμφανίζει όλες τις πληροφορίες του συγκεκριμένου πίνακα και τις βάζει σε ένα table του παραθύρου.

Κλάση Log_Trip:

Έχει την ακόλουθη οπτική μορφή:

History of Trip Table											
Action Type	Admin Last Name	Timestamp	Trip ID	Trip Departure	Trip Return	Max Seats	Cost	Branch Code	Guide AT	Driver AT	
INSERT	root@localhost	2023-02-01 21:3...	31	2022-07-05 18:3...	2022-07-15 16:3...	70	1500.0	2022-07-15 16:3...	g60	fbgv	

Στο Log_Trip παράθυρο θέλουμε να βλέπουμε όλες τις πληροφορίες που έχουν καταγραφεί στον πίνακα log_trip της βάσης μας, ο οποίος περιέχει το είδος της ενέργειας, το επώνυμο Υπευθύνου Πληροφορικής που έκανε την ενέργεια, το timestamp και τις πληροφορίες της παλιάς ή καινούργιας γραμμής του πίνακα trip ανάλογα αν έχουμε κάνει update ή delete και insert αντίστοιχα.

Η μέθοδος table_load() εκτελεί στην βάση την εντολή:

```
SELECT log_type , log_it_lname , log_timestamp , log_tr_id  
,log_tr_departure,log_tr_return,log_tr_maxseats,log_tr_cost,log_tr_br_code, log_tr_gui_AT  
,log_tr_drv_AT FROM log_trip
```

Η παραπάνω εντολή εμφανίζει όλες τις πληροφορίες του συγκεκριμένου πίνακα και τις βάζει σε ένα table του παραθύρου.

Κλάση ProcedureResults:

Έχει την ακόλουθη οπτική μορφή:

The screenshot shows a Windows application window titled "Procedures". On the left side, there are two input fields: "Start Date" and "End Date", both with placeholder text "(YYYY-MM-DD HH:MM:SS)". Below these is a blue "Search Trips" button. Further down is a "Last Name" input field and a blue "Show Reserved Offers" button. To the right of these controls are two large, empty rectangular boxes intended for displaying search results. At the bottom of the window are two buttons: "Clear" and "Back".

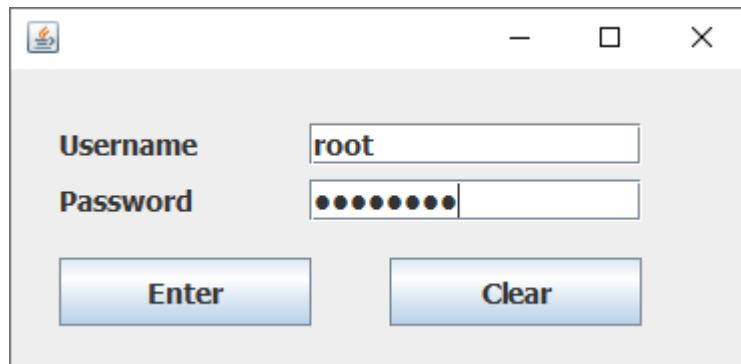
Στο ProcedureResults παράθυρο για κάθε υποκατάστημα και για ένα διάστημα που ορίζει ο Υπεύθυνος Πληροφορικής (IT), θέλουμε να βάλουμε το κόστος ταξιδιού, τις μέγιστες θέσεις ανά ταξίδι, το σύνολο κρατήσεων (reservation), τις διαθέσιμες κενές θέσεις, το επώνυμο και όνομα οδηγού και ξεναγού, την ημερομηνία αναχώρησης και επιστροφής σε ένα table και για ένα επώνυμο ενός πελάτη που ορίζει και πάλι ο ίδιος, θέλουμε να βάλουμε τα ονόματα και επώνυμα των πελατών με το επώνυμο αυτό και την προσφορά ταξιδιού στην οποία έχει γίνει εγγραφή σε ένα άλλο table. Σε περίπτωση που υπάρχουν πάνω από ένας επιστρέφει και το πλήθος των πελατών με το όνομα αυτό, ανά προσφορά ταξιδιού χρησιμοποιεί και τα δύο tables.

Η μέθοδος `call_search_trip` εκτελεί στην βάση την εντολή `call search_trip()` την οποία έχουμε εξηγήσει στο Κεφάλαιο 2 - Stored Procedures στο 3.1.3.2 και παίρνει τα αποτελέσματα της βάσης και τα βάζει στο ένα table.

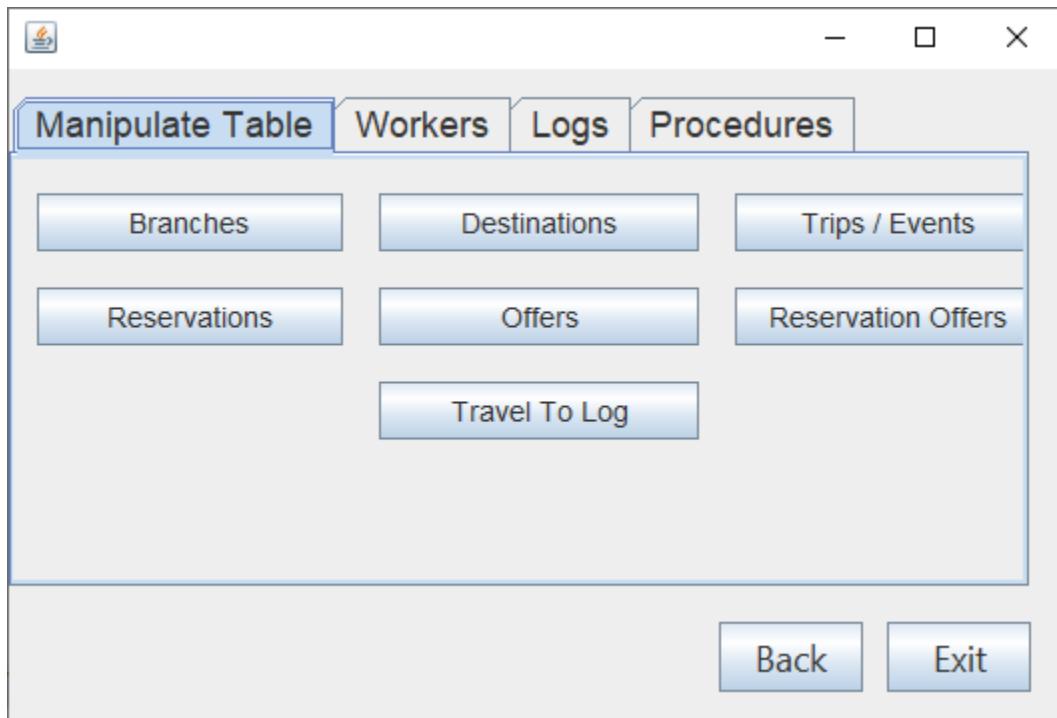
Η μέθοδος `res_names` εκτελεί στην βάση την εντολή `call res_names()` την οποία έχουμε εξηγήσει στο Κεφάλαιο 2 - Stored Procedures στο 3.1.3.4 στο β) και παίρνει τα αποτελέσματα της βάσης και τα βάζει στο ένα table ή και στα δύο tables ανάλογα με την περίπτωση.

Σενάριο Χρήσης

- Σύνδεση στην βάση ως τον root χρήστη.



- Υπομονή για ένα λεπτό, ώστε να εκτελεστούν τα insert στον πίνακα reservation_offers.
- Μετά από ένα λεπτό περίπου ανοίγει το main menu του προγράμματός μας.



4. Έστω ότι υπάρχει ένα πρόβλημα σε κάποιες κρατήσεις του ταξιδιού με id=3. Τα μέλη της οικογένειας Μακρή θέλουν να βρίσκονται σε διαδοχικές θέσεις. Πατάμε λοιπόν το κουμπί Reservations.

Trip ID	Seat Number	Name	Last Name	Is Adult
1	12	Apollon	Sawidis	ADULT
1	13	Nikolas	Papadakis	ADULT
1	20	Iris	Agelopoulou	ADULT
2	15	Kyriakos	Akritidis	ADULT
2	20	Leonidas	Papakonstantinou	ADULT
2	24	Iasonas	Agelopoulos	ADULT
3	9	Thanos	Makris	MINOR
3	10	Maria	Makri	ADULT
3	55	Atticus	Makris	ADULT
4	6	Ioannis	Papadopoulos	MINOR
4	20	Alexia	Papadopoulou	ADULT
4	27	Theo	Papadopoulos	ADULT
5	2	Hercules	Diasakos	MINOR
5	18	Alexandra	Diasakou	ADULT
5	28	Gregory	Diasakos	ADULT
6	19	Nektarios	Tsaltakis	MINOR
6	20	Kostantina	Tsaltakh	ADULT

Trip ID	Name	Departure	Return
1	Santorini	2022-03-05 15:30:00	2022-03-08 12:30:00
17	Santorini	2022-03-20 16:30:00	2022-03-27 15:30:00
2	Mykonos	2022-03-10 15:00:00	2022-03-16 17:00:00
18	Mykonos	2022-04-24 19:00:00	2022-04-28 21:30:00
3	Paros	2022-04-15 17:30:00	2022-04-17 01:30:00

Buttons: Save, Update, Delete, Clear, Exit

3	2	Atticus	Makris	ADULT
3	10	Thanos	Makris	MINOR
3	50	Maria	Makri	ADULT

Βλέπουμε ότι η οικογένεια κάθεται σε διαφορετικές θέσεις.

Για να αλλάξουμε τους αριθμούς των θέσεων τους, πατάμε την κάθε εγγραφή που θέλουμε να αλλάξουμε, εισάγοντας στο πάνω πεδίο Seat Number τις καινούριες θέσεις και πατάμε το κουμπί Update.

Trip ID	Seat Number	Name	Last Name	Is Adult
1	12	Apollon	Sawidis	ADULT
1	13	Nikolas	Papadakis	ADULT
1	20	Iris	Agelopoulou	ADULT
2	15	Kyriakos	Akritidis	ADULT
2	20	Leonidas	Papakonstantinou	ADULT
2	24	Iasonas	Agelopoulos	ADULT
3	2	Atticus	Makris	ADULT
3	10	Thanos	Makris	MINOR
3	50	Maria	Makri	ADULT
4	6	Ioannis	Papadopoulos	MINOR
4	20	Alexia	Papadopoulou	ADULT
4	27	Theo	Papadopoulos	ADULT
5	2	Hercules	Diasakos	MINOR
5	18	Alexandra	Diasakou	ADULT
5	28	Gregory	Diasakos	ADULT
6	19	Nektarios	Tsaltakis	MINOR
6	20	Kostantina	Tsaltakh	ADULT

Trip ID	Name	Departure	Return
1	Santorini	2022-03-05 15:30:00	2022-03-08 12:30:00
17	Santorini	2022-03-20 16:30:00	2022-03-27 15:30:00
2	Mykonos	2022-03-10 15:00:00	2022-03-16 17:00:00
18	Mykonos	2022-04-24 19:00:00	2022-04-28 21:30:00
3	Paros	2022-04-15 17:30:00	2022-04-17 01:30:00

Buttons: Save, Update, Delete, Clear, Exit

Reservation

Add Destination

Trip ID	3
Seat Number	54
Adult / Minor	ADULT
Name	Maria
Lname	Makri

Search

Trip ID	3
SeatNumber	10

Buttons: Save, Update, Delete, Clear, Exit

Trip ID	Seat Number	Name	Last Name	IS Adult
1	12	Apollon	Sawidis	ADULT
1	13	Nikolas	Papadakis	ADULT
1	20	Iris	Agielopoulou	ADULT
2	15	Kyriakos	Akrifidis	ADULT
2	20	Leonidas	Papakonstantinou	ADULT
2	24	Iasonas	Agielopoulos	ADULT
3	10	Maria	Makri	ADULT
3	53	Thanos	Makris	MINOR
3	55	Atticus	Makris	ADULT
4	6	Ioannis	Papadopoulos	MINOR
4	20	Alexia	Papadopoulos	ADULT
4	27	Theo	Papadopoulos	ADULT
5	2	Hercules	Diasakos	MINOR
5	18	Alexandra	Diasakou	ADULT
5	28	Gregory	Diasakos	ADULT
6	19	Nektarios	Tsaltakis	MINOR
6	20	Kostantina	Tsaltakh	ADULT

Reservation

Add Destination

Trip ID	3
Seat Number	53
Adult / Minor	MINOR
Name	Thanos
Lname	Makris

Search

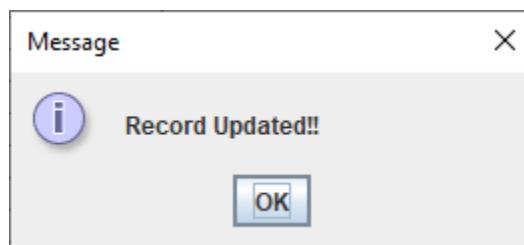
Trip ID	3
SeatNumber	9

Buttons: Save, Update, Delete, Clear, Exit

Trip ID	Seat Number	Name	Last Name	IS Adult
1	12	Apollon	Sawidis	ADULT
1	13	Nikolas	Papadakis	ADULT
1	20	Iris	Agielopoulou	ADULT
2	15	Kyriakos	Akrifidis	ADULT
2	20	Leonidas	Papakonstantinou	ADULT
2	24	Iasonas	Agielopoulos	ADULT
3	9	Thanos	Makris	MINOR
3	54	Atticus	Makris	ADULT
4	6	Ioannis	Papadopoulos	MINOR
4	20	Alexia	Papadopoulos	ADULT
4	27	Theo	Papadopoulos	ADULT
5	2	Hercules	Diasakos	MINOR
5	18	Alexandra	Diasakou	ADULT
5	28	Gregory	Diasakos	ADULT
6	19	Nektarios	Tsaltakis	MINOR
6	20	Kostantina	Tsaltakh	ADULT

Trip ID	Name	Departure	Return
1	Santorini	2022-03-05 15:30:00	2022-03-08 12:30:00
17	Santorini	2022-03-20 16:30:00	2022-03-27 15:30:00
2	Mykonos	2022-03-10 15:00:00	2022-03-16 17:00:00
18	Mykonos	2022-04-24 19:00:00	2022-04-28 21:30:00
3	Paros	2022-04-15 17:30:00	2022-04-17 01:30:00

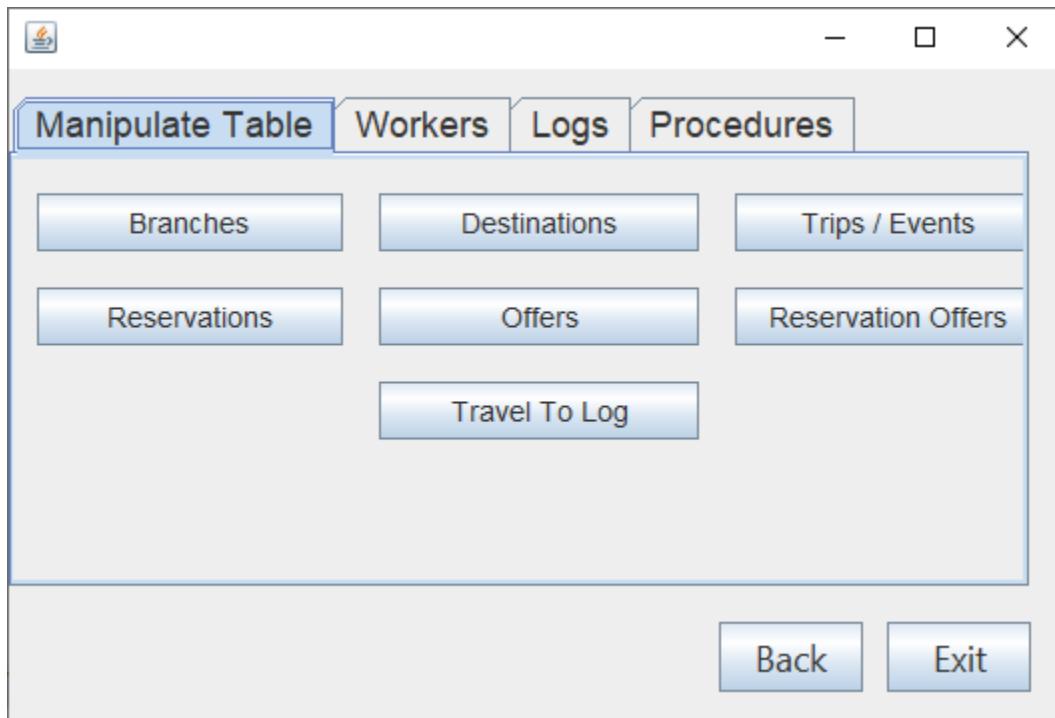
Μετά από κάθε update εμφανίζεται το παρακάτω παράθυρο για επιβεβαίωση της αλλαγής.



Τελικά μπορούμε να δούμε ότι οι θέσεις των κρατήσεων άλλαξαν.

3	53	Thanos	Makris	MINOR
3	54	Maria	Makri	ADULT
3	55	Atticus	Makris	ADULT

5. Έστω ότι ανοίγει ένα καινούριο branch και πρέπει να προτεθεί στην βάση. Πατάμε το κουμπί “X” στο πάνω δεξιά μέρος του παραθύρου για να φύγουμε από το παράθυρο των κρατήσεων και επιστρέφουμε στο μενού.



6. Πατάμε το κουμπί Branches.

7. Μπορούμε να δούμε όλα τα υπάρχοντα branches και τα τηλεφωνά τους. Εισάγουμε στα πεδία του Add Branch, τα στοιχεία του νέου branch, που θέλουμε να είναι στο Ηράκλειο και πατάμε Save.

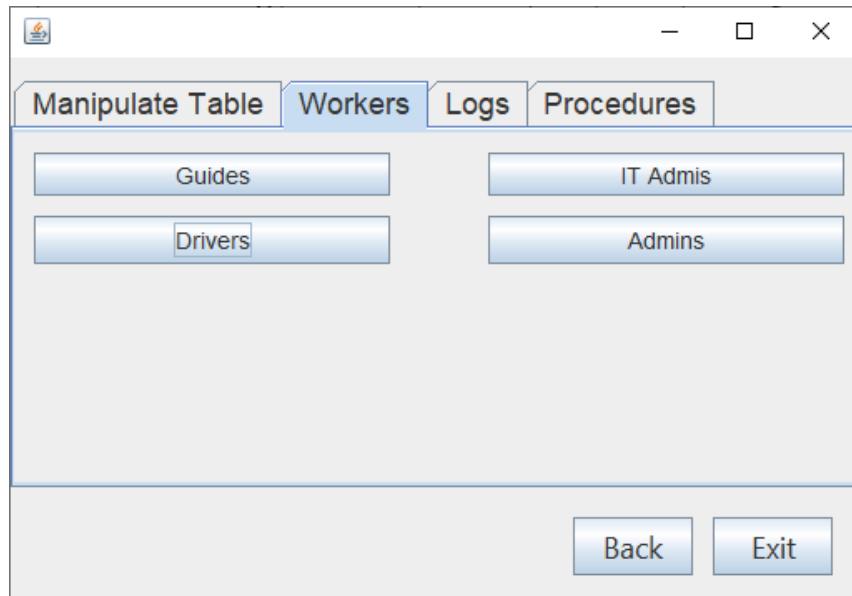
Branch Code	Street Name	Street Number	City
1	Kifisia	355	Athens
2	Amarisias Artemi...	5	Athens
3	Mezonos	44	Patra
4	Aristomenous	5	Kalamata
5	Tsimiskh	55	Thesalonikh

Branch Code	Phone
1	2101111111
1	2101222222
2	2102222222
2	2102333333
3	2103333333
4	2104444444
5	2105555555
6	2810333198

Branch Code	Street Name	Street Number	City
1	Kifisia	355	Athens
2	Amarisias Artemi...	5	Athens
3	Mezonos	44	Patra
4	Aristomenous	5	Kalamata
5	Tsimiskh	55	Thesalonikh
6	Kolokotroni	52	Iraklio

Βλέπουμε ότι προστέθηκε το νέο υποκατάστημα με branch code = 6.

8. Στην συνέχεια μπορούμε να δημιουργήσουμε ένα ταξίδι και να αναθέσουμε έναν οδηγό και ξεναγό σε αυτό. Πρώτα όμως πρέπει να προσθέσουμε έναν οδηγό και έναν ξεναγό στο υποκατάστημα. Οπότε στο μενού πατάμε την σελίδα Workers.



9. Πατάμε το κουμπί Drivers.

Driver Worker

Branches	Worker AT	Name	Last Name	Salary	Branch Code	Licensee	Route	Experience
1	AM10410000	Antonis	Kokinos	1000.0	1	D	LOCAL	9
2	AM10410111	Antonis	Eleftheriadis	1100.0	1	D	ABROAD	10
3	AM10410222	Nora	Raiou	750.0	2	D	LOCAL	7
4	AM10410333	John	Oikonomou	1150.0	2	D	ABROAD	11
5	AM10410444	Dimitrios	Gonias	1500.0	3	D	LOCAL	20
6	AM10410555	Fotios	Patrios	1400.0	4	D	LOCAL	15
	AM10410666	Maria	Papadopoulou	1000.0	5	D	LOCAL	8
	AM10410777	Andreas	Makris	750.0	5	B	ABROAD	3
	AT57679032	Tasos	Grigoriadis	1000.0	6	D	LOCAL	5

Add Worker

Name:

Last Name:

ID Number:

Salary:

Branch Code:

Driver License: D

Route: LOCAL

Experience:

Search

ID Number:

Save Update Delete Clear Exit

10. Εδώ μπορούμε να προσθέσουμε έναν νέο οδηγό εισάγοντας τα στοιχεία του, επιλέγοντας το υποκατάστημα στο οποίο θα εργάζεται και πατώντας το κουμπί Save.

The screenshot shows the "Driver Worker" application window. On the left, there is a form titled "Add Worker" with fields for Name (Tasos), Last Name (Grigoriadis), ID Number (AT67679032), Salary (1000), Branch Code (6), Driver License (D), Route (LOCAL), and Experience (5). To the right of the form is a table titled "Branches" listing worker details:

	Worker AT	Name	Last Name	Salary	Branch Code	License	Route	Experience
1	AM10410000	Antonis	Kokinos	1000.0	1	D	LOCAL	9
2	AM10410111	Antonis	Eleftheriadis	1100.0	1	D	ABROAD	10
3	AM10410222	Nora	Raihou	750.0	2	D	LOCAL	7
4	AM10410333	John	Oikonomou	1150.0	2	D	ABROAD	11
5	AM10410444	Dimitrios	Gongas	1500.0	3	D	LOCAL	20
6	AM10410555	Fotios	Patrios	1400.0	4	D	LOCAL	15
	AM10410666	Maria	Papadopoulou	1000.0	5	D	LOCAL	8
	AM10410777	Andreas	Makris	750.0	5	B	ABROAD	3

Below the table are buttons for Search, Save, Update, Delete, Clear, and Exit. The "Save" button is highlighted.

Κάνουμε το ίδιο και για να προσθέσουμε έναν guide στο αντίστοιχο παράθυρο.

The screenshot shows the "Guide Worker" application window. On the left, there is a form titled "Add Worker" with fields for Name (Georgia), Last Name (Papandreou), ID Number (AT67565434), Salary (1200.50), Branch Code (6), Language (Greek), and Guide CV (No previous work experience). To the right of the form is a table titled "Branches" listing guide details:

	Worker AT	Name	Last Name	Salary	Branch Code	Language	Guide CV
1	AK10310444	Sofia	Politi	1400.00	5	Greek,English	Employment History...
2	AK10311111	Giannis	Vassilou	1547.56	1	Greek,English,French	Employment History...
3	AN10520010	Damianos	Disakos	1200.0	1	Greek,English,French	Employment History...
4	AN10520020	Greg	Delimpaltadakis	1000.0	2	Greek,English,German	Employment History...
5	AN10520030	Orestis	Delimpaltadakis	1000.0	2	Greek,German,Fren...	Employment History...
6	AN10520040	Iason	Makris	1200.0	3	Greek,English,Italian	Employment History...
	AN10520050	Orestis	Disakos	1000.0	4	Greek,English,German	Employment History...
	AN10520060	Damianos	Delimpaltadakis	1200.0	5	Greek,English,German	Employment History...

Below the table are buttons for Search, Save, Update, Delete, Clear, and Exit. The "Save" button is highlighted.

11. Τώρα λοιπόν πηγαίνουμε στο παράθυρο Trips/Events.

Trip & Events

Trip ID	Departure	Return	Max Seats	Cost	Branch Code	Guide AT	Driver AT
1	2022-03-05 15:30...	2022-03-08 12:30...	30	300.0	1	AK10311111	AM10410000
2	2022-03-10 15:00...	2022-03-16 17:00...	30	500.0	1	AK10311111	AM10410000
3	2022-04-15 17:30...	2022-04-17 01:30...	60	1000.65	1	AK10311111	AM10410000
4	2022-03-08 15:00...	2022-03-27 13:00...	20	200.85	1	AN10520010	AM10410111
5	2022-04-03 17:00...	2022-04-19 22:00...	30	500.52	1	AN10520010	AM10410111
6	2022-06-18 22:30...	2022-06-29 18:30...	30	900.0	1	AN10520010	AM10410111
7	2022-07-05 18:30...	2022-07-15 16:30...	70	1500.0	2	AN10520020	AM10410222
8	2022-07-18 18:30...	2022-07-19 22:00...	30	800.0	2	AN10520020	AM10410222
9	2022-08-02 15:30...	2022-08-03 21:30...	30	300.0	2	AN10520020	AM10410222
10	2022-07-12 16:00...	2022-07-29 19:30...	30	2000.0	2	AN10520030	AM10410333
11	2022-08-10 18:30...	2022-08-23 19:00...	50	100.0	2	AN10520030	AM10410333
12	2022-09-09 18:30...	2022-09-26 12:00...	30	700.88	2	AN10520030	AM10410333

Branch...	Driver AT	Name	Last Name	Branch Code	Route	Guide AT	Name	Last Name	Branch Code	Language
1	AT67679032	Tasos	Grigoridis	6	LOCAL	AT67565434	Georgia	Papandreou	6	Greek
2										
3										
4										
5										
6										

Add Trip

Trip Departure: 2023-01-01 12:00:00

Trip Return: 2023-01-04 12:00:00

Max Seats: 50

Cost: 100

Branch Code: 6

Guide AT: AT67565434

Driver AT: AT67679032

Search: Trip ID:

Buttons: Save, Add Event, Update, Delete, Clear, Exit

Πατώντας το branch 6 εμφανίζονται οι εργαζόμενοι που μόλις προσθέσαμε. Εισάγουμε λοιπόν τα ζητούμενα στοιχεία, επιλέγοντας branch, driver και guide και πατάμε Save.

Trip & Events

Trip ID	Departure	Return	Max Seats	Cost	Branch Code	Guide AT	Driver AT
1	2022-03-05 15:30...	2022-03-08 12:30...	30	300.0	1	AK10311111	AM10410000
2	2022-03-10 15:00...	2022-03-16 17:00...	30	500.0	1	AK10311111	AM10410000
3	2022-04-15 17:30...	2022-04-17 01:30...	60	1000.65	1	AK10311111	AM10410000
4	2022-03-08 15:00...	2022-03-27 13:00...	20	200.85	1	AN10520010	AM10410111
5	2022-04-03 17:00...	2022-04-19 22:00...	30	500.52	1	AN10520010	AM10410111
6	2022-06-18 22:30...	2022-06-29 18:30...	30	900.0	1	AN10520010	AM10410111
7	2022-07-05 18:30...	2022-07-15 16:30...	70	1500.0	2	AN10520020	AM10410222
8	2022-07-18 18:30...	2022-07-19 22:00...	30	800.0	2	AN10520020	AM10410222
9	2022-08-02 15:30...	2022-08-03 21:30...	30	300.0	2	AN10520020	AM10410222
10	2022-07-12 16:00...	2022-07-29 19:30...	30	2000.0	2	AN10520030	AM10410333
11	2022-08-10 18:30...	2022-08-23 19:00...	50	100.0	2	AN10520030	AM10410333
12	2022-09-09 18:30...	2022-09-26 12:00...	30	700.88	2	AN10520030	AM10410333

Branch...	Driver AT	Name	Last Name	Branch Code	Route	Guide AT	Name	Last Name	Branch Code	Language
1	AT67679032	Tasos	Grigoridis	6	LOCAL	AT67565434	Georgia	Papandreou	6	Greek
2										
3										
4										
5										
6										

Add Trip

Trip Departure: 2023-01-01 12:00:00

Trip Return: 2023-01-04 12:00:00

Max Seats: 50

Cost: 100

Branch Code: 6

Guide AT: AT67565434

Driver AT: AT67679032

Search: Trip ID:

Buttons: Save, Add Event, Update, Delete, Clear, Exit

Trip & Events

Add Trip

Trip Departure	<input type="text"/>
Trip Return	<input type="text"/>
Max Seats	<input type="text"/>
Cost	<input type="text"/>
Branch Code	<input type="text"/>
Guide AT	<input type="text"/>
Driver AT	<input type="text"/> AT67679032

Search

Trip ID	<input type="text"/>
---------	----------------------

Buttons: Save, Add Event, Update, Delete, Clear, Exit

Trip ID	Departure	Return	Max Seats	Cost	Branch Code	Guide AT	Driver AT
20	2022-06-23 17:30...	2022-06-30 18:00...	30	600.0	4	AN10520050	AM10410555
21	2022-07-23 12:45...	2022-07-28 22:45...	100	2030.45	4	AN10520050	AM10410555
22	2022-08-08 09:30...	2022-08-10 19:30...	30	380.0	4	AN10520050	AM10410555
23	2022-09-14 18:00...	2022-09-26 10:45...	80	3500.0	4	AN10520050	AM10410555
24	2022-10-08 16:30...	2022-10-09 22:00...	30	360.32	4	AN10520050	AM10410555
25	2022-08-18 05:30...	2022-08-22 21:00...	20	9000.74	5	AK10310444	AM10410666
26	2022-10-20 14:30...	2022-10-27 21:00...	90	1800.23	5	AK10310444	AM10410666
27	2022-11-11 15:15...	2022-11-26 21:00...	30	800.0	5	AK10310444	AM10410666
28	2022-12-05 12:30...	2022-12-21 20:30...	7	3400.0	5	AN10520060	AM10410777
29	2023-02-17 19:45...	2023-02-26 18:00...	7	3900.43	5	AN10520060	AM10410777
30	2023-06-12 18:30...	2023-06-29 10:30...	7	700.0	5	AN10520060	AM10410777
31	2023-01-01 12:00...	2023-01-04 12:00...	50	100.0	6	AT67565434	AT67679032

Branch...	Driver AT	Name	Last Name	Branch Code	Route	Guide AT	Name	Last Name	Branch Code	Language
1	AT67679032	Tasos	Grigoriadis	6	LOCAL	AT67565434	Georgia	Papandreu	6	Greek
2										
3										
4										
5										
6										

Βλέπουμε ότι το νέο ταξίδι με trip id = 31 προστέθηκε με επιθυμία.

12. Μπορούμε να δούμε την αλλαγή που έχουμε κάνει στον πίνακα Trip Log και Reservation στην σελίδα Logs του μενού μας.

Manipulate Table **Workers** **Logs** **Procedures**

Trip Log	Event Log
Destination Log	Reservation Log
Travel To Log	

Buttons: Back, Exit

13. Πατάμε το κουμπί Trip Log.

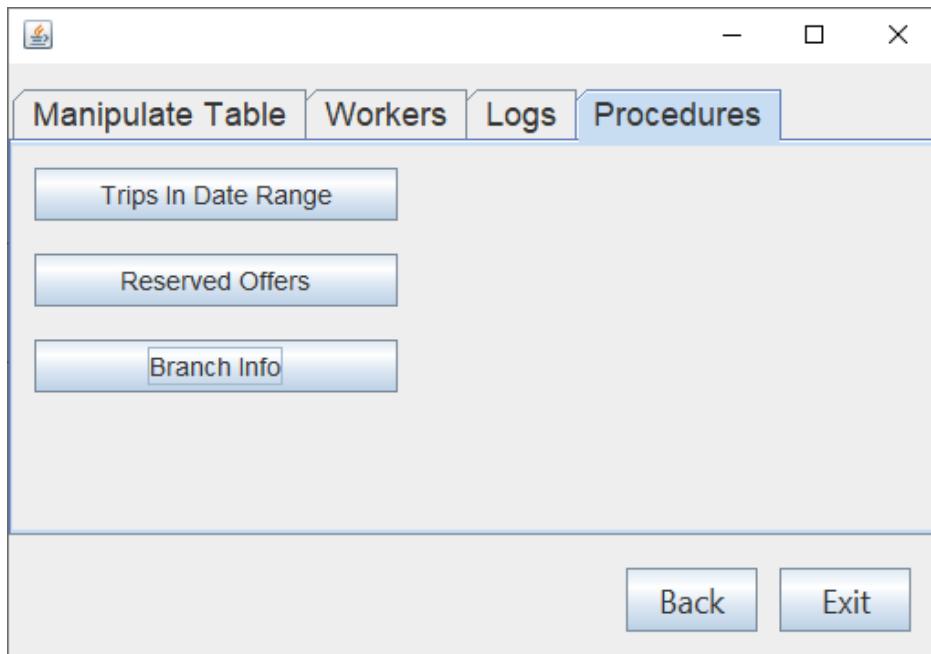
Action Type	Admin Last Name	Timestamp	Trip ID	Trip Departure	Trip Return	Max Seats	Cost	Branch Code	Guide AT	Driver AT
INSERT	root@localhost	2023-02-04 18:4...	31	2023-01-01 12:0...	2023-01-04 12:0...	50	100.0	2023-01-04 12:0...	AT67565434	AT67679032

Βλέπουμε το καινούριο trip που κάναμε insert και το όνομα του χρήστη με το οποίο ήμαστε συνδεδεμένοι.

Αν στην σελίδα Log πατήσουμε το κουμπί Reservation Log θα δούμε τις αλλαγές που κάναμε στις κρατήσεις στην αρχή.

Action Type	Admin Last Name	Timestamp	Reservation Travel ID	Reservation Seat Number	Name	Last Name	Adult / Minor
UPDATE	root@localhost	log_timestamp	3	10	Maria	Makri	ADULT
UPDATE	root@localhost	log_timestamp	3	9	Thanos	Makris	MINOR

14. Αν θέλαμε να δούμε τις βασικές πληροφορίες για όλα τα branches μπορούμε να μεταβούμε στην σελίδα Procedures του μενού.



Πατάμε το κουμπί Branch Info και στο παράθυρο που ανοίγει πατάμε τα κουμπιά Get branch info και Get branch employees.

Branch code	Street	Number	City	Admin name	Admin last name	Total of reservatio...	Income
1	Kifisia	355	Athens	Georgia	Makri	18	10206.1
2	Amarisas Artemi...	5	Athens	Maria	Papadopoulou	18	16202.6
3	Mezonos	44	Patra	Orestis	Makris	18	12753.0
4	Aristomenous	5	Kalamata	John	Politis	18	21512.3
5	Tsimiskh	55	Thessalonikh	Giannhs	Stathopoulos	18	58804.2
6	Kolokotroni	52	Irakleio	Giannhs	Stathopoulos	0	

Branch code	Worker name	Worker last name	Worker salary	Total branch salaries
1	Giannhs	Vasilou	1547.55	13147.89
1	Artemis	Papadopoulou	1800.34	13147.89
1	Georgia	Makri	2000.0	13147.89
1	Artemis	Padadimitriou	1500.0	13147.89
1	Maria	Prodromou	1500.0	13147.89
1	John	Stathopoulos	1500.0	13147.89
1	Antonis	Kokinos	1000.0	13147.89
1	Antonis	Eleftheriadis	1100.0	13147.89
1	Damianos	Diasakos	1200.0	13147.89
2	Greg	Stephanopoulos	1600.0	12300.99
2	Iason	Raikos	1800.99	12300.99
2	Maria	Papadopoulou	2000.0	12300.99
2	Andreas	Vasiladiotis	1500.0	12300.99
2	Iason	Raikos	1500.0	12300.99
2	Nora	Raiou	750.0	12300.99
2	John	Oikonomou	1150.0	12300.99
2	Greg	Delimpaltadakis	1000.0	12300.99
2	Orestis	Delimpaltadakis	1000.0	12300.99

μπορούμε να δούμε πληροφορίες και τα έσοδα του κάθε υποκαταστήματος και όλους τους εργαζόμενους των υποκαταστημάτων μαζί με τους μισθούς τους.

15. Για να δούμε το σύνολο των ταξιδιών σε ένα διάστημα ημερομηνιών και τις κρατήσεις προσφορών για τους πελάτες με το ίδιο επώνυμο μπορούμε να πατήσουμε τα κουμπιά Trips In Date Range ή Reserved Offers.

Procedures

Start Date:	<input type="text"/>	(YYYY-MM-DD HH:MM:SS)
End Date:	<input type="text"/>	(YYYY-MM-DD HH:MM:SS)
<input type="button" value="Search Trips"/>		
Last Name:	<input type="text"/>	
<input type="button" value="Show Reserved Offers"/>		
<input type="button" value="Clear"/>		<input type="button" value="Back"/>

Εισάγουμε ένα διάστημα ημερομηνιών έστω από 2022-03-17 18:30:00 μέχρι 2022-10-08 16:30:00.

Procedures

Trip in the given date range

Trip Id	Cost	MaxSeats	Number Of	Empty Seats	Driver Last...	Driver Name	Guide Last...	Guide Name	Departure	Return
3	1000.65	60	3	57	Kokinos	Antonis	Vasilou	Giannhs	2022-04-1...	2022-04-1...
5	500.52	30	3	27	Eleftheriadis	Antonis	Diasakos	Damianos	2022-04-0...	2022-04-1...
6	900.0	30	3	27	Eleftheriadis	Antonis	Diasakos	Damianos	2022-06-1...	2022-06-2...
7	1500.0	70	3	67	Raiiou	Nora	Delimpal...	Greg	2022-07-0...	2022-07-1...
8	800.0	30	3	27	Raiiou	Nora	Delimpal...	Greg	2022-07-1...	2022-07-1...
9	300.0	30	3	27	Raiiou	Nora	Delimpal...	Greg	2022-08-0...	2022-08-0...
10	2000.0	30	3	27	Oikonomou	John	Delimpal...	Orestis	2022-07-1...	2022-07-2...
11	100.0	50	3	47	Oikonomou	John	Delimpal...	Orestis	2022-08-1...	2022-08-2...
12	700.88	30	3	27	Oikonomou	John	Delimpal...	Orestis	2022-09-0...	2022-09-2...
16	890.0	60	3	57	Gongas	Dimitrios	Makris	Iason	2022-03-1...	2022-03-1...
17	230.0	30	3	27	Gongas	Dimitrios	Makris	Iason	2022-03-2...	2022-03-2...
18	670.0	45	3	42	Gongas	Dimitrios	Makris	Iason	2022-04-2...	2022-04-2...
19	300.0	30	3	27	Patros	Folios	Diasakos	Orestis	2022-06-1...	2022-06-2...

Start Date:	<input type="text" value="2022-03-17 18:30:00"/>	(YYYY-MM-DD HH:MM:SS)
End Date:	<input type="text" value="2022-10-08 16:30:00"/>	(YYYY-MM-DD HH:MM:SS)
<input type="button" value="Search Trips"/>		
Last Name:	<input type="text"/>	
<input type="button" value="Show Reserved Offers"/>		
<input type="button" value="Clear"/>		<input type="button" value="Back"/>

Βλέπουμε τα ταξίδια που θέλουμε στον πάνω πίνακα.

Εισάγοντας το επώνυμο ενός πελάτη στο πεδίο Last Name.

The screenshot shows a software window titled "Procedures". On the left, there are input fields for "Start Date" (2022-03-17 18:30:00) and "End Date" (2022-10-08 16:30:00), both in YYYY-MM-DD HH:MM:SS format. Below these is a button labeled "Search Trips". To the right, there are two tables. The top table is titled "Reserved offers for costumers with the lastname Berger" and has three rows of data:

Offer Id	Number Of Reserved Offers
1	12
2	21
3	15

The bottom table is titled "Reserved offers for costumers with one reservation per offer" and is currently empty. At the bottom right are "Clear" and "Back" buttons.

Βλέπουμε το σύνολο των κρατήσεων σε κάθε offer από άτομα με το επώνυμο που Berger, στον πάνω πίνακα. Ο κάτω πίνακας παραμένει άδειος επειδή δεν υπάρχουν offers με μόνο μία κράτηση από άτομο με αυτό το επώνυμο.

16. Έστω ότι θέλουμε να δημιουργήσουμε έναν it_admin, με δικαιώματα προβολής μόνο. Πρέπει να μεταβούμε στην σελίδα Workers του μενού και να πατήσουμε το κουμπί It Admins.

The screenshot shows the 'IT Admin' application interface. On the left, there is a form titled 'Add Worker' with fields for Name, Last Name, ID Number, Salary, Branch Code, Password, Start Date, End Date, and Privileges. On the right, there is a grid table titled 'Branches' showing a list of workers with columns for Worker AT, Name, Last Name, Salary, Branch Code, Password, Start Date, End Date, and All Privileges. The grid contains 14 rows of data. Below the grid are buttons for Show All, Insert, Delete, Clear, and Back.

Worker AT	Name	Last Name	Salary	Branch Code	Password	Start Date	End Date	All Privileges
AK12000010	Viki	Aleksiou	1500.0	5	password	2017-11-11 10:...		Y
AK12000008	Alexandros	Alexandrou	1500.0	4	AlexAlex	2010-09-06 10:...		Y
AK12000007	Griposis	Delibaltadakis	1500.0	3	ff	2012-05-06 10:...		Y
AK12000009	Nikolas	Karavidis	1500.0	5	Nik	2015-02-04 10:...		Y
AK12000006	Orestis	Makris	1500.0	3	1444	2019-03-06 12:...		Y
AK12000001	Artemis	Padadimitriou	1500.0	1	password	2015-02-06 14:...		Y
AK12000002	Maria	Prodromou	1500.0	1	password	2012-01-26 14:...		Y
AK12000005	Iason	Raikos	1500.0	2	1234	2007-01-31 14:...		Y
AK12000003	John	Stathopoulos	1500.0	1	John	2010-02-06 14:...		Y
AK12000004	Andreas	Vasiladiotis	1500.0	2	password	2008-02-06 14:...		Y

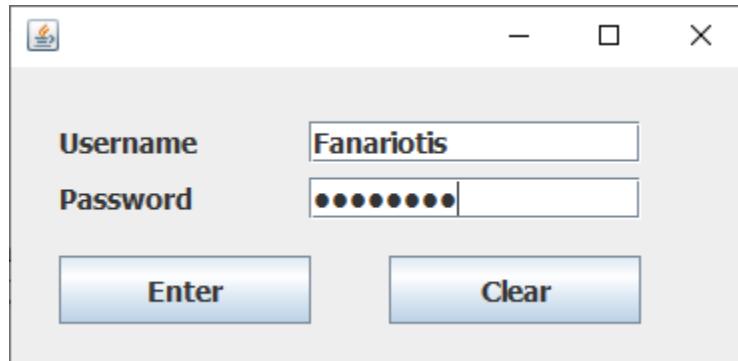
Ανοίγει το παραπάνω παράθυρο στο οποίο μπορούμε να προσθέσουμε έναν it_admin και στο τέλος να επιλέξουμε select privileges και να πατήσουμε Insert.

The screenshot shows the 'IT Admin' application interface. On the left, there is a form titled 'Add Worker' with fields for Name, Last Name, ID Number, Salary, Branch Code, Password, Start Date, End Date, and Privileges. The Name field is filled with 'Antonis'. The Privileges dropdown is set to 'Select Privileges'. On the right, there is a grid table titled 'Branches' showing a list of workers with columns for Worker AT, Name, Last Name, Salary, Branch Code, Password, Start Date, End Date, and All Privileges. The grid contains 14 rows of data. Below the grid are buttons for Show All, Insert, Delete, Clear, and Back.

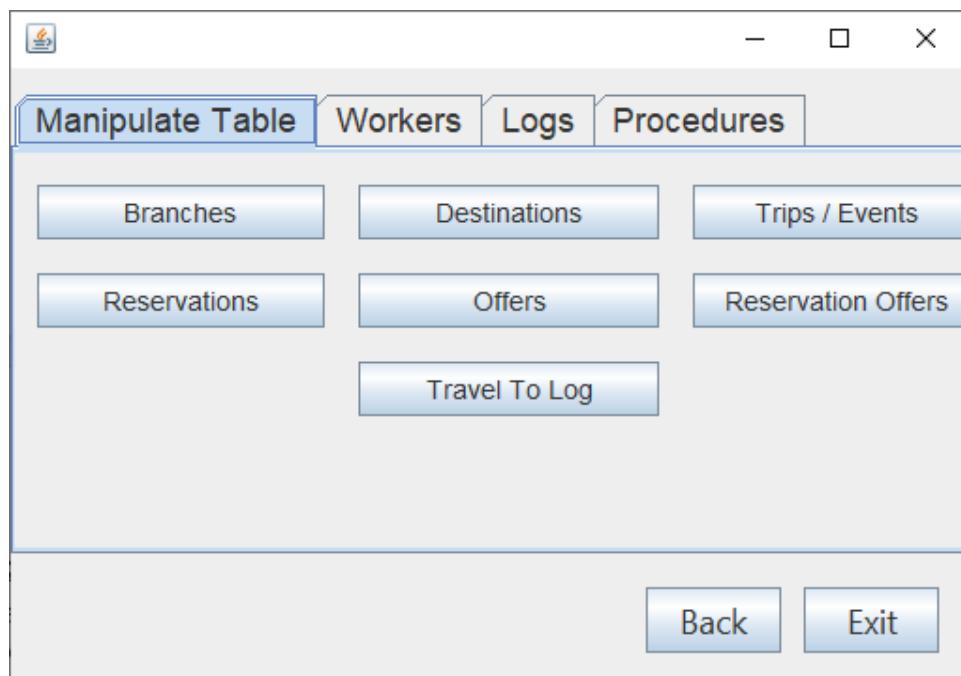
Worker AT	Name	Last Name	Salary	Branch Code	Password	Start Date	End Date	All Privileges
AK12000010	Viki	Aleksiou	1500.0	5	password	2017-11-11 10:...		Y
AK12000008	Alexandros	Alexandrou	1500.0	4	AlexAlex	2010-09-06 10:...		Y
AK12000007	Griposis	Delibaltadakis	1500.0	3	ff	2012-05-06 10:...		Y
AT67901234	Antonis	Fanariotis	100.0	6	password	2020-01-01 09:...		N
AK12000009	Nikolas	Karavidis	1500.0	5	Nik	2015-02-04 10:...		Y
AK12000006	Orestis	Makris	1500.0	3	1444	2019-03-06 12:...		Y
AK12000001	Artemis	Padadimitriou	1500.0	1	password	2015-02-06 14:...		Y
AK12000002	Maria	Prodromou	1500.0	1	password	2012-01-26 14:...		Y
AK12000005	Iason	Raikos	1500.0	2	1234	2007-01-31 14:...		Y
AK12000003	John	Stathopoulos	1500.0	1	John	2010-02-06 14:...		Y
AK12000004	Andreas	Vasiladiotis	1500.0	2	password	2008-02-06 14:...		Y

Βλέπουμε ότι ο εργαζόμενος προστέθηκε με επιτυχία.

17. Τώρα πατάμε Back για να μεταβούμε στο μενού και όταν βρισκόμαστε εκεί πατάμε πάλι Back για να ανοίξει το παράθυρο login. Εκεί εισάγουμε το useraname και password του νέου it_admin.



18. Ας προσπαθήσουμε να διαγράψουμε μια κράτηση στον πίνακα reservation.



Πατάμε το κουμπί Reservations.

Reservation

Add Destination

Trip ID	<input type="text"/>
Seat Number	<input type="text"/>
Adult / Minor	<input type="button" value="ADULT"/>
Name	<input type="text"/>
Lastname	<input type="text"/>

Search

Trip ID	<input type="text"/>
SeatNumber	<input type="text"/>

Trip ID	Seat Number	Name	Last Name	Is Adult
1	12	Apollon	Sawidis	ADULT
1	13	Nikolas	Papadakis	ADULT
1	20	Iris	Agelopoulou	ADULT
2	15	Kyriakos	Akritidis	ADULT
2	20	Leonidas	Papakonstantinou	ADULT
2	24	Iasonas	Agelopoulos	ADULT
3	9	Thanos	Makris	MINOR
3	10	Maria	Makri	ADULT
3	55	Atticus	Makris	ADULT
4	6	Ioannis	Papadopoulos	MINOR
4	20	Alexia	Papadopoulou	ADULT
4	27	Theo	Papadopoulos	ADULT
5	2	Hercules	Diasakos	MINOR
5	18	Alexandra	Diasakou	ADULT
5	28	Gregory	Diasskos	ADULT
6	19	Nektarios	Tsaltakis	MINOR
6	20	Kostantina	Tsaltakh	ADULT

Trip ID	Name	Departure	Return
1	Santorini	2022-03-05 15:30:00	2022-03-08 12:30:00
17	Santorini	2022-03-20 16:30:00	2022-03-27 15:30:00
2	Mykonos	2022-03-10 15:00:00	2022-03-16 17:00:00
18	Mykonos	2022-04-24 19:00:00	2022-04-28 21:30:00
3	Paros	2022-04-15 17:30:00	2022-04-17 01:30:00

Βλέπουμε ότι ο πίνακας με της κρατήσεις φαίνεται κανονικά.

Αν επιλέξουμε όμως μία γραμμή και πατήσουμε Delete.

Reservation

Add Destination

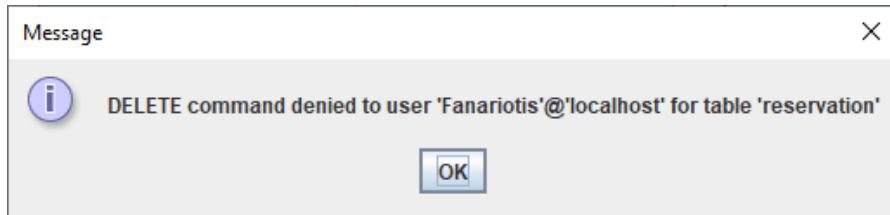
Trip ID	<input type="text" value="22"/>
Seat Number	<input type="text" value="7"/>
Adult / Minor	<input type="button" value="ADULT"/>
Name	<input type="text" value="Giorgos"/>
Lastname	<input type="text" value="Papadopoulos"/>

Search

Trip ID	<input type="text" value="22"/>
SeatNumber	<input type="text" value="7"/>

Trip ID	Seat Number	Name	Last Name	Is Adult
20	5	Apollonas	Priths	ADULT
20	6	Marios	Priths	ADULT
20	7	Platonas	Priths	MINOR
21	13	Alexandros	Gkogkas	ADULT
21	14	Anastasia	Gkogkas	ADULT
21	15	Marios	Gkogas	MINOR
22	5	Marios	Skourlis	ADULT
22	6	Grigoris	Papadakis	ADULT
22	7	Giorgos	Papadopoulos	ADULT
23	9	Vasiliana	Konstantakopoulou	ADULT
23	10	Dimitris	Konstantakopoulou	ADULT
23	11	Asimakis	Konstantakopoulou	MINOR
24	30	Giannis	Koutsogiannis	ADULT
24	31	Panagiota	Koutsogianni	ADULT
24	32	Sofoklis	Koutsogiannis	MINOR
25	1	Grigoris	Aleksiou	MINOR
25	2	Vasiliki	Aleksiou	ADULT

Trip ID	Name	Departure	Return
1	Santorini	2022-03-05 15:30:00	2022-03-08 12:30:00
17	Santorini	2022-03-20 16:30:00	2022-03-27 15:30:00
2	Mykonos	2022-03-10 15:00:00	2022-03-16 17:00:00
18	Mykonos	2022-04-24 19:00:00	2022-04-28 21:30:00
3	Paros	2022-04-15 17:30:00	2022-04-17 01:30:00



Η διαγραφή εμποδίζεται.

GUI Κόδικας

AdminWorker

```
package classes;

import static classes.Login.conn;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class AdminWorker extends javax.swing.JFrame {

    public AdminWorker() throws SQLException {
        initComponents();
        table_load();
        table_load_Branches();
    }

    PreparedStatement pst;
    CallableStatement cs;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT wrk_AT , wrk_name,wrk_lname,wrk_salary,wrk_br_code,adm_type,adm_diploma FROM worker
INNER JOIN manages ON mng_adm_AT = wrk_AT INNER JOIN admin ON adm_AT = wrk_AT";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String at = rs.getString("wrk_AT");
            String name = rs.getString("wrk_name");
            String laname = rs.getString("wrk_lname");
            String salary = String.valueOf(rs.getFloat("wrk_salary"));
            String br_code = String.valueOf(rs.getInt("wrk_br_code"));
            String type = rs.getString("adm_type");
            String diploma = rs.getString("adm_diploma");

            String tbData[] = {at , name, laname , salary , br_code , diploma , type };

            DefaultTableModel tblModel = (DefaultTableModel)jTable2.getModel();
            tblModel.addRow(tbData);
        }
    }

    public void table_load_Branches() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT br_code FROM branch";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String br = rs.getString("br_code");
        }
    }
}
```

```

        String tbData[] = {br};
        DefaultTableModel tblModel = (DefaultTableModel)jTable4.getModel();
        tblModel.addRow(tbData);
    }

}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    jLabel2 = new javax.swing.JLabel();
    buttonGroup1 = new javax.swing.ButtonGroup();
    jToggleButton1 = new javax.swing.JToggleButton();
    jTable1 = new javax.swing.JTable();
    jScrollPane2 = new javax.swing.JScrollPane();
    jTable3 = new javax.swing.JTable();
    jPanel2 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jPanel3 = new javax.swing.JPanel();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    LastNameField = new javax.swing.JTextField();
    jLabel8 = new javax.swing.JLabel();
    SalaryField = new javax.swing.JTextField();
    NameField = new javax.swing.JTextField();
    IdField = new javax.swing.JTextField();
    BranchField = new javax.swing.JTextField();
    jLabel9 = new javax.swing.JLabel();
    jLabel11 = new javax.swing.JLabel();
    RoleBox = new javax.swing.JComboBox<>();
    DiplomaField = new javax.swing.JTextField();
    SaveButton = new javax.swing.JButton();
    ExitButton = new javax.swing.JButton();
    ClearButton = new javax.swing.JButton();
    jPanel1 = new javax.swing.JPanel();
    jLabel10 = new javax.swing.JLabel();
    SearchField = new javax.swing.JTextField();
    DeleteButton = new javax.swing.JButton();
    UpdateButton2 = new javax.swing.JButton();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable2 = new javax.swing.JTable();
    jScrollPane3 = new javax.swing.JScrollPane();
    jTable4 = new javax.swing.JTable();

    jLabel2.setText("jLabel2");

    jToggleButton1.setText("jToggleButton1");

    jTable1.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {
            {null, null, null, null},
            {null, null, null, null},
            {null, null, null, null},
            {null, null, null, null}
        },
        new String [] {
            "Title 1", "Title 2", "Title 3", "Title 4"
        }
    ));
    jScrollPane2.setViewportView(jTable3);

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

    jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
    jLabel1.setText("Admin Worker");

    jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Add Worker", javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 24))); // NOI18N
}

```

```

jLabel14.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel14.setText("Name");

jLabel15.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel15.setText("Last Name");

jLabel16.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel16.setText("ID Number");

jLabel17.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel17.setText("Salary");

LastNameField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        LastNameFieldActionPerformed(evt);
    }
});

jLabel18.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel18.setText("Branch Code");

SalaryField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SalaryFieldActionPerformed(evt);
    }
});

IdField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        IdFieldActionPerformed(evt);
    }
});

BranchField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        BranchFieldActionPerformed(evt);
    }
});

jLabel19.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel19.setText("Diploma");

jLabel11.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel11.setText("Role");

RoleBox.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "LOGISTICS", "ADMINISTRATIVE", "ACCOUNTING" }));
RoleBox.setSelectedItem(jTable2);
RoleBox.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        RoleBoxActionPerformed(evt);
    }
});

DiplomaField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DiplomaFieldActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
jPanel3.setLayout(jPanel3Layout);
jPanel3Layout.setHorizontalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(25, 25, 25)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel15, javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel19, javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel18, javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel11, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel17, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(106, 106, 106)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel14, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 75, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel16, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel1, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(106, 106, 106)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel13, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel12, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel10, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel9, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(106, 106, 106)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel13, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel12, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel10, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel9, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)))
    .addGroup(jPanel3Layout.createSequentialGroup()
        .addGap(106, 106, 106)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel13, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel12, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel10, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel9, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)))
));

```

```

        .addComponent(IdField)
        .addComponent(SalaryField, javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(BranchField, javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(DiplomaField, javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(RoleBox, javax.swing.GroupLayout.Alignment.TRAILING, 0, 350, Short.MAX_VALUE)
        .addComponent(LastNameField)
        .addGap(31, 31, 31))
    );
    jPanel3.setLayout.setVerticalGroup(
        jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(16, 16, 16)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel14)
                .addComponent(NameField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel15)
                .addComponent(LastNameField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
            .addGap(17, 17, 17)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel16)
                .addComponent(IdField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
            .addGap(18, 18, 18)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel17)
                .addComponent(SalaryField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
            .addGap(18, 18, 18)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel18)
                .addComponent(BranchField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
            .addGap(18, 18, 18)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel19)
                .addComponent(DiplomaField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
            .addGap(18, 18, 18)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(RoleBox, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
                javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel11))
            .addContainerGap(16, Short.MAX_VALUE))
        );
    );

    SaveButton.setFont(new java.awt.Font("Segoe UI", 0, 27)); // NOI18N
    SaveButton.setText("Save");
    SaveButton.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            SaveButtonActionPerformed(evt);
        }
    });
    });

    ExitButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    ExitButton.setText("Exit");
    ExitButton.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            ExitButtonActionPerformed(evt);
        }
    });
    });

    ClearButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
    ClearButton.setText("Clear");
    ClearButton.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            ClearButtonActionPerformed(evt);
        }
    });
    });

    jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Search",
    javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT_POSITION, new
    java.awt.Font("Segoe UI", 0, 22))); // NOI18N

    jLabel10.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel10.setText("ID Number");

    SearchField.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            SearchFieldActionPerformed(evt);
        }
    });
    SearchField.addKeyListener(new java.awt.event.KeyAdapter() {
        public void keyReleased(java.awt.event.KeyEvent evt) {
            SearchFieldKeyReleased(evt);
        }
    });
    });

```

```

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(32, 32, 32)
            .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 109,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(26, 26, 26)
            .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 368,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(21, Short.MAX_VALUE))
        );
    jPanel1Layout.setVerticalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(15, 15, 15)
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel10)
                    .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
                        javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(20, Short.MAX_VALUE))
            );
);

DeleteButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
DeleteButton.setText("Delete");
DeleteButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteButtonActionPerformed(evt);
    }
});

UpdateButton2.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
UpdateButton2.setText("Update");
UpdateButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateButton2ActionPerformed(evt);
    }
});

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
    new String [] {
        "Worker AT", "Name", "Last Name", "Salary", "Branch Code", "Diploma", "Admin Type"
    }
) {
    Class[] types = new Class [] {
        java.lang.Object.class, java.lang.Object.class, java.lang.Object.class, java.lang.Object.class,
        java.lang.Object.class, java.lang.Object.class, java.lang.String.class
    };
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false, false, false
    };

    public Class getColumnClass(int columnIndex) {
        return types [columnIndex];
    }

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
));
jTable2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable2MouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable2);

jTable4.setBorder(javax.swing.BorderFactory.createTitledBorder(""));
jTable4.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
    new String [] {
        "Branches"
    }
) {
    boolean[] canEdit = new boolean [] {
        false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {

```



```

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
        .addGap(10, 10, 10)
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(10, 10, 10))
    .addGroup(layout.createSequentialGroup()
        .addGap(10, 10, 10)
        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(10, 10, 10)))
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addGap(10, 10, 10)
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(10, 10, 10))
    .addGroup(layout.createSequentialGroup()
        .addGap(10, 10, 10)
        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(10, 10, 10)))
);
pack();
}// </editor-fold>//GEN-END:initComponents

private void SaveButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_SaveButtonActionPerformed
String name , lname , id , salary , brcode ,diploma , role ;
name = NameField.getText();
lname = LastNameField.getText();
id = IdField.getText();
salary = SalaryField.getText();
brcode = BranchField.getText();
diploma = DiplomaField.getText();
role = RoleBox.getSelectedItem().toString();

try{
pst= conn.prepareStatement("insert into
worker(wrk_AT,wrk_name,wrk_lname,wrk_salary,wrk_br_code)values(?,?,?,?,?)");
pst.setString(1,id);
pst.setString(2,name);
pst.setString(3,lname);
pst.setString(4,salary);
pst.setString(5,brcode);
pst.executeUpdate();
pst= conn.prepareStatement("insert into admin (adm_AT,adm_type,adm_diploma)values(?,?,?)");
pst.setString(1,id);
pst.setString(2,role);
pst.setString(3,diploma);
pst.executeUpdate();
pst= conn.prepareStatement("insert into manages (mng_adm_AT,mng_br_code)values(?,?)");
pst.setString(1,id);
pst.setString(2,brcode);
pst.executeUpdate();
JOptionPane.showMessageDialog(null , "Record Added!!!");
jTable2.setModel(new DefaultTableModel(null , new String[]{"Worker AT", "Name","Last Name","Salary","Branch Code","Admin Type","Diploma"}));
table_load();
NameField.setText("");
LastNameField.setText("");
IdField.setText("");
SalaryField.setText("");
BranchField.setText("");
DiplomaField.setText("");
NameField.requestFocus();
}catch(SQLException e){
JOptionPane.showMessageDialog(null , e.getMessage());
}
}//GEN-LAST:event_SaveButtonActionPerformed

private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ExitButtonActionPerformed
System.exit(0);
}//GEN-LAST:event_ExitButtonActionPerformed

private void ClearButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ClearButtonActionPerformed
NameField.setText("");
LastNameField.setText("");
IdField.setText("");
SalaryField.setText("");
BranchField.setText("");
DiplomaField.setText("");
}//GEN-LAST:event_ClearButtonActionPerformed

```

```

private void SearchFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_SearchFieldActionPerformed
    // TODO add your handling code here:
}//GEN-LAST:event_SearchFieldActionPerformed

private void jTable2MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jTable2MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable2.getModel();
    int selectedRowIndex = jTable2.getSelectedRow();
    IdField.setText(model.getValueAt(selectedRowIndex , 0 ).toString());
    NameField.setText(model.getValueAt(selectedRowIndex , 1 ).toString());
    LastNameField.setText(model.getValueAt(selectedRowIndex , 2 ).toString());
    SalaryField.setText(model.getValueAt(selectedRowIndex , 3 ).toString());
    BranchField.setText(model.getValueAt(selectedRowIndex , 4 ).toString());
    DiplomaField.setText(model.getValueAt(selectedRowIndex , 5).toString());
    String combosub = model.getValueAt(selectedRowIndex , 6).toString();
    for (int i = 0 ; i < RoleBox.getItemCount(); i++){
        if(RoleBox.getItemAt(i).toString().equalsIgnoreCase(combosub)){
            RoleBox.setSelectedIndex(i);
        }
    }
    SearchField.setText(model.getValueAt(selectedRowIndex , 0 ).toString());
}//GEN-LAST:event_jTable2MouseClicked

private void UpdateButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_UpdateButton2ActionPerformed
    String name , lname , id , salary , brcode , srid ,diploma ,role;
    name = NameField.getText();
    lname =LastNameField.getText();
    id = IdField.getText();
    salary = SalaryField.getText();
    brcode = BranchField.getText();
    srid = SearchField.getText();
    diploma = DiplomaField.getText();
    role = RoleBox.getSelectedItem().toString();

    try{
        pst= conn.prepareStatement("update worker set wrk_AT=? ,wrk_name=? ,wrk_lname=? ,wrk_salary=? ,wrk_br_code=? WHERE wrk_AT =?");
        pst.setString(1,id);
        pst.setString(2,name);
        pst.setString(3,lname);
        pst.setString(4,salary);
        pst.setString(5,brcode);
        pst.setString(6,srid);
        pst.executeUpdate();
        pst= conn.prepareStatement("update admin set adm_type =? ,adm_diploma = ? WHERE adm_AT =?");
        pst.setString(1,role);
        pst.setString(2,diploma);
        pst.setString(3,srid);
        pst.executeUpdate();
        pst= conn.prepareStatement("update manages set mng_br_code = ? WHERE mng_adm_AT =?");
        pst.setString(1,brcode);
        pst.setString(2,srid);
        pst.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Update!!!");
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Worker AT", "Name","Last Name","Salary","Branch Code","Admin Type","Diploma"}));
        table_load();
        NameField.setText("");
        LastNameField.setText("");
        IdField.setText("");
        SalaryField.setText("");
        BranchField.setText("");
        DiplomaField.setText("");
        NameField.requestFocus();
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_UpdateButton2ActionPerformed

private void jTable4MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jTable4MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable4.getModel();
    int selectedRowIndex = jTable4.getSelectedRow();
    BranchField.setText(model.getValueAt(selectedRowIndex , 0 ).toString());
}//GEN-LAST:event_jTable4MouseClicked

private void SearchFieldKeyReleased(java.awt.event.KeyEvent evt) {//GEN-FIRST:event_SearchFieldKeyReleased
    try{

```

```

        String wrk_AT = SearchField.getText();

        pst = conn.prepareStatement("SELECT wrk_AT ,
wrk_name,wrk_lname,wrk_salary,wrk_br_code,adm_type,adm_diploma FROM worker INNER JOIN manages ON mng_adm_AT = wrk_AT
INNER JOIN admin ON adm_AT = wrk_AT WHERE wrk_AT = ?");
        pst.setString(1 , wrk_AT);
        ResultSet rs = pst.executeQuery();

        if(rs.next() == true)
        {
            String AT = rs.getString(1);
            String name = rs.getString(2);
            String lname = rs.getString(3);
            String salary = rs.getString(4);
            String code = rs.getString(5);
            String type = rs.getString(6);
            String diploma = rs.getString(7);

            NameField.setText(name);
            LastNameField.setText(lname);
            IdField.setText(AT);
            SalaryField.setText(salary);
            BranchField.setText(code);
            DiplomaField.setText(diploma);
            for (int i = 0 ; i < RoleBox.getItemCount(); i++){
                if(RoleBox.getItemAt(i).toString().equalsIgnoreCase(type)){
                    RoleBox.setSelectedIndex(i);
                }
            }
        }else{
            NameField.setText("");
            LastNameField.setText("");
            IdField.setText("");
            SalaryField.setText("");
            BranchField.setText("");
            DiplomaField.setText("");
        }
    }

    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_SearchFieldKeyReleased

private void DeleteButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_DeleteButtonActionPerformed
String name , lname;

name = NameField.getText();
lname = LastNameField.getText();

try{
    cs= conn.prepareCall("{ call delete_worker(?,?) }");
    cs.setString(1,name);
    cs.setString(2,lname);
    cs.executeUpdate();
    JOptionPane.showMessageDialog(null , "Record Deleted!!!");
    jTable2.setModel(new DefaultTableModel(null , new String[]{"Worker AT", "Name","Last Name","Salary","Branch Code","Admin Type","Diploma"}));
    table_load();
    NameField.setText("");
    LastNameField.setText("");
    IdField.setText("");
    SalaryField.setText("");
    BranchField.setText("");
    DiplomaField.setText("");
    SearchField.setText("");
    NameField.requestFocus();
}catch(SQLException e){
    JOptionPane.showMessageDialog(null , e.getMessage());
}
}//GEN-LAST:event_DeleteButtonActionPerformed

private void RoleBoxActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_RoleBoxActionPerformed
// TODO add your handling code here:
}//GEN-LAST:event_RoleBoxActionPerformed

private void BranchFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_BranchFieldActionPerformed
// TODO add your handling code here:
}//GEN-LAST:event_BranchFieldActionPerformed

private void IdFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_IdFieldActionPerformed

```

```

        // TODO add your handling code here:
} //GEN-LAST:event_IdFieldActionPerformed

private void SalaryFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_SalaryFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_SalaryFieldActionPerformed

private void LastNameFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_LastNameFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_LastNameFieldActionPerformed

private void DiplomaFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_DiplomaFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_DiplomaFieldActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(AdminWorker.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(AdminWorker.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(AdminWorker.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(AdminWorker.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
    // </editor-fold>
    // </editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                new AdminWorker().setVisible(true);
            } catch (SQLException ex) {
                Logger.getLogger(AdminWorker.class.getName()).log(Level.SEVERE, null, ex);
            }
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JTextField BranchField;
private javax.swing.JButton ClearButton;
private javax.swing.JButton DeleteButton;
private javax.swing.JTextField DiplomaField;
private javax.swing.JButton ExitButton;
private javax.swing.JTextField IdField;
private javax.swing.JTextField LastNameField;
private javax.swing.JTextField NameField;
private javax.swing.JComboBox<String> RoleBox;
private javax.swing.JTextField SalaryField;
private javax.swing.JButton SaveButton;
private javax.swing.JTextField SearchField;
private javax.swing.JButton UpdateButton2;
private javax.swing.ButtonGroup buttonGroup1;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel16;
private javax.swing.JLabel jLabel17;

```

```

private javax.swing.JLabel jLabel18;
private javax.swing.JLabel jLabel19;
private javax.swing.JPanel jPanel11;
private javax.swing.JPanel jPanel12;
private javax.swing.JPanel jPanel13;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JScrollPane jScrollPane3;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
private javax.swing.JTable jTable3;
private javax.swing.JTable jTable4;
private javax.swing.JToggleButton jToggleButton1;
// End of variables declaration//GEN-END:variables
}

```

Branches

```

package classes;

import static classes.Login.conn;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class Branches extends javax.swing.JFrame {

    /**
     * Creates new form Branches
     */
    public Branches() throws SQLException {
        initComponents();
        table_load();
        table_load2();
    }

    PreparedStatement pst;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT br_code , br_street , br_num , br_city FROM branch ";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){
            String br_code = String.valueOf(rs.getInt("br_code"));
            String br_street= rs.getString("br_street");
            String br_num = String.valueOf(rs.getInt("br_num"));
            String br_city = rs.getString("br_city");

            String tbData[] = {br_code , br_street , br_num , br_city };

            DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
            tblModel.addRow(tbData);
        }
    }

    public void table_load2() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT ph_br_code, ph_number FROM phones ";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){
            String br_code = String.valueOf(rs.getInt("ph_br_code"));
            String ph_number = rs.getString("ph_number");

            String tbData[] = {br_code ,ph_number};

            DefaultTableModel tblModel = (DefaultTableModel)jTable2.getModel();
            tblModel.addRow(tbData);
        }
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        jPanel11 = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        jLabel7 = new javax.swing.JLabel();
        SearchField = new javax.swing.JTextField();
        NumberField = new javax.swing.JTextField();
        CityField = new javax.swing.JTextField();
        PhoneField = new javax.swing.JTextField();
        jPanel13 = new javax.swing.JPanel();
        jLabel8 = new javax.swing.JLabel();
        jLabel9 = new javax.swing.JLabel();
        jLabel10 = new javax.swing.JLabel();
        jLabel11 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jScrollPane2 = new javax.swing.JScrollPane();
        jTable2 = new javax.swing.JTable();
        ClearButton = new javax.swing.JToggleButton();
        ExitButton = new javax.swing.JToggleButton();
        DeleteButton = new javax.swing.JToggleButton();
    }

```

```

SaveButton = new javax.swing.JToggleButton();
UpdateButton = new javax.swing.JToggleButton();
AddPhoneButton = new javax.swing.JToggleButton();

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
jLabel1.setText("Branches");

jPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Add Branch", javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 28))); // NOI18N

jLabel2.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel2.setText("Street Name");

jLabel3.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel3.setText("Phone");

jLabel4.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel4.setText("Street Number");

jLabel5.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel5.setText("City");

StreetField.setToolTipText("");

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(22, 22, 22)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addComponent(jLabel1)
                    .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 47, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel4)
                    .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 119, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 190, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addComponent(StreetField, javax.swing.GroupLayout.PREFERRED_SIZE, 190, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(NumberField)
                    .addComponent(CityField)
                    .addComponent(PhoneField)))
            .addGap(19, 19, 19)
        )
    );
jPanel2Layout.setVerticalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(16, Short.MAX_VALUE)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(StreetField, javax.swing.GroupLayout.PREFERRED_SIZE, 36, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel2))
            .addGap(18, 18, 18)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel4)
                .addComponent(NumberField, javax.swing.GroupLayout.PREFERRED_SIZE, 35, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel5)
                .addComponent(CityField, javax.swing.GroupLayout.PREFERRED_SIZE, 35, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(PhoneField, javax.swing.GroupLayout.PREFERRED_SIZE, 35, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(14, 14, 14)
        )
);

jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Search / Add Phone", javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 24))); // NOI18N

jLabel6.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel6.setText("New Phone");

jLabel7.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel7.setText("Branch Code");

SearchField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchFieldActionPerformed(evt);
    }
});
SearchField.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        SearchFieldKeyReleased(evt);
    }
});
NewPhoneField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        NewPhoneFieldActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
jPanel3.setLayout(jPanel3Layout);
jPanel3Layout.setHorizontalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(15, 15, 15)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 139, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(NewPhoneField, javax.swing.GroupLayout.PREFERRED_SIZE, 194, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 139, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 194, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(24, Short.MAX_VALUE)
        )
    );
jPanel3Layout.setVerticalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(12, 12, 12)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 34, Short.MAX_VALUE)
                .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 34, Short.MAX_VALUE))
            .addGap(18, 18, 18)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 34, Short.MAX_VALUE)
                .addComponent(NewPhoneField, javax.swing.GroupLayout.PREFERRED_SIZE, 34, Short.MAX_VALUE))
            .addGap(18, 18, 18)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel16)
                .addComponent(jLabel17)))
        )
);

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        .addComponent(NewPhoneField, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap());
    });

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
        new String [] {
            "Branch Code", "Street Name", "Street Number", "City"
        }
    ) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false
    };
    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable1);

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
        new String [] {
            "Branch Code", "Phone"
        }
    ) {
    boolean[] canEdit = new boolean [] {
        false, false
    };
    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable2MouseClicked(evt);
    }
});
jScrollPane2.setViewportView(jTable2);

ClearButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
ClearButton.setText("Clear");
ClearButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ClearButtonActionPerformed(evt);
    }
});
ExitButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
ExitButton.setText("Exit");
ExitButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExitButtonActionPerformed(evt);
    }
});
DeleteButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
DeleteButton.setText("Delete");
DeleteButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteButtonActionPerformed(evt);
    }
});
SaveButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
SaveButton.setText("Save");
SaveButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SaveButtonActionPerformed(evt);
    }
});
UpdateButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
UpdateButton.setText("Update");
UpdateButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateButtonActionPerformed(evt);
    }
});
AddPhoneButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
AddPhoneButton.setText("Add Phone");
AddPhoneButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        AddPhoneButtonActionPerformed(evt);
    }
});

javafx.swing.GroupLayout jPanellLayout = new javax.swing.GroupLayout(jPanell);
jPanell.setLayout(jPanellLayout);
jPanellLayout.setHorizontalGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanellLayout.createSequentialGroup()
        .addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanellLayout.createSequentialGroup()
                .addGap(18, 18, 18)
                .addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanellLayout.createSequentialGroup()
                        .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(UpdateButton, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(AddPhoneButton, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
                    )
                    .addGroup(jPanellLayout.createSequentialGroup()
                        .addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addGroup(jPanellLayout.createSequentialGroup()
                                .addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                    .addGroup(jPanellLayout.createSequentialGroup()
                                        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
                                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                        .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
                                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                        .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
                                    )
                                    .addGroup(jPanellLayout.createSequentialGroup()
                                        .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
                                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                        .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
                                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                        .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
                                    )
                                )
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 422, javax.swing.GroupLayout.PREFERRED_SIZE)
                            )
                            .addGroup(jPanellLayout.createSequentialGroup()
                                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                            )
                        )
                    )
                )
            )
        )
    )
);
jPanellLayout.setVerticalGroup(jPanellLayout.createSequentialGroup()
    .addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(UpdateButton, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(AddPhoneButton, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
    )
    .addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
    )
    .addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 422, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
    )
);

```

```

        .addGap(6, 6, 6)
        .addComponent>DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent>ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 116, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(43, 43, 43)
        .addComponent>ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 117, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(7, 7, 7))
    .addContainerGap(12, Short.MAX_VALUE)
);
jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addComponent>jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 69, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
            .addComponent>jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent>jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 252, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
            .addComponent>jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent>jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 126, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent>ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 49, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent>DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 49, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent>SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 49, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent>UpdateButton, javax.swing.GroupLayout.PREFERRED_SIZE, 49, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent>ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 49, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent>AddPhoneButton, javax.swing.GroupLayout.PREFERRED_SIZE, 49, javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGap(12, 12, 12)
);
javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent>jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        ), layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent>jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        )
);
pack();
// </editor-fold>/GEN-END:initComponents

private void NewPhoneFieldActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_NewPhoneFieldActionPerformed
// TODO add your handling code here:
//GEN-LAST:event_NewPhoneFieldActionPerformed

private void SearchFieldActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_SearchFieldActionPerformed
// TODO add your handling code here:
//GEN-LAST:event_SearchFieldActionPerformed

private void jTable1MouseClicked(java.awt.event.MouseEvent evt) //GEN-FIRST:event_jTable1MouseClicked
DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
int selectedRowIndex = jTable1.getSelectedRow();
SearchField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
StreetField.setText(model.getValueAt(selectedRowIndex ,1 ).toString());
NumberField.setText(model.getValueAt(selectedRowIndex ,2 ).toString());
CityField.setText(model.getValueAt(selectedRowIndex ,3 ).toString());
//GEN-LAST:event_jTable1MouseClicked

private void jTable2MouseClicked(java.awt.event.MouseEvent evt) //GEN-FIRST:event_jTable2MouseClicked
DefaultTableModel model = (DefaultTableModel)jTable2.getModel();
int selectedRowIndex = jTable2.getSelectedRow();
SearchField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
NewPhoneField.setText(model.getValueAt(selectedRowIndex ,1).toString());
PhoneField.setText(model.getValueAt(selectedRowIndex ,1).toString());
//GEN-LAST:event_jTable2MouseClicked

private void ClearButtonActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_ClearButtonActionPerformed
SearchField.setText("");
StreetField.setText("");
NumberField.setText("");
CityField.setText("");
NewPhoneField.setText("");
PhoneField.setText("");
//GEN-LAST:event_ClearButtonActionPerformed

private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_ExitButtonActionPerformed
System.exit(0);
//GEN-LAST:event_ExitButtonActionPerformed

private void DeleteButtonActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_DeleteButtonActionPerformed
String srid;

srid = SearchField.getText();

try{
    pst= conn.prepareStatement("delete from branch WHERE br_code =?");
    pst.setString(1,srid);
    pst.executeUpdate();
    JOptionPane.showMessageDialog(null , "Record Deleted!!!");
    jTable1.setModel(new DefaultTableModel(null , new String[]{"Branch Code", "Street Name","Street Number","City"}));
    jTable2.setModel(new DefaultTableModel(null , new String[]{"Branch Code", "Phones"}));
    table_load();
    table_load2();
    SearchField.setText("");
    StreetField.setText("");
    NumberField.setText("");
    CityField.setText("");
    NewPhoneField.setText("");
    PhoneField.setText("");
} catch (SQLException e){
    JOptionPane.showMessageDialog(null , e.getMessage());
}
//GEN-LAST:event_DeleteButtonActionPerformed

private void SaveButtonActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_SaveButtonActionPerformed
String  br_street , br_num , br_city , ph_number;
br_street= StreetField.getText();

```

```

br_num = NumberField.getText();
br_city = CityField.getText();
ph_number = PhoneField.getText();
String br_code = null;
try{
    pst= conn.prepareStatement("insert into branch(br_street,br_num,br_city)values(?, ?, ?)");
    pst.setString(1, br_street);
    pst.setString(2, br_num);
    pst.setString(3,br_city);
    pst.executeUpdate();
    Statement st = conn.createStatement();
    String table_sql = "SELECT br_code FROM branch ";
    ResultSet rs = st.executeQuery(table_sql);
    while(rs.next()){
        br_code = String.valueOf(rs.getInt("br_code"));
    }
}
pst= conn.prepareStatement("insert into phones (ph_br_code,ph_number)values(?,?)");
pst.setString(1,br_code);
pst.setString(2,ph_number);
pst.executeUpdate();

JOptionPane.showMessageDialog(null , "Record Added!!!");
jTable1.setModel(new DefaultTableModel(null , new String[]{"Branch Code", "Street Name","Street Number","City"}));
jTable2.setModel(new DefaultTableModel(null , new String[]{"Branch Code", "Phones"}));
table.load();
table.load2();
SearchField.setText("");
StreetField.setText("");
NumberField.setText("");
CityField.setText("");
NewPhoneField.setText("");
PhoneField.setText("");
}catch(SQLException e){
    JOptionPane.showMessageDialog(null , e.getMessage());
}

}//GEN-LAST:event_SaveButtonActionPerformed

private void UpdateButtonActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_UpdateButtonActionPerformed
{
String br_street , br_num , br_city , ph_number ,sear , search_phone;

br_street= StreetField.getText();
br_num = NumberField.getText();
br_city = CityField.getText();
sear = SearchField.getText();
ph_number = PhoneField.getText();
search_phone = NewPhoneField.getText();

try{
    pst= conn.prepareStatement("update branch set br_street = ? , br_num = ? , br_city = ? WHERE br_code =? ");
    pst.setString(1,br_street);
    pst.setString(2,br_num);
    pst.setString(3,br_city);
    pst.setString(4,sear);
    pst.executeUpdate();
    pst= conn.prepareStatement("update phones set ph_number=? WHERE ph_br_code=? AND ph_number=?");
    pst.setString(1,ph_number);
    pst.setString(2,sear);
    pst.setString(3,search_phone);
    pst.executeUpdate();
    JOptionPane.showMessageDialog(null , "Record Update!!!");
    jTable1.setModel(new DefaultTableModel(null , new String[]{"Branch Code", "Street Name","Street Number","City"}));
    jTable2.setModel(new DefaultTableModel(null , new String[]{"Branch Code", "Phones"}));
    table_load();
    table_load2();
    SearchField.setText("");
    StreetField.setText("");
    NumberField.setText("");
    CityField.setText("");
    NewPhoneField.setText("");
    PhoneField.setText("");
}catch(SQLException e){
    JOptionPane.showMessageDialog(null , e.getMessage());
}

}//GEN-LAST:event_UpdateButtonActionPerformed

private void SearchFieldKeyReleased(java.awt.event.KeyEvent evt) //GEN-FIRST:event_SearchFieldKeyReleased
try{
    String br_code = SearchField.getText();

    pst = conn.prepareStatement("SELECT br_code , br_street , br_num , br_city ,ph_number FROM branch INNER JOIN phones ON br_code = ph_br_code WHERE br_code = ?");
    pst.setString(1 , br_code);
    ResultSet rs = pst.executeQuery();

    pst = conn.prepareStatement("SELECT br_code , br_street , br_num , br_city  FROM branch WHERE br_code = ?");
    pst.setString(1 , br_code);
    ResultSet rsl = pst.executeQuery();

    if(rs.next() == true )
    {
        String code = rs.getString(1);
        String street = rs.getString(2);
        String num = rs.getString(3);
        String city = rs.getString(4);
        String phone = rs.getString(5);
        SearchField.setText(code);
        StreetField.setText(street);
        NumberField.setText(num);
        CityField.setText(city);
        PhoneField.setText(phone);
        NewPhoneField.setText(phone);
    }else if (rsl.next() == true){
        String code = rsl.getString(1);
        String street = rsl.getString(2);
        String num = rsl.getString(3);
        String city = rsl.getString(4);
        SearchField.setText(code);
        StreetField.setText(street);
        NumberField.setText(num);
    }
}
}

```

```

        CityField.setText(city);
        NewPhoneField.setText("");
        PhoneField.setText("");
    }else
    {
        SearchField.setText("");
        StreetField.setText("");
        NumberField.setText("");
        CityField.setText("");
        NewPhoneField.setText("");
        PhoneField.setText("");
    }

    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_SearchfieldKeyReleased

private void AddPhoneButtonActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_AddPhoneButtonActionPerformed
{
    String br_code, ph_number;

    ph_number = NewPhoneField.getText();
    br_code = SearchField.getText();

    try{

        pst= conn.prepareStatement("insert into phones (ph_br_code,ph_number)values(?,?)");
        pst.setString(1,br_code);
        pst.setString(2,ph_number);
        pst.executeUpdate();

        JOptionPane.showMessageDialog(null , "Phone Added!!");

        jTable1.setModel(new DefaultTableModel(null , new String[]{"Branch Code", "Street Name","Street Number","City"}));
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Branch Code", "Phones"}));
        table_load();
        table_load2();
        SearchField.setText("");
        StreetField.setText("");
        NumberField.setText("");
        CityField.setText("");
        NewPhoneField.setText("");
        PhoneField.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_AddPhoneButtonActionPerformed

public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    /*<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(Branches.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(Branches.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(Branches.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(Branches.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
    /*</editor-fold>
    /*</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                new Branches().setVisible(true);
            } catch (SQLException ex) {
                Logger.getLogger(Branches.class.getName()).log(Level.SEVERE, null, ex);
            }
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JToggleButton AddPhoneButton;
private javax.swing.JTextField CityField;
private javax.swing.JToggleButton ClearButton;
private javax.swing.JToggleButton DeleteButton;
private javax.swing.JToggleButton ExitButton;
private javax.swing.JTextField NewPhoneField;
private javax.swing.JTextField NumberField;
private javax.swing.JTextField PhoneField;
private javax.swing.JToggleButton SaveButton;
private javax.swing.JTextField SearchField;
private javax.swing.JTextField StreetField;
private javax.swing.JToggleButton UpdateButton;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
// End of variables declaration//GEN-END:variables

private boolean notNull(ResultSet rs1) {
    throw new UnsupportedOperationException("Not supported yet."); // Generated from nbfs://nbhost/SystemFileSystem/Templates/Classes/Code/GeneratedMethodBody
}
}

```

}

BranchInfo

```
package classes;

import java.sql.*;
import javax.swing.table.DefaultTableModel;
import static classes.Login.*;
import static classes.Menu.menu;

public class BranchInfo extends javax.swing.JFrame {

    private DefaultTableModel tmodel1;
    private DefaultTableModel tmodel2;

    public BranchInfo() {
        initComponents();
    }

    private int branch_info()
    {
        try{
            //create statement object
            CallableStatement stmt = conn.prepareCall("{call branch_info()}");

            //execute procedure
            stmt.execute();

            //process the results
            ResultSet rs = stmt.getResultSet();
            if(rs == null)
            {
                return -1;
            }
            ResultSetMetaData metaData = rs.getMetaData();
            int columnCount = metaData.getColumnCount();

            //prosthetw tis sthles tou sql pianaka sto TableModel mono gia tin prwti klisi tou
procedure
            if(tmodel1.getColumnCount() == 0)
            {
                tmodel1.addColumn("Branch code");
                tmodel1.addColumn("Street");
                tmodel1.addColumn("Number");
                tmodel1.addColumn("City");
                tmodel1.addColumn("Admin name");
                tmodel1.addColumn("Admin last name");
                tmodel1.addColumn("Total of reservations");
                tmodel1.addColumn("Income");
            }

            //prosthetw tis grammes tou pinaka
            Object[] row;
            while (rs.next())
            {
                row = new Object[columnCount];
                for (int i = 1; i <= columnCount; i++)
                {
                    row[i - 1] = rs.getObject(i);
                }
                tmodel1.addRow(row);
            }

            while (stmt.getMoreResults())
            {
                rs = stmt.getResultSet();
                while (rs.next())
                {
                    row = new Object[columnCount];

```

```

        for (int i = 1; i <= columnCount; i++)
        {
            row[i - 1] = rs.getObject(i);
        }
        tmodel1.addRow(row);
    }
}

rs.close();
stmt.close();

return 0;
}
catch (SQLException e)
{
    e.printStackTrace();
    return 1;
}
}

private int branch_employees()
{
try{
    Statement stmt = conn.createStatement();

    ResultSet rs = stmt.executeQuery("SELECT br_code,wrk_name,wrk_lname,wrk_salary,(SELECT
SUM(wrk_salary) from worker WHERE wrk_br_code=br_code) AS 'Total salaries' FROM worker INNER JOIN
branch ON br_code=wrk_br_code;");

    if(rs == null)
    {
        return -1;
    }
    ResultSetMetaData metaData = rs.getMetaData();
    int columnCount = metaData.getColumnCount();

    //prosthetw tis sthles tou sql pianaka sto TableModel mono gia tin prwti klisi tou
procedure
    if(tmodel2.getColumnCount() == 0)
    {
        tmodel2.addColumn("Branch code");
        tmodel2.addColumn("Worker name");
        tmodel2.addColumn("Worker last name");
        tmodel2.addColumn("Worker salary");
        tmodel2.addColumn("Total branch salaries");
    }

    //prosthetw tis grammes tou pinaka
    Object[] row;
    while (rs.next())
    {
        row = new Object[columnCount];
        for (int i = 1; i <= columnCount; i++)
        {
            row[i - 1] = rs.getObject(i);
        }
        tmodel2.addRow(row);
    }

    //close the resources
    rs.close();
    stmt.close();

    return 0; //an den yparxei exception return 0
}
catch (SQLException e)
{
    e.printStackTrace();
    return 1; //an yparxei exception return 1
}
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

```

```

jButton1 = new javax.swing.JButton();
jScrollPane1 = new javax.swing.JScrollPane();
jTable1 = new javax.swing.JTable();
jButton2 = new javax.swing.JButton();
jButton3 = new javax.swing.JButton();
jButton4 = new javax.swing.JButton();
jScrollPane2 = new javax.swing.JScrollPane();
jTable2 = new javax.swing.JTable();
backButton = new javax.swing.JButton();

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jButton1.setFont(new java.awt.Font("Segoe UI", 1, 18)); // NOI18N
jButton1.setText("Get branch info");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {},
        {},
        {},
        {}
    },
    new String [] {

    });
jScrollPane1.setViewportView(jTable1);

jButton2.setFont(new java.awt.Font("Segoe UI", 1, 18)); // NOI18N
jButton2.setText("Get branch employees");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

jButton3.setFont(new java.awt.Font("Segoe UI", 1, 18)); // NOI18N
jButton3.setText("Clear");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jButton4.setFont(new java.awt.Font("Segoe UI", 1, 18)); // NOI18N
jButton4.setText("Clear");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {},
        {},
        {},
        {}
    },
    new String [] {

    });
jScrollPane2.setViewportView(jTable2);

backButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
backButton.setText("Back");
backButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {

```

```

        backButtonActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jButton2, javax.swing.GroupLayout.Alignment.TRAILING,
                javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(jButton3, javax.swing.GroupLayout.Alignment.TRAILING,
                javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(jButton1, javax.swing.GroupLayout.Alignment.TRAILING,
                javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(jButton4, javax.swing.GroupLayout.DEFAULT_SIZE,
                javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jScrollPane2)
            .addGroup(layout.createSequentialGroup()
                .addGap(0, 0, Short.MAX_VALUE)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 895,
                    javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(backButton, javax.swing.GroupLayout.PREFERRED_SIZE, 123,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap()))
    );
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
            .addGroup(layout.createSequentialGroup()
                .addGap(16, 16, 16)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 309,
                    javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGroup(javax.swing.GroupLayout.Alignment.LEADING, layout.createSequentialGroup()
                    .addGap(81, 81, 81)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 71,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(39, 39, 39)
                    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 71,
                        javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addGap(63, 63, 63)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(layout.createSequentialGroup()
                            .addGap(81, 81, 81)
                            .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 71,
                                javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 71,
                                javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 309,
                            javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGroup(layout.createSequentialGroup()
                            .addGap(21, Short.MAX_VALUE)
                            .addComponent(backButton, javax.swing.GroupLayout.PREFERRED_SIZE, 45,
                                javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addContainerGap())))
                .pack();
    } // </editor-fold>//GEN-END:initComponents

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton1ActionPerformed
    // TODO add your handling code here:
    tmodell = new DefaultTableModel();

    if(branch_info()==0)
    {

```

```

        jTable1.setModel(tmodel1);
    }
}//GEN-LAST:event_jButton1ActionPerformed

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton2ActionPerformed
// TODO add your handling code here:
tmodel2 = new DefaultTableModel();

if(branch_employees()==0)
{
    jTable2.setModel(tmodel2);
}
}//GEN-LAST:event_jButton2ActionPerformed

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton3ActionPerformed
// TODO add your handling code here:
DefaultTableModel model = new DefaultTableModel();
jTable1.setModel(model);
}//GEN-LAST:event_jButton3ActionPerformed

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton4ActionPerformed
// TODO add your handling code here:
DefaultTableModel model = new DefaultTableModel();
jTable2.setModel(model);
}//GEN-LAST:event_jButton4ActionPerformed

private void backButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_backButtonActionPerformed
// TODO add your handling code here:
this.dispose();
menu.requestFocus();
}//GEN-LAST:event_backButtonActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
/* Set the Nimbus look and feel */
/*<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
/* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
 * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
 */
try {
    for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
        if ("Nimbus".equals(info.getName())) {
            javax.swing.UIManager.setLookAndFeel(info.getClassName());
            break;
        }
    }
} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(BranchInfo.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(BranchInfo.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(BranchInfo.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(BranchInfo.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
}

//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {

```

```

        new BranchInfo().setVisible(true);
    }
});
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton backButton;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JButton jButton4;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
// End of variables declaration//GEN-END:variables
}

```

Destination

```

package classes;

import static classes.Login.conn;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class Destination extends javax.swing.JFrame {

    public Destination() throws SQLException {
        initComponents();
        table_load();
        table_load2();
    }

    PreparedStatement pst;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT dst_id , dst_name ,dst_dscr
,dst_rtype,dst_language,dst_location FROM destination";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String dst_id = String.valueOf(rs.getInt("dst_id"));
            String dst_name= rs.getString("dst_name");
            String dst_dscr = rs.getString("dst_dscr");
            String dst_rtype =  rs.getString("dst_rtype");
            String dst_language =  rs.getString("dst_language");
            String dst_location=  String.valueOf(rs.getInt("dst_location"));

            String tbData[] = {dst_id , dst_name, dst_dscr , dst_rtype
,dst_language,dst_location};

            DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
            tblModel.addRow(tbData);
        }
    }
}

```

```

        }

    }

    public void table_load2() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT dst_id , dst_name FROM destination";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String dst_id= String.valueOf(rs.getInt("dst_id"));
            String dst_name= rs.getString("dst_name");

            String tbData[] = {dst_id , dst_name };

            DefaultTableModel tblModel = (DefaultTableModel)jTable2.getModel();
            tblModel.addRow(tbData);
        }
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jPanel3 = new javax.swing.JPanel();
        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        jLabel7 = new javax.swing.JLabel();
        DescriptionField = new javax.swing.JTextField();
        jLabel8 = new javax.swing.JLabel();
        LanguageField = new javax.swing.JTextField();
        NameField = new javax.swing.JTextField();
        LocationField = new javax.swing.JTextField();
        TypeBox = new javax.swing.JComboBox();
        jPanel11 = new javax.swing.JPanel();
        jLabel10 = new javax.swing.JLabel();
        SearchField = new javax.swing.JTextField();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jScrollPane2 = new javax.swing.JScrollPane();
        jTable2 = new javax.swing.JTable();
        ExitButton = new javax.swing.JButton();
        ClearButton = new javax.swing.JButton();
        DeleteButton1 = new javax.swing.JButton();
        UpdateButton2 = new javax.swing.JButton();
        SaveButton = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

        jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
        jLabel1.setText("Destination");

        jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Add Destination", javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 24))); // NOI18N

        jLabel4.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
        jLabel4.setText("Name");

        jLabel5.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
        jLabel5.setText("Description");
    }
}

```

```

jLabel6.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel6.setText("Type");

jLabel7.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel7.setText("Language");

DiscriptionField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DiscriptionFieldActionPerformed(evt);
    }
});

jLabel8.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel8.setText("Location");

LanguageField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        LanguageFieldActionPerformed(evt);
    }
});

LocationField.setEditable(false);
LocationField.setText("0");
LocationField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        LocationFieldActionPerformed(evt);
    }
});

TypeBox.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "LOCAL",
"ABROAD" }));
TypeBox.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        TypeBoxActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
jPanel3.setLayout(jPanel3Layout);
jPanel3Layout.setHorizontalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel3Layout.createSequentialGroup()
    .addGap(16, 16, 16)
    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel14, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel16, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 88,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGapGap(43, 43, 43)

    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(LocationField)
        .addComponent(NameField)
        .addComponent(DiscriptionField)
        .addComponent(LanguageField)
        .addComponent(TypeBox, 0, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    .addGapGap(19, 19, 19)))

```

```

);
jPanel3Layout.setVerticalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(22, 22, 22)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel4)
            .addComponent(NameField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel5)
            .addComponent(DiscriptionField, javax.swing.GroupLayout.DEFAULT_SIZE,
34, Short.MAX_VALUE))
            .addGap(17, 17, 17)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel6)
            .addComponent(TypeBox, javax.swing.GroupLayout.DEFAULT_SIZE, 33,
Short.MAX_VALUE))
            .addGap(18, 18, 18)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel7)
            .addComponent(LanguageField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
            .addGap(19, 19, 19)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel8)
            .addComponent(LocationField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
            .addGap(16, 16, 16))
);

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Search",
javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 22)));
// NOI18N

jLabel10.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel10.setText("Destination ID");

SearchField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchFieldActionPerformed(evt);
    }
});
SearchField.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        SearchFieldKeyReleased(evt);
    }
});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(14, 14, 14)
            .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 134,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
        )
);

```

```

        .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 285,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(29, 29, 29))
);
jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel10)
        .addContainerGap(24, Short.MAX_VALUE))
);

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
        new String [] {
            "Destination ID", "Name", "Discription", "Type", "Language", "Location"
        }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
));
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable1);

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
        new String [] {
            "Destination ID", "Name"
        }
) {
    boolean[] canEdit = new boolean [] {
        false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
));
jTable2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable2MouseClicked(evt);
    }
});
jScrollPane2.setViewportView(jTable2);

ExitButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
ExitButton.setText("Exit");
ExitButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {

```

```

        ExitButtonActionPerformed(evt);
    }
});

ClearButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
ClearButton.setText("Clear");
ClearButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ClearButtonActionPerformed(evt);
    }
});

DeleteButton1.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
DeleteButton1.setText("Delete");
DeleteButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteButton1ActionPerformed(evt);
    }
});

UpdateButton2.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
UpdateButton2.setText("Update");
UpdateButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateButton2ActionPerformed(evt);
    }
});

SaveButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
SaveButton.setText("Save");
SaveButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SaveButtonActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 189,
        javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jPanel3, javax.swing.GroupLayout.DEFAULT_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addGroup(layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addComponent(jPanel11, javax.swing.GroupLayout.DEFAULT_SIZE,
                javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jLabel11, javax.swing.GroupLayout.PREFERRED_SIZE, 189,
                javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jPanel33, javax.swing.GroupLayout.DEFAULT_SIZE,
                javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addGroup(layout.createSequentialGroup()
                .addGap(18, 18, 18)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
                964, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE,
                171, javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGap(18, 18, 18)
        .addComponent(SaveButton, javax.swing.GroupLayout.DEFAULT_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    )
);

.layout.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

```

```

        .addComponent(UpdateButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 147, javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(jaxx.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(DeleteButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 148, javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(jaxx.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE,
142, javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(jaxx.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE,
143, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(20, 20, 20)))
);

layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel1)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
            .addGap(33, 33, 33)
            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
298, javax.swing.GroupLayout.PREFERRED_SIZE)))
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
            .addGap(31, 31, 31)
            .addComponent(jScrollPane2,
javax.swing.GroupLayout.PREFERRED_SIZE, 100, javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(layout.createSequentialGroup()
            .addGap(43, 43, 43)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(ClearButton,
javax.swing.GroupLayout.PREFERRED_SIZE, 75, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(ExitButton,
javax.swing.GroupLayout.PREFERRED_SIZE, 75, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(DeleteButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 75, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(UpdateButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 75, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(SaveButton,
javax.swing.GroupLayout.PREFERRED_SIZE, 78, javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addContainerGap(24, Short.MAX_VALUE))
);

pack();
}// </editor-fold>//GEN-END:initComponents

```

```

private void DiscriptionFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_DiscriptionFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_DiscriptionFieldActionPerformed

private void LanguageFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_LanguageFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_LanguageFieldActionPerformed

private void LocationFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_LocationFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_LocationFieldActionPerformed

private void TypeBoxActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_TypeBoxActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_TypeBoxActionPerformed

private void SearchFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_SearchFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_SearchFieldActionPerformed

private void SearchFieldKeyReleased(java.awt.event.KeyEvent evt) { //GEN-FIRST:event_SearchFieldKeyReleased
try{
    String wrk_AT = SearchField.getText();

    pst = conn.prepareStatement("Select dst_name ,dst_dscr
,dst_rtype,dst_language,dst_location FROM destination WHERE dst_id = ?");
    pst.setString(1 , wrk_AT);
    ResultSet rs = pst.executeQuery();

    if(rs.next() == true)
    {

        String dst_name = rs.getString(1);
        String dst_dscr = rs.getString(2);
        String dst_rtype= rs.getString(3);
        String dst_language = rs.getString(4);
        String dst_location = rs.getString(5);

        NameField.setText(dst_name);
        DiscriptionField.setText( dst_dscr);
        LanguageField.setText(dst_language);
        LocationField.setText(dst_location);

        for (int i = 0 ; i < TypeBox.getItemCount(); i++){
            if(TypeBox.getItemAt(i).equalsIgnoreCase( dst_rtype)){
                TypeBox.setSelectedIndex(i);
            }
        }
    }
    else{

        NameField.setText("");
        DiscriptionField.setText("");
        LanguageField.setText("");
        LocationField.setText("0");
        NameField.requestFocus();
    }
}

```

```

        }catch(SQLException e){
            JOptionPane.showMessageDialog(null , e.getMessage());
        }
    }//GEN-LAST:event_SearchFieldKeyReleased

    private void jTable2MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jTable2MouseClicked
        DefaultTableModel model = (DefaultTableModel)jTable2.getModel();
        int selectedRowIndex = jTable2.getSelectedRow();
        LocationField.setText(model.getValueAt(selectedRowIndex , 0 ).toString());

    }//GEN-LAST:event_jTable2MouseClicked

    private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jTable1MouseClicked
        DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
        int selectedRowIndex = jTable1.getSelectedRow();
        SearchField.setText(model.getValueAt(selectedRowIndex , 0 ).toString());
        NameField.setText(model.getValueAt(selectedRowIndex , 1 ).toString());
        DescriptionField.setText(model.getValueAt(selectedRowIndex , 2 ).toString());
        String type = model.getValueAt(selectedRowIndex , 3 ).toString();
        LanguageField.setText(model.getValueAt(selectedRowIndex , 4 ).toString());
        String dst_location = model.getValueAt(selectedRowIndex , 5 ).toString();

        if ("0".equals(dst_location) ){
            LocationField.setText("0");
        }else if (!"0".equals(dst_location)){
            LocationField.setText(dst_location);
        }

        for (int i = 0 ; i < TypeBox.getItemCount(); i++){
            if(TypeBox.getItemAt(i).toString().equalsIgnoreCase( type)){
                TypeBox.setSelectedIndex(i);
            }
        }
    }//GEN-LAST:event_jTable1MouseClicked

    private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ExitButtonActionPerformed
        System.exit(0);
    }//GEN-LAST:event_ExitButtonActionPerformed

    private void ClearButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ClearButtonActionPerformed
        NameField.setText("");
        DescriptionField.setText("");
        LanguageField.setText("");
        LocationField.setText("");
        SearchField.setText("0");
    }//GEN-LAST:event_ClearButtonActionPerformed

    private void DeleteButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_DeleteButton1ActionPerformed
        String search1 ;
        search1 = SearchField.getText();

        try{
            pst= conn.prepareStatement("delete from destination WHERE dst_id =? ");
            pst.setString(1, search1);
            pst.executeUpdate();
        }

```

```

        JOptionPane.showMessageDialog(null , "Record Deleted!!!");
        jTable1.setModel(new DefaultTableModel(null , new String[]{"Destination
ID","Name","Description","Type","Language","Location"}));
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Destination
ID","Name"}));
        table_load();
        table_load2();
        NameField.setText("");
        DescriptionField.setText("");
        LanguageField.setText("");
        LocationField.setText("0");
        SearchField.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
} //GEN-LAST:event_DeleteButton1ActionPerformed

private void UpdateButton2ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-
FIRST:event_UpdateButton2ActionPerformed

    String dst_name ,dst_dscr ,dst_rtype ,dst_language,dst_location ,search1;

    dst_name =NameField.getText();
    dst_dscr = DescriptionField.getText();
    dst_rtype =
    TypeBox.getSelectedItem().toString();TypeBox.getSelectedItem().toString();
    dst_language= LanguageField.getText();
    dst_location = LocationField.getText();
    search1 = SearchField.getText();

    try{

        if ("0".equals(dst_location) ){
            pst= conn.prepareStatement("update destination set dst_name=? , dst_dscr =?,
dst_rtype = ? , dst_language = ? WHERE dst_id =?");
            pst.setString(1,dst_name);
            pst.setString(2,dst_dscr);
            pst.setString(3,dst_rtype);
            pst.setString(4,dst_language);
            pst.setString(5,search1);
            pst.executeUpdate();
        }else if (!"0".equals(dst_location)){
            pst= conn.prepareStatement("update destination set dst_name=? , dst_dscr =?,
dst_rtype = ? , dst_language = ? ,dst_location = ? WHERE dst_id =?");
            pst.setString(1,dst_name);
            pst.setString(2,dst_dscr);
            pst.setString(3,dst_rtype);
            pst.setString(4,dst_language);
            pst.setString(5, dst_location);
            pst.setString(6,search1);
            pst.executeUpdate();
        }

        JOptionPane.showMessageDialog(null , "Record Updated!!!");
        jTable1.setModel(new DefaultTableModel(null , new String[]{"Destination
ID","Name","Description","Type","Language","Location"}));
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Destination
ID","Name"}));
        table_load();
        table_load2();
        NameField.setText("");
        DescriptionField.setText("");
        LanguageField.setText("");
        LocationField.setText("0");
        SearchField.setText("");
    }catch(SQLException e){

```

```

        JOptionPane.showMessageDialog(null , e.getMessage());
    }
} //GEN-LAST:event_UpdateButton2ActionPerformed

private void SaveButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_SaveButtonActionPerformed

    String dst_name ,dst_dscr ,dst_rtype ,dst_language,dst_location ;

    dst_name =NameField.getText();
    dst_dscr = DiscriptionField.getText();
    dst_rtype =
    TypeBox.getSelectedItem().toString();TypeBox.getSelectedItem().toString();
    dst_language= LanguageField.getText();
    dst_location = LocationField.getText();

    try{

        if ("0".equals(dst_location) ){
            pst= conn.prepareCall("insert into destination
(dst_name,dst_dscr,dst_rtype,dst_language )values(?, ?, ?, ?)");
            pst.setString(1,dst_name);
            pst.setString(2,dst_dscr);
            pst.setString(3,dst_rtype);
            pst.setString(4,dst_language);
            pst.executeUpdate();
        }else if (!"0".equals(dst_location)){
            pst= conn.prepareCall("insert into destination
(dst_name,dst_dscr,dst_rtype,dst_language ,dst_location)values(?, ?, ?, ?, ?)");
            pst.setString(1,dst_name);
            pst.setString(2,dst_dscr);
            pst.setString(3,dst_rtype);
            pst.setString(4,dst_language);
            pst.setString(5,dst_location);
            pst.executeUpdate();
        }
        JOptionPane.showMessageDialog(null , "Record Addeddd!!!");
        jTable1.setModel(new DefaultTableModel(null , new String[]{"Destination
ID","Name","Discription","Type","Language","Location"}));
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Destination
ID","Name"}));
        table_load();
        table_load2();
        NameField.setText("");
        DiscriptionField.setText("");
        LanguageField.setText("");
        LocationField.setText("0");
        SearchField.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
} //GEN-LAST:event_SaveButtonActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code
(optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look
and feel.
     * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
}

```

```

        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Destination.class.getName()).log(java.util.logging.Level
.SEVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Destination.class.getName()).log(java.util.logging.Level
.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Destination.class.getName()).log(java.util.logging.Level
.SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Destination.class.getName()).log(java.util.logging.Level
.SEVERE, null, ex);
        }

//</editor-fold>
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {

        try {
            new Destination().setVisible(true);
        } catch (SQLException ex) {
            Logger.getLogger(Destination.class.getName()).log(Level.SEVERE, null,
ex);
        }
    }
});

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton ClearButton;
private javax.swing.JButton DeleteButton1;
private javax.swing.JTextField DiscriptionField;
private javax.swing.JButton ExitButton;
private javax.swing.JTextField LanguageField;
private javax.swing.JTextField LocationField;
private javax.swing.JTextField NameField;
private javax.swing.JButton SaveButton;
private javax.swing.JTextField SearchField;
private javax.swing.JComboBox<String> TypeBox;
private javax.swing.JButton UpdateButton2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel3;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;

```

```

    private javax.swing.JTable jTable1;
    private javax.swing.JTable jTable2;
    // End of variables declaration//GEN-END:variables
}

```

DriverWorker

```

package classes;

import static classes.Login.*;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class DriverWorker extends javax.swing.JFrame {

    public DriverWorker() throws SQLException {
        initComponents();
        table_load();
        table_load_Branches();
    }

    PreparedStatement pst;
    CallableStatement cs;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT wrk_AT , wrk_name,wrk_lname,wrk_salary,wrk_br_code,drv_license, drv_route
,drv_experience FROM worker INNER JOIN driver ON drv_AT = wrk_AT ";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String at = rs.getString("wrk_AT");
            String name = rs.getString("wrk_name");
            String laname = rs.getString("wrk_lname");
            String salary = String.valueOf(rs.getFloat("wrk_salary"));
            String br_code = String.valueOf(rs.getInt("wrk_br_code"));
            String license = rs.getString("drv_license");
            String route = rs.getString("drv_route");
            String experience = String.valueOf(rs.getInt("drv_experience"));

            String tbData[] = {at , name, laname , salary , br_code , license, route ,experience };

            DefaultTableModel tblModel = (DefaultTableModel)jTable2.getModel();
            tblModel.addRow(tbData);
        }
    }

    public void table_load_Branches() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT br_code FROM branch";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String br = rs.getString("br_code");
            String tbData[] = {br};
            DefaultTableModel tblModel = (DefaultTableModel)jTable4.getModel();
            tblModel.addRow(tbData);
        }
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        jLabel2 = new javax.swing.JLabel();
        buttonGroup1 = new javax.swing.ButtonGroup();
        jToggleButton1 = new javax.swing.JToggleButton();
        jTable1 = new javax.swing.JTable();
        jScrollPane2 = new javax.swing.JScrollPane();
        jTable3 = new javax.swing.JTable();

```

```

jScrollPane4 = new javax.swing.JScrollPane();
jTable5 = new javax.swing.JTable();
jScrollPane5 = new javax.swing.JScrollPane();
jTable6 = new javax.swing.JTable();
jScrollPane6 = new javax.swing.JScrollPane();
jTable7 = new javax.swing.JTable();
jScrollPane7 = new javax.swing.JScrollPane();
jTable8 = new javax.swing.JTable();
jPanel12 = new javax.swing.JPanel();
jLabel1 = new javax.swing.JLabel();
jPanel3 = new javax.swing.JPanel();
jLabel4 = new javax.swing.JLabel();
jLabel5 = new javax.swing.JLabel();
jLabel6 = new javax.swing.JLabel();
jLabel7 = new javax.swing.JLabel();
LastNameField = new javax.swing.JTextField();
jLabel8 = new javax.swing.JLabel();
SalaryField = new javax.swing.JTextField();
NameField = new javax.swing.JTextField();
IdField = new javax.swing.JTextField();
BranchField = new javax.swing.JTextField();
jLabel9 = new javax.swing.JLabel();
jLabel11 = new javax.swing.JLabel();
jLabel12 = new javax.swing.JLabel();
ExperienceField = new javax.swing.JTextField();
LicenseBox = new javax.swing.JComboBox<>();
RouteBox = new javax.swing.JComboBox<>();
SaveButton = new javax.swing.JButton();
ExitButton = new javax.swing.JButton();
ClearButton = new javax.swing.JButton();
jPanel11 = new javax.swing.JPanel();
jLabel10 = new javax.swing.JLabel();
SearchField = new javax.swing.JTextField();
DeleteButton = new javax.swing.JButton();
UpdateButton2 = new javax.swing.JButton();
jScrollPane1 = new javax.swing.JScrollPane();
jTable2 = new javax.swing.JTable();
jScrollPane3 = new javax.swing.JScrollPane();
jTable4 = new javax.swing.JTable();

jLabel2.setText("jLabel2");

jToggleButton1.setText("jToggleButton1");

jTable1.setModel(new javax.swing.table.DefaultTableModel(
  new Object [][] {
    {null, null, null, null},
    {null, null, null, null},
    {null, null, null, null},
    {null, null, null, null}
  },
  new String [] {
    "Title 1", "Title 2", "Title 3", "Title 4"
  }
));

jTable3.setModel(new javax.swing.table.DefaultTableModel(
  new Object [][] {
    {null, null, null, null},
    {null, null, null, null},
    {null, null, null, null},
    {null, null, null, null}
  },
  new String [] {
    "Title 1", "Title 2", "Title 3", "Title 4"
  }
));
jScrollPane2.setViewportView(jTable3);

jTable5.setModel(new javax.swing.table.DefaultTableModel(
  new Object [][] {
    {null, null, null, null},
    {null, null, null, null},
    {null, null, null, null},
    {null, null, null, null}
  },
  new String [] {
    "Title 1", "Title 2", "Title 3", "Title 4"
  }
));
jScrollPane4.setViewportView(jTable5);

jTable6.setModel(new javax.swing.table.DefaultTableModel(
  new Object [][] {
    {null, null, null, null}
  },
  new String []
)
);

```

```

        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
);
jScrollPane5.setViewportView(jTable6);

jTable7.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane6.setViewportView(jTable7);

jTable8.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane7.setViewportView(jTable8);

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
jLabel1.setText("Driver Worker");

jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Add Worker",
    javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT_POSITION, new
    java.awt.Font("Segoe UI", 0, 24))); // NOI18N

jLabel4.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel4.setText("Name");

jLabel5.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel5.setText("Last Name");

jLabel6.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel6.setText("ID Number");

jLabel7.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel7.setText("Salary");

LastNameField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        LastNameFieldActionPerformed(evt);
    }
});

jLabel8.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel8.setText("Branch Code");

SalaryField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SalaryFieldActionPerformed(evt);
    }
});

IdField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        IdFieldActionPerformed(evt);
    }
});

BranchField.setEditable(false);
BranchField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        BranchFieldActionPerformed(evt);
    }
});

```

```

jLabel9.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel9.setText("Driver License");

jLabel11.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel11.setText("Route");

jLabel12.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel12.setText("Experience");

ExperienceField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExperienceFieldActionPerformed(evt);
    }
});

LicenseBox.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "A", "B", "C", "D" }));
LicenseBox.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        LicenseBoxActionPerformed(evt);
    }
});

RouteBox.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "LOCAL", "ABROAD" }));
RouteBox.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        RouteBoxActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
jPanel3.setLayout(jPanel3Layout);
jPanel3Layout.setHorizontalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(16, 16, 16)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addGap(16, 16, 16)
                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(jLabel11, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                        .addComponent(jLabel5, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jLabel19, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jLabel18, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jLabel12, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jPanel3Layout.createSequentialGroup().addGap(27, 27, 27).createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                        .addComponent(NameField)
                        .addComponent(LastNameField)
                        .addComponent(IdField)
                        .addComponent(SalaryField)
                        .addComponent(BranchField)
                        .addComponent(LicenseBox, 0, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(RouteBox, javax.swing.GroupLayout.Alignment.LEADING, 0, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jPanel3Layout.createSequentialGroup().addGap(19, 19, 19).createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 75, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE))
                            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                .addComponent(jPanel3Layout.createSequentialGroup().addGap(17, 17, 17).createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                    .addComponent(jLabel14)
                                    .addComponent(NameField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
                                .addComponent(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                    .addComponent(jLabel15)
                                    .addComponent(LastNameField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE)))
                            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jLabel16)
                                .addComponent(IdField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE)))
                            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jLabel18)
                                .addComponent(jLabel17)))
                        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                            .addComponent(jLabel14)
                            .addComponent(jLabel16)
                            .addComponent(jLabel15)
                            .addComponent(jLabel17)
                            .addComponent(jLabel18)))))))
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(22, 22, 22)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addGap(17, 17, 17)
                    .addComponent(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel14)
                        .addComponent(NameField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE)))
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel16)
                        .addComponent(IdField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE)))
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel18)
                        .addComponent(jLabel17)))))))
    );
});
```

```

        .addComponent(SalaryField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel8)
            .addComponent(BranchField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addComponent(jLabel9, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addComponent(LicenseBox))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 17, Short.MAX_VALUE)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(RouteBox, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 27, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel11, javax.swing.GroupLayout.Alignment.TRAILING))
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(ExperienceField, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel12))
        .addContainerGap(17, Short.MAX_VALUE))
    );

SaveButton.setFont(new java.awt.Font("Segoe UI", 0, 27)); // NOI18N
SaveButton.setText("Save");
SaveButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SaveButtonActionPerformed(evt);
    }
});
ExitButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
ExitButton.setText("Exit");
ExitButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExitButtonActionPerformed(evt);
    }
});
ClearButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
ClearButton.setText("Clear");
ClearButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ClearButtonActionPerformed(evt);
    }
});

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Search",
javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT_POSITION, new
java.awt.Font("Segoe UI", 0, 22))); // NOI18N

jLabel10.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel10.setText("ID Number");

SearchField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchFieldActionPerformed(evt);
    }
});
SearchField.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        SearchFieldKeyReleased(evt);
    }
});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(32, 32, 32)
                .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 109,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(26, 26, 26)
                .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 243,
javax.swing.GroupLayout.PREFERRED_SIZE)
            )
        )
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    jPanel1Layout.setVerticalGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addGap(32, 32, 32)
                    .addComponent(jLabel10)
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addGap(26, 26, 26)
                    .addComponent(SearchField)
                )
            )
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );
        jPanel1Layout.setVerticalGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGap(15, 15, 15)
                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                            .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jPanel1Layout.createSequentialGroup()
                                    .addGap(15, 15, 15)
                                    .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                        .addComponent(jLabel10)
                                    )
                                .addContainerGap()
                            )
                        )
                    )
                )
            )
        )
    )
);

```

```

        .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap(20, Short.MAX_VALUE))
    );

DeleteButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
DeleteButton.setText("Delete");
DeleteButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteButtonActionPerformed(evt);
    }
});

UpdateButton2.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
UpdateButton2.setText("Update");
UpdateButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateButton2ActionPerformed(evt);
    }
});

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
    new String [] {
        "Worker AT", "Name", "Last Name", "Salary", "Branch Code", "License", "Route", "Experience"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable2MouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable2);

jTable4.setBorder(javax.swing.BorderFactory.createTitledBorder(""));

jTable4.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
    new String [] {
        "Branches"
    }
) {
    boolean[] canEdit = new boolean [] {
        false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable4.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable4MouseClicked(evt);
    }
});
jScrollPane3.setViewportView(jTable4);

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(jPanel12Layout, javax.swing.GroupLayout.PREFERRED_SIZE, 896, javax.swing.GroupLayout.PREFERRED_SIZE)
        )
);
jPanel2Layout.setVerticalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(jPanel12Layout, javax.swing.GroupLayout.PREFERRED_SIZE, 896, javax.swing.GroupLayout.PREFERRED_SIZE)
        )
);

```

```

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 184,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 18, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 178,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 18, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 178,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 18, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 181,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 18, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 177,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 62,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 926,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 18, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 450,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 450,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGap(9, 9, 9)))
            .addGap(9, 9, 9))
        );
    });

    jPanel2Layout.setVerticalGroup(
        jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 18, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 450,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 450,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addGap(9, 9, 9)
                    .addGroup(jPanel2Layout.createSequentialGroup()
                        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGap(9, 9, 9)))
            .addGap(9, 9, 9))
        );
    );

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE,
Short.MAX_VALUE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE,
Short.MAX_VALUE))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(9, 9, 9)
                        .addGroup(layout.createSequentialGroup()
                            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                    .addGap(9, 9, 9))
                .addGap(9, 9, 9))
            .addGap(9, 9, 9))
        );
    );

    pack();
} // </editor-fold> //GEN-END:initComponents

private void jTable4MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable4MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable4.getModel();
    int selectedRowIndex = jTable4.getSelectedRow();
    BranchField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
} //GEN-LAST:event_jTable4MouseClicked

private void jTable2MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable2MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable2.getModel();
    int selectedRowIndex = jTable2.getSelectedRow();
}

```

```

IdField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
NameField.setText(model.getValueAt(selectedRowIndex ,1 ).toString());
LastNameField.setText(model.getValueAt(selectedRowIndex ,2 ).toString());
SalaryField.setText(model.getValueAt(selectedRowIndex ,3 ).toString());
BranchField.setText(model.getValueAt(selectedRowIndex ,4 ).toString());
String Licens= model.getValueAt(selectedRowIndex ,5 ).toString();
String Route= model.getValueAt(selectedRowIndex ,6 ).toString();
ExperienceField.setText(model.getValueAt(selectedRowIndex ,7 ).toString());
SearchField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
for (int i = 0 ; i < LicenseBox.getItemCount(); i++){
    if(LicenseBox.getSelectedItem().toString().equalsIgnoreCase(Licens)){
        LicenseBox.setSelectedIndex(i);
    }
}
for (int i = 0 ; i < RouteBox.getItemCount(); i++){
    if(RouteBox.getSelectedItem().toString().equalsIgnoreCase(Route)){
        RouteBox.setSelectedIndex(i);
    }
}
} //GEN-LAST:event_jTable2MouseClicked

private void UpdateButton2ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_UpdateButton2ActionPerformed
    String name , lname , id , salary , brcode ,srid ,license,route, experience;
    name = NameField.getText();
    lname = LastNameField.getText();
    id = IdField.getText();
    salary = SalaryField.getText();
    brcode = BranchField.getText();
    srid = SearchField.getText();
    license = LicenseBox.getSelectedItem().toString();
    route = RouteBox.getSelectedItem().toString();
    experience = ExperienceField.getText();

    try{
        pst= conn.prepareStatement("update worker set wrk_AT=? ,wrk_name=? ,wrk_lname=? ,wrk_salary=? ,wrk_br_code=? WHERE wrk_AT=?");
        SQLWarning warning = pst.getWarnings();
        pst.setString(1,id);
        pst.setString(2,name);
        pst.setString(3,lname);
        pst.setString(4,salary);
        pst.setString(5,brcode);
        pst.setString(6,srid);
        pst.executeUpdate();
        pst= conn.prepareStatement("update driver set drv_license =? ,drv_route= ? ,drv_experience=? WHERE drv_AT=?");
        pst.setString(1,license);
        pst.setString(2,route);
        pst.setString(3,experience);
        pst.setString(4,srid);
        pst.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Update!!!");
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Worker AT", "Name", "Last Name", "Salary", "Branch Code", "Licensee", "Route" , "Experience"}));
        table_load();
        NameField.setText("");
        LastNameField.setText("");
        IdField.setText("");
        SalaryField.setText("");
        BranchField.setText("");
        ExperienceField.setText("");
        NameField.requestFocus();
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
} //GEN-LAST:event_UpdateButton2ActionPerformed

private void DeleteButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_DeleteButtonActionPerformed
    String name , lname;
    name = NameField.getText();
    lname = LastNameField.getText();

    try{
        cs= conn.prepareCall("{ call delete_worker(?,?) }");
        cs.setString(1,name);
        cs.setString(2,lname);
        cs.executeUpdate();
    }

```

```

JOptionPane.showMessageDialog(null , "Record Deleted!!!");
jTable2.setModel(new DefaultTableModel(null , new String[]{"Worker AT", "Name","Last
Name","Salary","Branch Code","Licensee","Route" , "Experience"}));
table_load();
NameField.setText("");
LastNameField.setText("");
IdField.setText("");
SalaryField.setText("");
BranchField.setText("");
ExperienceField.setText("");
Namefield.requestFocus();
}catch(SQLException e){
    JOptionPane.showMessageDialog(null , e.getMessage());
}
}//GEN-LAST:event_DeleteButtonActionPerformed

private void SearchFieldKeyReleased(java.awt.event.KeyEvent evt) {//GEN-FIRST:event_SearchFieldKeyReleased

try{
    String wrk_AT = SearchField.getText();

    pst = conn.prepareStatement("SELECT wrk_AT , wrk_name,wrk_lname,wrk_salary,wrk_br_code,drv_license,
drv_route ,drv_experience FROM worker INNER JOIN driver ON drv_AT = wrk_AT WHERE wrk_AT = ?");
    pst.setString(1 , wrk_AT);
    ResultSet rs = pst.executeQuery();

    if(rs.next() == true)
    {

        String AT = rs.getString(1);
        String name = rs.getString(2);
        String lname = rs.getString(3);
        String salary = rs.getString(4);
        String code = rs.getString(5);
        String license = rs.getString(6);
        String route = rs.getString(7);
        String experience = rs.getString(8);

        NameField.setText(name);
        LastNameField.setText(lname);
        IdField.setText(AT);
        SalaryField.setText(salary);
        BranchField.setText(code);
        ExperienceField.setText(experience);
        for (int i = 0 ; i < LicenseBox.getItemCount(); i++){
            if(LicenseBox.getSelectedItem().toString().equalsIgnoreCase(license)){
                LicenseBox.setSelectedIndex(i);
            }
        }
        for (int i = 0 ; i < RouteBox.getItemCount(); i++){
            if(RouteBox.getSelectedItem().toString().equalsIgnoreCase(route)){
                RouteBox.setSelectedIndex(i);
            }
        }
    }
    else{
        NameField.setText("");
        LastNameField.setText("");
        IdField.setText("");
        SalaryField.setText("");
        BranchField.setText("");
        ExperienceField.setText("");
        NameField.requestFocus();
    }
}catch(SQLException e){
    JOptionPane.showMessageDialog(null , e.getMessage());
}
}//GEN-LAST:event_SearchFieldKeyReleased

private void SearchFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_SearchFieldActionPerformed
// TODO add your handling code here:
}//GEN-LAST:event_SearchFieldActionPerformed

private void ClearButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ClearButtonActionPerformed

NameField.setText("");
LastNameField.setText("");
IdField.setText("");
SalaryField.setText("");
BranchField.setText("");

```

```

        ExperienceField.setText("");

    }//GEN-LAST:event_ClearButtonActionPerformed

    private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ExitButtonActionPerformed
        System.exit(0);
    }//GEN-LAST:event_ExitButtonActionPerformed

    private void SaveButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_SaveButtonActionPerformed

        String name , lname , id , salary , brcode ,srid ,license,route, experience;

        name = NameField.getText();
        lname =LastNameField.getText();
        id = IdField.getText();
        salary = SalaryField.getText();
        license = LicenseBox.getSelectedItem().toString();
        route = RouteBox.getSelectedItem().toString();
        experience = ExperienceField.getText();

        try{

            cs= conn.prepareCall("{ call insert_driver(?, ?, ?, ?, ?, ?, ?) }");
            cs.setString(1,id);
            cs.setString(2,name);
            cs.setString(3,lname);
            cs.setString(4,salary);
            cs.setString(5,license);
            cs.setString(6,route);
            cs.setString(7,experience);
            cs.executeUpdate();

            JOptionPane.showMessageDialog(null , "Record Added!!!");
            jTable2.setModel(new DefaultTableModel(null , new String[]{"Worker AT", "Name","Last Name","Salary","Branch Code","Licensee","Route" , "Experience"}));
            table_load();
            NameField.setText("");
            LastNameField.setText("");
            IdField.setText("");
            SalaryField.setText("");
            BranchField.setText("");
            ExperienceField.setText("");
            NameField.requestFocus();
        }catch(SQLException e){
            JOptionPane.showMessageDialog(null , e.getMessage());
        }
    }//GEN-LAST:event_SaveButtonActionPerformed

    private void BranchFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_BranchFieldActionPerformed
        // TODO add your handling code here:
    }//GEN-LAST:event_BranchFieldActionPerformed

    private void IdFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_IdFieldActionPerformed
        // TODO add your handling code here:
    }//GEN-LAST:event_IdFieldActionPerformed

    private void SalaryFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_SalaryFieldActionPerformed
        // TODO add your handling code here:
    }//GEN-LAST:event_SalaryFieldActionPerformed

    private void LastNameFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_LastNameFieldActionPerformed
        // TODO add your handling code here:
    }//GEN-LAST:event_LastNameFieldActionPerformed

    private void ExperienceFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ExperienceFieldActionPerformed
        // TODO add your handling code here:
    }//GEN-LAST:event_ExperienceFieldActionPerformed

    private void LicenseBoxActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_LicenseBoxActionPerformed
        // TODO add your handling code here:
    }//GEN-LAST:event_LicenseBoxActionPerformed

    private void RouteBoxActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_RouteBoxActionPerformed
        // TODO add your handling code here:
    }//GEN-LAST:event_RouteBoxActionPerformed

    /**

```

```

    * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<!--editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) "--&gt;
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(DriverWorker.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(DriverWorker.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(DriverWorker.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(DriverWorker.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    }
    //<!--/editor-fold&gt;

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                new DriverWorker().setVisible(true);
            } catch (SQLException ex) {
                Logger.getLogger(DriverWorker.class.getName()).log(Level.SEVERE, null, ex);
            }
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JTextField BranchField;
private javax.swing.JButton ClearButton;
private javax.swing.JButton DeleteButton;
private javax.swing.JButton ExitButton;
private javax.swing.JTextField ExperienceField;
private javax.swing.JTextField IdField;
private javax.swing.JTextField LastNameField;
private javax.swing.JComboBox&lt;String&gt; LicenseBox;
private javax.swing.JTextField NameField;
private javax.swing.JComboBox&lt;String&gt; RouteBox;
private javax.swing.JTextField SalaryField;
private javax.swing.JButton SaveButton;
private javax.swing.JTextField SearchField;
private javax.swing.JButton UpdateButton2;
private javax.swing.ButtonGroup buttonGroup1;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel13;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel16;
private javax.swing.JLabel jLabel17;
private javax.swing.JLabel jLabel18;
private javax.swing.JLabel jLabel19;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JPanel jPanel5;
private javax.swing.JPanel jPanel6;
private javax.swing.JPanel jPanel7;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JScrollPane jScrollPane3;
private javax.swing.JScrollPane jScrollPane4;
private javax.swing.JScrollPane jScrollPane5;
private javax.swing.JScrollPane jScrollPane6;
private javax.swing.JScrollPane jScrollPane7;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
private javax.swing.JTable jTable3;
private javax.swing.JTable jTable4;
private javax.swing.JTable jTable5;
</pre>

```

```

private javax.swing.JTable jTable6;
private javax.swing.JTable jTable7;
private javax.swing.JTable jTable8;
private javax.swing.JToggleButton jToggleButton1;
// End of variables declaration//GEN-END:variables
}

```

Events

```

package classes;

import static classes.Login.conn;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class Events extends javax.swing.JFrame {

    public Events() throws SQLException {
        initComponents();
        table_load();
        table_load2();
    }

    PreparedStatement pst;
    CallableStatement cs;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT ev_tr_id , ev_start , ev_end ,ev_descr FROM event";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String id = rs.getString("ev_tr_id");
            String start = rs.getString("ev_start");
            String end = rs.getString("ev_end");
            String des = rs.getString("ev_descr");

            String tbData[] = {id , start, end , des };

            DefaultTableModel tblModel = (DefaultTableModel)jTable2.getModel();
            tblModel.addRow(tbData);
        }
    }

    public void table_load2() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT tr_id, tr_departure , tr_return ,tr_br_code FROM trip";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String tr_id = rs.getString("tr_id");
            String tr_departure= rs.getString("tr_departure");
            String tr_return = rs.getString("tr_return");
            String tr_br_code = String.valueOf(rs.getInt("tr_br_code"));

            String tbData[] = {tr_id, tr_departure, tr_return , tr_br_code };

            DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
            tblModel.addRow(tbData);
        }
    }
}

```

```

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    jLabel11 = new javax.swing.JLabel();
    jPanel3 = new javax.swing.JPanel();
    jLabel10 = new javax.swing.JLabel();
    jLabel11 = new javax.swing.JLabel();
    jLabel17 = new javax.swing.JLabel();
    EndField = new javax.swing.JTextField();
    jLabel8 = new javax.swing.JLabel();
    DiscriberField = new javax.swing.JTextField();
    StartField = new javax.swing.JTextField();
    CodeField = new javax.swing.JTextField();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();
    jScrollPane2 = new javax.swing.JScrollPane();
    jTable2 = new javax.swing.JTable();
    jPanel4 = new javax.swing.JPanel();
    jLabel13 = new javax.swing.JLabel();
    SearchField1 = new javax.swing.JTextField();
    SearchField2 = new javax.swing.JTextField();
    jLabel14 = new javax.swing.JLabel();
    jPanel11 = new javax.swing.JPanel();
    SaveButton = new javax.swing.JButton();
    UpdateButton2 = new javax.swing.JButton();
    DeleteButton = new javax.swing.JButton();
    ClearButton = new javax.swing.JButton();
    ExitButton = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

    jLabel11.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
    jLabel11.setText(" Events");

    jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Add Trip",
        javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
        javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 24))); // NOI18N

    jLabel10.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel10.setText("Event Start");

    jLabel11.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel11.setText("Event End");

    jLabel17.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel17.setText("Discriber");

    EndField.setText("YYY-MM-DD HH:MM:SS");
    EndField.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            EndFieldActionPerformed(evt);
        }
    });

    jLabel8.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel8.setText("Trip Code");

    DiscriberField.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            DiscriberFieldActionPerformed(evt);
        }
    });

    StartField.setText("YYY-MM-DD HH:MM:SS");
    StartField.setToolTipText("");
    StartField.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            StartFieldActionPerformed(evt);
        }
    });

    CodeField.setEditable(false);
    CodeField.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {

```

```

        CodeFieldActionPerformed(evt);
    }
});
CodeField.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        CodeFieldKeyReleased(evt);
    }
});

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
jPanel3.setLayout(jPanel3Layout);
jPanel3Layout.setHorizontalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel3Layout.createSequentialGroup()
        .addGap(16, 16, 16)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel11)
                .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 152,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            )
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addComponent(jLabel8, javax.swing.GroupLayout.Alignment.LEADING,
                    javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
                    Short.MAX_VALUE)
                    .addComponent(jLabel7, javax.swing.GroupLayout.Alignment.LEADING,
                    javax.swing.GroupLayout.DEFAULT_SIZE, 106, Short.MAX_VALUE))
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addGap(16, 16, 16)
                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jLabel13, javax.swing.GroupLayout.Alignment.TRAILING,
                        javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
                        Short.MAX_VALUE)
                        .addComponent(jLabel12, javax.swing.GroupLayout.Alignment.TRAILING,
                        javax.swing.GroupLayout.DEFAULT_SIZE, 247,
                        Short.MAX_VALUE)
                    )
                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(EndField)
                        .addComponent(CodeField)))
                .addGap(16, 16, 16)
            )
        )
    )
);
jPanel3Layout.setVerticalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel3Layout.createSequentialGroup()
        .addGap(22, 22, 22)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addComponent(jLabel10)
            .addComponent(StartField, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
            Short.MAX_VALUE)
        )
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addComponent(jLabel11)
            .addComponent(EndField, javax.swing.GroupLayout.PREFERRED_SIZE, 34, Short.MAX_VALUE)
        )
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addComponent(jLabel12)
            .addComponent(CodeField, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
            Short.MAX_VALUE)
        )
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addComponent(jLabel13)
            .addComponent(StartField, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
            Short.MAX_VALUE)
        )
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addComponent(jLabel8)
            .addComponent(EndField, javax.swing.GroupLayout.PREFERRED_SIZE, 34, Short.MAX_VALUE)
        )
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addComponent(jLabel7)
            .addComponent(CodeField, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
            Short.MAX_VALUE)
        )
    )
);
jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "Trip ID", "Departure", "Return", "Branch Code"
    }
));
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
});
jScrollPane.setViewportView(jTable1);

```

```

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        },
        new String [] {
            "Trip ID", "Event Start", "Event End", "Discriber"
        }
));
jTable2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable2MouseClicked(evt);
    }
});
jScrollPane2.setViewportView(jTable2);

jPanel4.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Search",
javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 22))); // NOI18N

jLabel13.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel13.setText("ID Number");

SearchField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchField1ActionPerformed(evt);
    }
});
SearchField1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        SearchField1KeyReleased(evt);
    }
});

SearchField2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchField2ActionPerformed(evt);
    }
});
SearchField2.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        SearchField2KeyReleased(evt);
    }
});

jLabel14.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel14.setText("Event Start");

javax.swing.GroupLayout jPanel4Layout = new javax.swing.GroupLayout(jPanel4);
jPanel4.setLayout(jPanel4Layout);
jPanel4Layout.setHorizontalGroup(
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel4Layout.createSequentialGroup()
            .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel4Layout.createSequentialGroup()
                    .addComponent(jLabel13, javax.swing.GroupLayout.PREFERRED_SIZE, 109, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel14, javax.swing.GroupLayout.PREFERRED_SIZE, 109, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel4Layout.createSequentialGroup()
                    .addGap(26, 26, 26)
                    .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(SearchField2, javax.swing.GroupLayout.PREFERRED_SIZE, 243, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(SearchField1, javax.swing.GroupLayout.PREFERRED_SIZE, 243, javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGroup(jPanel4Layout.createSequentialGroup()
                    .addGap(29, 29, 29)
                    .addComponent(jLabel13)
                    .addComponent(SearchField1, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(0, 0, Short.MAX_VALUE)
        )
);
jPanel4Layout.setVerticalGroup(
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel4Layout.createSequentialGroup()
            .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel13, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel14, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(26, 26, 26)
            .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(SearchField2, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(SearchField1, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(29, 29, 29)
            .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel13)
                .addComponent(SearchField1, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGap(0, 0, Short.MAX_VALUE)
);

```

```

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(SearchField2, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel14))
        .addContainerGap())
    );

SaveButton.setFont(new java.awt.Font("Segoe UI", 0, 27)); // NOI18N
SaveButton.setText("Save");
SaveButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SaveButtonActionPerformed(evt);
    }
});

UpdateButton2.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
UpdateButton2.setText("Update");
UpdateButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateButton2ActionPerformed(evt);
    }
});

DeleteButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
DeleteButton.setText("Delete");
DeleteButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteButtonActionPerformed(evt);
    }
});

ClearButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
ClearButton.setText("Clear");
ClearButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ClearButtonActionPerformed(evt);
    }
});

ExitButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
ExitButton.setText("Exit");
ExitButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExitButtonActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(106, 106, 106)
            .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(105, 105, 105)
            .addComponent(UpdateButton2)
            .addGap(105, 105, 105)
            .addComponent/DeleteButton)
            .addGap(106, 106, 106)
            .addComponent(SearchField2, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap()
);
jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(106, 106, 106)
            .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(105, 105, 105)
            .addComponent(UpdateButton2)
            .addGap(105, 105, 105)
            .addComponent/DeleteButton)
            .addGap(106, 106, 106)
            .addComponent(SearchField2, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap()
);

```

```

        .addComponent(SaveButton, javax.swing.GroupLayout.DEFAULT_SIZE, 78,
Short.MAX_VALUE)
        .addComponent(UpdateButton2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(DeleteButton, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(ExitButton, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(ClearButton, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addGap(14, 14, 14)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(9, 9, 9)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 154,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(0, 0, Short.MAX_VALUE))
            .addGroup(layout.createSequentialGroup()
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                    .addComponent(jPanel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(jPanel4, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(jScrollPane2, javax.swing.GroupLayout.DEFAULT_SIZE, 649,
Short.MAX_VALUE))
                .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
            .addContainerGap()))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(15, 15, 15)
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 39,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, 119,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, 131,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addComponent(jPanel4, javax.swing.GroupLayout.PREFERRED_SIZE, 121,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(20, Short.MAX_VALUE))
    );
}

pack();
}// </editor-fold>//GEN-END:initComponents

private void EndFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_EndFieldActionPerformed
    // TODO add your handling code here:
}//GEN-LAST:event_EndFieldActionPerformed

```

```

private void DiscriberFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_DiscriberFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_DiscriberFieldActionPerformed

private void StartFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_StartFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_StartFieldActionPerformed

private void CodeFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_CodeFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_CodeFieldActionPerformed

private void CodeFieldKeyReleased(java.awt.event.KeyEvent evt) { //GEN-FIRST:event_CodeFieldKeyReleased
    // TODO add your handling code here:
} //GEN-LAST:event_CodeFieldKeyReleased

private void SaveButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_SaveButtonActionPerformed

    String ev_tr_id ,ev_start , ev_end ,ev_descr ;

    ev_start = StartField.getText();
    ev_end = EndField.getText();
    ev_descr= DiscriberField.getText();
    ev_tr_id = CodeField.getText();

    try{

        cs= conn.prepareCall("insert into event
(ev_tr_id,ev_start,ev_end,ev_descr)values(?, ?, ?, ?)");
        cs.setString(1, ev_tr_id );
        cs.setString(2, ev_start);
        cs.setString(3, ev_end);
        cs.setString(4, ev_descr);
        cs.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Addedd!!!");
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Trip ID","Event Start","Event End","Discriber"}));
        table_load();
        StartField.setText("");
        EndField.setText("");
        DiscriberField.setText("");
        CodeField.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
} //GEN-LAST:event_SaveButtonActionPerformed

private void UpdateButton2ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_UpdateButton2ActionPerformed

    String ev_tr_id ,ev_start , ev_end ,ev_descr ,search1 ,search2 ;

    ev_start = StartField.getText();
    ev_end = EndField.getText();
    ev_descr= DiscriberField.getText();
    ev_tr_id = CodeField.getText();
    search1 = SearchField1.getText();
    search2 = SearchField2.getText();

    try{

        pst= conn.prepareStatement("update event set ev_tr_id=? ,ev_start=? , ev_end=?, ev_descr=?
WHERE ev_tr_id=? and ev_start=?");
        pst.setString(1, ev_tr_id );
        pst.setString(2, ev_start);
        pst.setString(3, ev_end);
        pst.setString(4, ev_descr);
        pst.setString(5, search1);
        pst.setString(6, search2);
        pst.executeUpdate();
    }
}

```

```

        JOptionPane.showMessageDialog(null , "Record upadted!");
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Trip ID","Event Start","Event
End","Discriber"}));
        table_load();
        StartField.setText("");
        EndField.setText("");
        DiscriberField.setText("");
        CodeField.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_UpdateButton2ActionPerformed

private void DeleteButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-
FIRST:event_DeleteButtonActionPerformed
    String search1 , search2;

    search1 = SearchField1.getText();
    search2 = SearchField2.getText();

    try{
        pst= conn.prepareStatement("delete from event WHERE ev_tr_id =? and ev_start=? ");
        pst.setString(1, search1);
        pst.setString(2, search2);
        pst.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Deleted!!!");
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Trip ID","Event Start","Event
End","Discriber"}));
        table_load();
        StartField.setText("");
        EndField.setText("");
        DiscriberField.setText("");
        CodeField.setText("");
        SearchField1.setText("");
        SearchField2.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_DeleteButtonActionPerformed

private void ClearButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-
FIRST:event_ClearButtonActionPerformed

    StartField.setText("");
    EndField.setText("");
    DiscriberField.setText("");
    CodeField.setText("");
    SearchField1.setText("");
    SearchField2.setText("");
}//GEN-LAST:event_ClearButtonActionPerformed

private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-
FIRST:event_ExitButtonActionPerformed
    System.exit(0);
}//GEN-LAST:event_ExitButtonActionPerformed

private void SearchField1ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-
FIRST:event_SearchField1ActionPerformed
    // TODO add your handling code here:
}//GEN-LAST:event_SearchField1ActionPerformed

private void SearchField1KeyReleased(java.awt.event.KeyEvent evt) { //GEN-
FIRST:event_SearchField1KeyReleased

    }//GEN-LAST:event_SearchField1KeyReleased

private void SearchField2ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-
FIRST:event_SearchField2ActionPerformed
    // TODO add your handling code here:
}//GEN-LAST:event_SearchField2ActionPerformed

private void SearchField2KeyReleased(java.awt.event.KeyEvent evt) { //GEN-
FIRST:event_SearchField2KeyReleased

```

```

try{
    String sr1 = SearchField1.getText();
    String sr2 = SearchField2.getText();

    pst = conn.prepareStatement("SELECT ev_tr_id , ev_start, ev_end, ev_descr FROM event WHERE
ev_tr_id=? and ev_start=?");
    pst.setString(1 , sr1);
    pst.setString(2 , sr2);
    ResultSet rs = pst.executeQuery();

    if(rs.next() == true)
    {
        String ev_tr_id = rs.getString(1);
        String ev_start = rs.getString(2);
        String ev_end = rs.getString(3);
        String ev_descr = rs.getString(4);

        StartField.setText(ev_tr_id);
        EndField.setText(ev_start);
        DiscriberField.setText(ev_end);
        CodeField.setText(ev_descr);
    }
    else{
        StartField.setText("");
        EndField.setText("");
        DiscriberField.setText("");
        CodeField.setText("");
        SearchField1.setText("");
        SearchField2.setText("");
    }
}catch(SQLException e){
    JOptionPane.showMessageDialog(null , e.getMessage());
}
}//GEN-LAST:event_SearchField2KeyReleased

private void jTable2MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jTable2MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable2.getModel();
    int selectedRowIndex = jTable2.getSelectedRow();
    SearchField1.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
    StartField.setText(model.getValueAt(selectedRowIndex ,1 ).toString());
    EndField.setText(model.getValueAt(selectedRowIndex ,2 ).toString());
    DiscriberField.setText(model.getValueAt(selectedRowIndex ,3 ).toString());
    SearchField2.setText(model.getValueAt(selectedRowIndex ,1 ).toString());
}//GEN-LAST:event_jTable2MouseClicked

private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jTable1MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
    int selectedRowIndex = jTable1.getSelectedRow();
    CodeField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
}//GEN-LAST:event_jTable1MouseClicked

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) " >
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    
```

```

        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Events.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Events.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Events.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Events.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
}
//</editor-fold>
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        try {
            new Events().setVisible(true);
        } catch (SQLException ex) {
            Logger.getLogger(Events.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
});
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton ClearButton;
private javax.swing.JTextField CodeField;
private javax.swing.JButton DeleteButton;
private javax.swing.JTextField DiscriberField;
private javax.swing.JTextField EndField;
private javax.swing.JButton ExitButton;
private javax.swing.JButton SaveButton;
private javax.swing.JTextField SearchField1;
private javax.swing.JTextField SearchField2;
private javax.swing.JTextField StartField;
private javax.swing.JButton UpdateButton2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel13;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel17;
private javax.swing.JLabel jLabel8;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
// End of variables declaration//GEN-END:variables
}

```

GuideWorker

```
package classes;

import static classes.Login.*;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class GuideWorker extends javax.swing.JFrame {

    public GuideWorker() throws SQLException {
        initComponents();
        table_load();
        table_load_Branches();
    }

    PreparedStatement pst;
    CallableStatement cs;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT wrk_AT , wrk_name,wrk_lname,wrk_salary,wrk_br_code,gui_cv, lng_language FROM worker
INNER JOIN guide ON gui_AT = wrk_AT INNER JOIN languages ON lng_gui_AT = wrk_AT";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String at = rs.getString("wrk_AT");
            String name = rs.getString("wrk_name");
            String laname = rs.getString("wrk_lname");
            String salary = String.valueOf(rs.getFloat("wrk_salary"));
            String br_code = String.valueOf(rs.getInt("wrk_br_code"));
            String language = rs.getString("gui_cv");
            String cv = rs.getString("lng_language");

            String tbData[] = {at , name, laname , salary , br_code , cv, language };

            DefaultTableModel tblModel = (DefaultTableModel)jTable2.getModel();
            tblModel.addRow(tbData);
        }
    }

    public void table_load_Branches() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT br_code FROM branch";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String br = rs.getString("br_code");
            String tbData[] = {br};
            DefaultTableModel tblModel = (DefaultTableModel)jTable4.getModel();
            tblModel.addRow(tbData);
        }
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        jLabel2 = new javax.swing.JLabel();
        buttonGroup1 = new javax.swing.ButtonGroup();
        jToggleButton1 = new javax.swing.JToggleButton();
        jTable1 = new javax.swing.JTable();
        jScrollPane2 = new javax.swing.JScrollPane();
        jTable3 = new javax.swing.JTable();
        jScrollPane4 = new javax.swing.JScrollPane();
        jTable5 = new javax.swing.JTable();
        jScrollPane5 = new javax.swing.JScrollPane();
        jTable6 = new javax.swing.JTable();
        jScrollPane6 = new javax.swing.JScrollPane();
        jTable7 = new javax.swing.JTable();
        jScrollPane7 = new javax.swing.JScrollPane();
        jTable8 = new javax.swing.JTable();
        jPanel2 = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
```

```

jPanel3 = new javax.swing.JPanel();
jLabel4 = new javax.swing.JLabel();
jLabel5 = new javax.swing.JLabel();
jLabel6 = new javax.swing.JLabel();
jLabel7 = new javax.swing.JLabel();
LastNameField = new javax.swing.JTextField();
jLabel8 = new javax.swing.JLabel();
SalaryField = new javax.swing.JTextField();
NameField = new javax.swing.JTextField();
IdField = new javax.swing.JTextField();
BranchField = new javax.swing.JTextField();
jLabel9 = new javax.swing.JLabel();
jLabel11 = new javax.swing.JLabel();
LanguageField = new javax.swing.JTextField();
GuideCVField = new javax.swing.JTextField();
SaveButton = new javax.swing.JButton();
ExitButton = new javax.swing.JButton();
ClearButton = new javax.swing.JButton();
jPanel1 = new javax.swing.JPanel();
jLabel10 = new javax.swing.JLabel();
SearchField = new javax.swing.JTextField();
DeleteButton = new javax.swing.JButton();
UpdateButton2 = new javax.swing.JButton();
jScrollPane1 = new javax.swing.JScrollPane();
jTable2 = new javax.swing.JTable();
jScrollPane3 = new javax.swing.JScrollPane();
jTable4 = new javax.swing.JTable();

jLabel2.setText("jLabel2");

jToggleButton1.setText("jToggleButton1");

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jTable3.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane2.setViewportView(jTable3);

jTable5.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane4.setViewportView(jTable5);

jTable6.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane5.setViewportView(jTable6);

jTable7.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

```

```

        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane6.setViewportView(jTable7);

jTable8.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane7.setViewportView(jTable8);

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
jLabel1.setText("Guide Worker");

jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Add Worker",
    javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT_POSITION, new
    java.awt.Font("Segoe UI", 0, 24))); // NOI18N

jLabel4.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel4.setText("Name");

jLabel5.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel5.setText("Last Name");

jLabel6.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel6.setText("ID Number");

jLabel7.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel7.setText("Salary");

LastNameField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        LastNameFieldActionPerformed(evt);
    }
});

jLabel8.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel8.setText("Branch Code");

SalaryField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SalaryFieldActionPerformed(evt);
    }
});

IdField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        IdFieldActionPerformed(evt);
    }
});

BranchField.setEditable(false);
BranchField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        BranchFieldActionPerformed(evt);
    }
});

jLabel9.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel9.setText("Language");

jLabel11.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel11.setText("Guide CV");

LanguageField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        LanguageFieldActionPerformed(evt);
    }
});

```

```

GuideCVField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        GuideCVFieldActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
jPanel3.setLayout(jPanel3Layout);
jPanel3Layout.setHorizontalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel3Layout.createSequentialGroup()
        .addGap(16, 16, 16)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addGap(16, 16, 16)
                    .addGroup(jPanel3Layout.createSequentialGroup()
                        .addComponent(jLabel11, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jLabel5, javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jLabel9, javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jLabel8, javax.swing.GroupLayout.Alignment.LEADING))
                    .addGap(53, 53, 53)
                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(lastNameField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 301, javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(branchField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 75, javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(languageField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)))
                    .addGap(16, 16, 16)
                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(nameField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(idField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(salaryField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE)))
                    .addGap(16, 16, 16)
                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(lastNameField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(idField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(branchField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE)))
                    .addGap(16, 16, 16)
                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(languageField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(16, 16, 16)
                            .addComponent(guideCVField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE)))
                    .addGap(27, 27, 27)
                )
            )
        )
    )
);

jPanel3Layout.setVerticalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel3Layout.createSequentialGroup()
        .addGap(22, 22, 22)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addComponent(jLabel14)
            .addComponent(nameField, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addGroup(jPanel3Layout.createSequentialGroup()
                .addComponent(jLabel15)
                .addComponent(lastNameField, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jLabel16)
                .addComponent(idField, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jLabel17)
                .addComponent(branchField, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jLabel18)
                .addComponent(languageField, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jLabel19)
                .addComponent(guideCVField, javax.swing.GroupLayout.PREFERRED_SIZE, 34, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(27, 27, 27)
            )
        )
    )
);

SaveButton.setFont(new java.awt.Font("Segoe UI", 0, 27)); // NOI18N
SaveButton.setText("Save");
SaveButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SaveButtonActionPerformed(evt);
    }
});

ExitButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
ExitButton.setText("Exit");

```

```

ExitButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExitButtonActionPerformed(evt);
    }
});

ClearButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
ClearButton.setText("Clear");
ClearButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ClearButtonActionPerformed(evt);
    }
});

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Search",
javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT_POSITION, new
java.awt.Font("Segoe UI", 0, 22))); // NOI18N

jLabel10.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel10.setText("ID Number");

SearchField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchFieldActionPerformed(evt);
    }
});
SearchField.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        SearchFieldKeyReleased(evt);
    }
});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(32, 32, 32)
            .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 109,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(26, 26, 26)
            .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 313,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(20, Short.MAX_VALUE))
);
jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(15, 15, 15)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel10)
                .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(20, Short.MAX_VALUE))
);

DeleteButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
DeleteButton.setText("Delete");
DeleteButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteButtonActionPerformed(evt);
    }
});

UpdateButton2.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
UpdateButton2.setText("Update");
UpdateButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateButton2ActionPerformed(evt);
    }
});

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        new String [] {
            "Worker AT", "Name", "Last Name", "Salary", "Branch Code", "Language", "Guide CV"
        }
    },
    new String [] {
        "false, false, false, false, false, false, false"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false, false, false
    };
    public boolean isCellEditable(int rowIndex, int columnIndex) {

```

```
        return canEdit [columnIndex];
    }
});
jTable2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable2MouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable2);

jTable4.setBorder(javax.swing.BorderFactory.createTitledBorder(""));
jTable4.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "Branches"
    }
) {
    boolean[] canEdit = new boolean [] {
        false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable4.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable4MouseClicked(evt);
    }
});
jScrollPane3.setViewportView(jTable4);

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jPanel13, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jPanel11, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 60, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addGap(46, 46, 46)
                    .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 154, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 154, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 150, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 150, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 151, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addGap(34, 34, 34)
                    .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 562, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addGap(20, 20, 20)
                    .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE, Short.MAX_VALUE)))
        )
    );
jPanel2Layout.setVerticalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addComponent(jPanel13, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jPanel11, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 60, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(46, 46, 46)
            .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 154, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 154, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 150, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 150, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 151, javax.swing.GroupLayout.PREFERRED_SIZE))
        )
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(34, 34, 34)
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 562, javax.swing.GroupLayout.PREFERRED_SIZE))
        )
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(20, 20, 20)
            .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE, Short.MAX_VALUE))
    );
});
```

```

        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 419,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jPanel3, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 419, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(18, 18, 18)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent>DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(26, 26, 26))
    );

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGapContainerGap())
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
    );
}

pack();
}// </editor-fold>//GEN-END:initComponents

private void jTable4MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jTable4MouseClicked
DefaultTableModel model = (DefaultTableModel)jTable4.getModel();
int selectedRowIndex = jTable4.getSelectedRow();
BranchField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
}//GEN-LAST:event_jTable4MouseClicked

private void jTable2MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jTable2MouseClicked

DefaultTableModel model = (DefaultTableModel)jTable2.getModel();
int selectedRowIndex = jTable2.getSelectedRow();
IdField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
NameField.setText(model.getValueAt(selectedRowIndex ,1 ).toString());
LastNameField.setText(model.getValueAt(selectedRowIndex ,2 ).toString());
SalaryField.setText(model.getValueAt(selectedRowIndex ,3 ).toString());
BranchField.setText(model.getValueAt(selectedRowIndex ,4 ).toString());
LanguageField.setText(model.getValueAt(selectedRowIndex ,5).toString());
GuideCVField.setText(model.getValueAt(selectedRowIndex ,6).toString());
SearchField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
}

}//GEN-LAST:event_jTable2MouseClicked

private void UpdateButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_UpdateButton2ActionPerformed

String name , lname , id , salary , brcode , srid ,language,cv ;

name = NameField.getText();
lname = LastNameField.getText();
id = IdField.getText();
salary = SalaryField.getText();
brcode = BranchField.getText();
srid = SearchField.getText();
language = LanguageField.getText();
cv = GuideCVField.getText();

try{

```

```

        pst= conn.prepareStatement("update worker set wrk_AT=? ,wrk_name=? ,wrk_lname=? ,wrk_salary=?,
wrk_br_code=? WHERE wrk_AT =?");
        SQLWarning warning = pst.getWarnings();
        pst.setString(1,id);
        pst.setString(2,name);
        pst.setString(3, lname);
        pst.setString(4,salary);
        pst.setString(5,brcode);
        pst.setString(6,srid);
        pst.executeUpdate();
        pst= conn.prepareStatement("update guide set gui_cv = ? WHERE gui_AT =?");
        pst.setString(1,cv);
        pst.setString(2,srid);
        pst.executeUpdate();
        pst= conn.prepareStatement("update languages set lng_language = ? WHERE lng_gui_AT =?");
        pst.setString(1,language);
        pst.setString(2,srid);
        pst.executeUpdate();

        JOptionPane.showMessageDialog(null , "Record Update!!");

        jTable2.setModel(new DefaultTableModel(null , new String[]{"Worker AT", "Name","Last
Name","Salary","Branch Code","Language","Guide CV"}));
        table_load();
        NameField.setText("");
        LastNameField.setText("");
        IdField.setText("");
        SalaryField.setText("");
        BranchField.setText("");
        LanguageField.setText("");
        GuideCVField.setText("");
        NameField.requestFocus();
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
} //GEN-LAST:event_UpdateButton2ActionPerformed

private void DeleteButtonActionPerformed(java.awt.event.ActionEvent evt) //GEN-
FIRST:event_DeleteButtonActionPerformed
{
    String name , lname;

    name = NameField.getText();
    lname = LastNameField.getText();

    try{
        cs= conn.prepareCall("{ call delete_worker(?,?) }");
        cs.setString(1,name);
        cs.setString(2,lname);
        cs.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Deleted!!!");
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Worker AT", "Name","Last
Name","Salary","Branch Code","Language","Guide CV"}));
        table_load();
        NameField.setText("");
        LastNameField.setText("");
        IdField.setText("");
        SalaryField.setText("");
        BranchField.setText("");
        LanguageField.setText("");
        GuideCVField.setText("");
        NameField.requestFocus();
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
} //GEN-LAST:event_DeleteButtonActionPerformed

private void SearchFieldKeyReleased(java.awt.event.KeyEvent evt) //GEN-FIRST:event_SearchFieldKeyReleased
{
    try{
        String wrk_AT = SearchField.getText();

        pst = conn.prepareStatement("SELECT wrk_AT , wrk_name,wrk_lname,wrk_salary,wrk_br_code,gui_cv,
       {lng_language FROM worker INNER JOIN guide ON gui_AT = wrk_AT INNER JOIN languages ON lng_gui_AT = wrk_AT WHERE wrk_AT
        = ?");
        pst.setString(1 , wrk_AT);
        ResultSet rs = pst.executeQuery();

        if(rs.next() == true)
        {
            String AT = rs.getString(1);
            String name = rs.getString(2);
            String lname = rs.getString(3);
            String salary = rs.getString(4);
    
```

```

        String code = rs.getString(5);
        String language = rs.getString(6);
        String cv = rs.getString(7);

        NameField.setText(name);
        LastNameField.setText(lname);
        IdField.setText(AT);
        SalaryField.setText(salary);
        BranchField.setText(code);
        LanguageField.setText(language);
        GuideCVField.setText(cv);

    }else{

        NameField.setText("");
        LastNameField.setText("");
        IdField.setText("");
        SalaryField.setText("");
        BranchField.setText("");
        LanguageField.setText("");
        GuideCVField.setText("");
    }

}catch(SQLException e){
    JOptionPane.showMessageDialog(null , e.getMessage());
}
}//GEN-LAST:event_SearchFieldKeyReleased

private void SearchFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_SearchFieldActionPerformed
// TODO add your handling code here:
}//GEN-LAST:event_SearchFieldActionPerformed

private void ClearButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ClearButtonActionPerformed
//GEN-LAST:event_ClearButtonActionPerformed

NameField.setText("");
LastNameField.setText("");
IdField.setText("");
SalaryField.setText("");
BranchField.setText("");
LanguageField.setText("");
GuideCVField.setText("");

}//GEN-LAST:event_ClearButtonActionPerformed

private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ExitButtonActionPerformed
System.exit(0);
}//GEN-LAST:event_ExitButtonActionPerformed

private void SaveButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_SaveButtonActionPerformed

String name , lname , id , salary , brcode ,language,cv ;

name = NameField.getText();
lname =LastNameField.getText();
id = IdField.getText();
salary = SalaryField.getText();
brcode = BranchField.getText();
language = LanguageField.getText();
cv = GuideCVField.getText();

try{
    pst= conn.prepareStatement("insert into
worker(wrk_AT,wrk_name,wrk_lname,wrk_salary,wrk_br_code)values(?,?,?,?,?)");
    pst.setString(1,id);
    pst.setString(2,name);
    pst.setString(3,lname);
    pst.setString(4,salary);
    pst.setString(5,brcode);
    pst.executeUpdate();
    pst= conn.prepareStatement("insert into guide (gui_AT,gui_cv)values(?,?)");
    pst.setString(1,id);
    pst.setString(2,cv);
    pst.executeUpdate();
    pst= conn.prepareStatement("insert into languages (lng_gui_AT,lng_language)values(?,?)");
    pst.setString(1,id);
    pst.setString(2,language);
    pst.executeUpdate();
    JOptionPane.showMessageDialog(null , "Record Added!!!");
    jTable2.setModel(new DefaultTableModel(null , new String[]{"Worker AT", "Name","Last
Name","Salary","Branch Code","Language","Guide CV"}));
    table_load();
    NameField.setText("");
}

```

```

LastNameField.setText("");
IdField.setText("");
SalaryField.setText("");
BranchField.setText("");
LanguageField.setText("");
GuideCVField.setText("");
NameField.requestFocus();
}catch(SQLException e){
    JOptionPane.showMessageDialog(null , e.getMessage());
}
}//GEN-LAST:event_SaveButtonActionPerformed

private void GuideCVFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_GuideCVFieldActionPerformed
// TODO add your handling code here:
}//GEN-LAST:event_GuideCVFieldActionPerformed

private void LanguageFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_LanguageFieldActionPerformed
// TODO add your handling code here:
}//GEN-LAST:event_LanguageFieldActionPerformed

private void BranchFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_BranchFieldActionPerformed
// TODO add your handling code here:
}//GEN-LAST:event_BranchFieldActionPerformed

private void IdFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_IdFieldActionPerformed
// TODO add your handling code here:
}//GEN-LAST:event_IdFieldActionPerformed

private void SalaryFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_SalaryFieldActionPerformed
// TODO add your handling code here:
}//GEN-LAST:event_SalaryFieldActionPerformed

private void LastNameFieldActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_LastNameFieldActionPerformed
// TODO add your handling code here:
}//GEN-LAST:event_LastNameFieldActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) " >
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(GuideWorker.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(GuideWorker.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(GuideWorker.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(GuideWorker.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
    // </editor-fold>
    // </editor-fold>
}
```

```

//</editor-fold>
/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        try {
            new GuideWorker().setVisible(true);
        } catch (SQLException ex) {
            Logger.getLogger(GuideWorker.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
});

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JTextField BranchField;
private javax.swing.JButton ClearButton;
private javax.swing.JButton DeleteButton;
private javax.swing.JButton ExitButton;
private javax.swing.JTextField GuideCVField;
private javax.swing.JTextField IdField;
private javax.swing.JTextField LanguageField;
private javax.swing.JTextField LastNameField;
private javax.swing.JTextField NameField;
private javax.swing.JTextField SalaryField;
private javax.swing.JButton SaveButton;
private javax.swing.JTextField SearchField;
private javax.swing.JButton UpdateButton2;
private javax.swing.ButtonGroup buttonGroup1;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel16;
private javax.swing.JLabel jLabel17;
private javax.swing.JLabel jLabel18;
private javax.swing.JLabel jLabel19;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel12;
private javax.swing.JPanel jPanel13;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JScrollPane jScrollPane3;
private javax.swing.JScrollPane jScrollPane4;
private javax.swing.JScrollPane jScrollPane5;
private javax.swing.JScrollPane jScrollPane6;
private javax.swing.JScrollPane jScrollPane7;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
private javax.swing.JTable jTable3;
private javax.swing.JTable jTable4;
private javax.swing.JTable jTable5;
private javax.swing.JTable jTable6;
private javax.swing.JTable jTable7;
private javax.swing.JTable jTable8;
private javax.swing.JToggleButton jToggleButton1;
// End of variables declaration//GEN-END:variables
}

```

ItAdmin

```
package classes;

import static classes.Login.conn;
import static classes.Login.login;
import static classes.Menu.menu;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.table.DefaultTableModel;

public class ItAdmin extends javax.swing.JFrame {

    //private Connection conn;
    private DefaultTableModel tmodel;
    private DefaultTableModel branch_tmodel;

    public ItAdmin() {
        initComponents();
        tmodel = (DefaultTableModel) jTable.getModel();
        branch_tmodel = (DefaultTableModel) jTable.getModel();
        selectAll();
        tableLoadBranches();
    }

    private void selectAll(){
        try {
            Statement stmt = conn.createStatement();
            ResultSet rs = stmt.executeQuery("SELECT wrk_AT,wrk_name,wrk_lname,wrk_salary,wrk_br_code,
" +
" +                               it_password,it_start_date,it_end_date,Insert_priv FROM
worker " +
                               "INNER JOIN it_admin ON it_at = wrk_AT " +
                               "INNER JOIN mysql.db ON wrk_lname = User");
            ResultSetMetaData metaData = rs.getMetaData();
            int columnCount = metaData.getColumnCount();
            Object[] row;
            while (rs.next()) {
                row = new Object[columnCount];
                for (int i = 1; i <= columnCount; i++) {
                    row[i - 1] = rs.getString(i);
                }
                tmodel.addRow(row);
            }
            rs.close();
            stmt.close();
        }catch (SQLException e) {
            e.printStackTrace();
        }
    }

    public void tableLoadBranches(){
        try {
            Statement st = conn.createStatement();
            String table_sql = "SELECT br_code FROM branch";
            ResultSet rs = st.executeQuery(table_sql);

            while(rs.next()){

                String br = rs.getString("br_code");
                String tbData[] = {br};
                DefaultTableModel tblModel = (DefaultTableModel) jTable4.getModel();
                tblModel.addRow(tbData);
            }
        } catch (SQLException e) {
            e.printStackTrace();
        }
    }
}
```

```

private int insertItAdmin() throws SQLException{
    try {
        boolean userCreated = createUser();
        if(userCreated==false){
            return 1;
        }

        String sql = "INSERT INTO worker(wrk_AT,wrk_name,wrk_lname,wrk_salary,wrk_br_code)"
                    + "VALUES(?, ?, ?, ?, ?)";
        PreparedStatement stmt = conn.prepareStatement(sql);
        stmt.setString(1,idField.getText());
        stmt.setString(2,nameField.getText());
        stmt.setString(3,lastNameField.getText());
        float salaryValue = Float.parseFloat(salaryField.getText());
        stmt.setFloat(4, salaryValue);
        int brCodeValue = Integer.parseInt(branchField.getText());
        stmt.setInt(5,brCodeValue);

        stmt.executeUpdate();

        //an exw keno to field password kalw synartisei pou kanei insert tin default timi password
        String passwordValue = passwordField.getText();
        if(passwordValue.isEmpty()){
            insertItAdminDefPass();
            return 0;
        }

        sql = "INSERT INTO it_admin(it_at,it_password,it_start_date,it_end_date)VALUES(?, ?, ?, ?)";
        stmt = conn.prepareStatement(sql);

        String endDateValue = endDateField.getText();
        stmt.setString(1, idField.getText());
        stmt.setString(2, passwordValue);
        stmt.setString(3, startDateField.getText());
        if(endDateValue.isEmpty()){
            stmt.setObject(4,null);
        }
        else{
            stmt.setString(4, endDateValue);
        }

        stmt.executeUpdate();

        stmt.close();

    }catch(SQLException e) {
        e.printStackTrace();
        //mporei na dimiourgithei o user alla na yparxei provlima stin dimiourgia worker i it_admin
    opote
        //diagrafw ton user pou eixe dimiourgithei
        String username = lastNameField.getText();
        PreparedStatement stmt= conn.prepareStatement("drop user ?@localhost");
        stmt.setString(1,username);
        stmt.execute();

        stmt = conn.prepareStatement("delete from mysql.db WHERE User = ?");
        stmt.setString(1, username);
        stmt.executeUpdate();
        return 1;
    }
    catch(NumberFormatException e){
        e.printStackTrace();
        return 1;
    }
    return 0;
}

private void insertItAdminDefPass() throws SQLException{
    try {
        String sql = "INSERT INTO
it_admin(it_at,it_password,it_start_date,it_end_date)VALUES(?,DEFAULT,?,?)";
        PreparedStatement stmt = conn.prepareStatement(sql);
        stmt = conn.prepareStatement(sql);

```

```

        String endDateValue = endDateField.getText();
        stmt.setString(1, idField.getText());
        stmt.setString(2, startDateField.getText());
        if(endDateValue.isEmpty()){
            stmt.setObject(3,null);
        }
        else{
            stmt.setString(3, endDateValue);
        }

        stmt.executeUpdate();

        stmt.close();

    }catch(SQLException e) {
        e.printStackTrace();
        String username = lastNameField.getText();
        PreparedStatement stmt= conn.prepareStatement("drop user ?@localhost");
        stmt.setString(1,username);
        stmt.execute();

        stmt = conn.prepareStatement("delete from mysql.db WHERE User = ?");
        stmt.setString(1, username);
        stmt.executeUpdate();
    }
}

private boolean createUser(){
    try{
        String priv = (String)privilegesBox.getSelectedItem();
        CallableStatement stmt;

        if(priv.equals("Select Privileges")){
            stmt = conn.prepareCall("{call create_select_user(?, ?)}");
        }
        else{
            stmt = conn.prepareCall("{call create_user(?, ?)}");
        }

        String username = lastNameField.getText();

        String password = passwordField.getText();
        if(password.isEmpty()){
            password = "password";
        }

        //set procedure input args
        stmt.setString(1, username);
        stmt.setString(2, password);

        //execute procedure
        stmt.execute();

        //close the resources
        stmt.close();

    }catch (SQLException e) {
        e.printStackTrace();
        return false;
    }
    return true;
}

private void clearTable(DefaultTableModel model){
    while(model.getRowCount()>0) {
        model.removeRow(0);
    }
}

private int deleteItAdmin(){
    try{
        //den mporw na diagrapsw ton user me ton opoio exw syndethei
        if(login.username.equals(lastNameField.getText())){
            return 1;
        }
    }

```

```

        String username = lastNameField.getText();
        PreparedStatement stmt= conn.prepareStatement("drop user ?@localhost");
        stmt.setString(1,username);

        stmt.execute();

        stmt = conn.prepareStatement("delete from worker WHERE wrk_AT = ?");

        String at = idField.getText();
        stmt.setString(1, at);

        stmt.executeUpdate();

        stmt = conn.prepareStatement("delete from mysql.db WHERE User = ?");

        stmt.setString(1, username);

        stmt.executeUpdate();

        nameField.setText("");
        lastNameField.setText("");
        idField.setText("");
        salaryField.setText("");
        branchField.setText("");
        passwordField.setText("");
        startDateField.setText("");
        endDateField.setText("");

    }catch(SQLException e){
        e.printStackTrace();
        return 1;
    }
    return 0;
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-BEGIN:initComponents
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jPanel13 = new javax.swing.JPanel();
    nameLabel = new javax.swing.JLabel();
    lastNameLabel = new javax.swing.JLabel();
    idLabel = new javax.swing.JLabel();
    salaryLabel = new javax.swing.JLabel();
    branchCodeLabel = new javax.swing.JLabel();
    passwordLabel = new javax.swing.JLabel();
    startDateLabel = new javax.swing.JLabel();
    endDateLabel = new javax.swing.JLabel();
    nameField = new javax.swing.JTextField();
    lastNameField = new javax.swing.JTextField();
    salaryField = new javax.swing.JTextField();
    idField = new javax.swing.JTextField();
    branchField = new javax.swing.JTextField();
    passwordField = new javax.swing.JTextField();
    startDateField = new javax.swing.JTextField();
    endDateField = new javax.swing.JTextField();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    jLabel9 = new javax.swing.JLabel();
    privilegesLabel = new javax.swing.JLabel();
    privilegesBox = new javax.swing.JComboBox();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable = new javax.swing.JTable();
    selectAllButton = new javax.swing.JButton();
    saveButton = new javax.swing.JButton();
    clearButton = new javax.swing.JButton();
    deleteButton = new javax.swing.JButton();
    backButton = new javax.swing.JButton();
    jScrollPane3 = new javax.swing.JScrollPane();
    jTable4 = new javax.swing.JTable();

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);
}

```

```

jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
jLabel1.setText("IT Admin ");

jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Add Worker",
javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 24))); // NOI18N

nameLabel.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
nameLabel.setText("Name");

lastNameLabel.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
lastNameLabel.setText("Last Name");

idLabel.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
idLabel.setText("ID Number");

salaryLabel.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
salaryLabel.setText("Salary");

branchCodeLabel.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
branchCodeLabel.setText("Branch Code");

passwordLabel.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
passwordLabel.setText("Password");

startDateLabel.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
startDateLabel.setText("Start Date");

endDateLabel.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
endDateLabel.setText("End Date");

lastNameField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        lastNameFieldActionPerformed(evt);
    }
});

salaryField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        salaryFieldActionPerformed(evt);
    }
});

idField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        idFieldActionPerformed(evt);
    }
});

branchField.setEditable(false);
branchField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        branchFieldActionPerformed(evt);
    }
});

passwordField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        passwordFieldActionPerformed(evt);
    }
});

startDateField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        startDateFieldActionPerformed(evt);
    }
});

endDateField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        endDateFieldActionPerformed(evt);
    }
});

jLabel5.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N

```

```

jLabel5.setText("(YYYY-MM-DD HH:MM:SS)");
jLabel6.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jLabel6.setText("(YYYY-MM-DD HH:MM:SS)");

jLabel7.setForeground(new java.awt.Color(102, 102, 102));
jLabel7.setText("leave empty for default value");

jLabel9.setForeground(new java.awt.Color(102, 102, 102));
jLabel9.setText("leave empty for default value");

privilegesLabel.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
privilegesLabel.setText("Privileges");

privilegesBox.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "All Privileges",
"Select Privileges" }));

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
jPanel3.setLayout(jPanel3Layout);
jPanel3Layout.setHorizontalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(16, 16, 16)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addGap(16, 16, 16)
                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jPanel3Layout.createSequentialGroup()
                            .addGap(0, 0, Short.MAX_VALUE)
                            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                .addGroup(jPanel3Layout.createSequentialGroup()
                                    .addGap(16, 16, 16)
                                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                        .addComponent(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                                            .addGroup(jPanel3Layout.createSequentialGroup()
                                                .addGap(16, 16, 16)
                                                .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                                                    .addGroup(jPanel3Layout.createSequentialGroup()
                                                        .addGap(16, 16, 16)
                                                        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                            .addComponent(nameField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                                            .addComponent(idField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                                            .addComponent(salaryField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 301, javax.swing.GroupLayout.PREFERRED_SIZE)))
                                                .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                    .addComponent(jPanel3Layout.createSequentialGroup()
                                                        .addGap(0, 0, Short.MAX_VALUE)
                                                        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                            .addComponent(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                                                                .addGroup(jPanel3Layout.createSequentialGroup()
                                                                    .addGap(16, 16, 16)
                                                                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                                                                        .addGroup(jPanel3Layout.createSequentialGroup()
                                                                            .addGap(16, 16, 16)
                                                                            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                .addComponent(lastNameLabel, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                                                                .addComponent(passwordLabel, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                                                                .addComponent(branchCodeLabel, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
                                                                                .addComponent(nameLabel, javax.swing.GroupLayout.PREFERRED_SIZE, 75, javax.swing.GroupLayout.PREFERRED_SIZE)
                                                                                .addComponent(idLabel, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
                                                                                .addComponent(privilegesLabel, javax.swing.GroupLayout.PREFERRED_SIZE, 93, javax.swing.GroupLayout.PREFERRED_SIZE)
                                                                                .addGap(36, 36, 36)
                                                                                .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                    .addComponent(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                                                                                        .addGroup(jPanel3Layout.createSequentialGroup()
                                                                                            .addGap(16, 16, 16)
                                                                                            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                                                                                                .addGroup(jPanel3Layout.createSequentialGroup()
                                                                                                    .addGap(16, 16, 16)
                                                                                                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                                        .addComponent(lastNameField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                                                                                        .addComponent(branchField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                                                                                        .addComponent(passwordField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                                                                                        .addComponent(startDateField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                                                                                        .addComponent(endDateField, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                                                                                        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                                            .addComponent(jPanel3Layout.createSequentialGroup()
                                                                                                                .addGap(0, 0, Short.MAX_VALUE)
                                                                                                                .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                                                    .addComponent(privilegesBox, javax.swing.GroupLayout.PREFERRED_SIZE, 0, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                                                                                                                    .addGap(Short.MAX_VALUE)))
                                                                                                            .addComponent(jPanel3Layout.createSequentialGroup()
                                                                                                                .addGap(0, 90, Short.MAX_VALUE)
                                                                                                                .addComponent(jPanel3Layout.createSequentialGroup()
                                                                                                                    .addGap(0, 0, Short.MAX_VALUE)
                                                                                                                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                                                        .addComponent(jPanel3Layout.createSequentialGroup()
                                                                                                                            .addGap(0, 0, Short.MAX_VALUE)
                                                            
```

```

jPanel3Layout.setVerticalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel3Layout.createSequentialGroup()
        .addGap(22, 22, 22)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(nameLabel)
            .addComponent(nameField))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(lastNameLabel)
            .addComponent(lastNameField))
        .addGap(17, 17, 17)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(idLabel)
            .addComponent(idField))
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(salaryLabel)
            .addComponent(salaryField))
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(branchCodeLabel)
            .addComponent(branchField))
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(passwordLabel)
            .addComponent(passwordField))
        .addGap(3, 3, 3)
        .addComponent(jLabel7)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(startDateLabel)
            .addComponent(startDateField))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jLabel6)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel3Layout.createSequentialGroup()
                .addComponent(endDateField, javax.swing.GroupLayout.PREFERRED_SIZE,
                    javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jLabel15))
            .addGroup(jPanel3Layout.createSequentialGroup()
                .addComponent(endDateLabel, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
                    javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jLabel19)))
        .addGap(18, 18, 18)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(privilegesLabel, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(privilegesBox, javax.swing.GroupLayout.PREFERRED_SIZE,
                javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(31, 31, 31))
    );
}

jTable.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
        new String [] {
            "Worker AT", "Name", "Last Name", "Salary", "Branch Code", "Password", "Start Date",
            "End Date", "All Privileges"
        }
    ) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {

```

```

        jTableMouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable);

selectAllButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
selectAllButton.setText("Show All");
selectAllButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        selectAllButtonActionPerformed(evt);
    }
});

saveButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
saveButton.setText("Insert");
saveButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        saveButtonActionPerformed(evt);
    }
});

clearButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
clearButton.setText("Clear");
clearButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        clearButtonActionPerformed(evt);
    }
});

deleteButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
deleteButton.setText("Delete");
deleteButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        deleteButtonActionPerformed(evt);
    }
});

backButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
backButton.setText("Back");
backButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        backButtonActionPerformed(evt);
    }
});

jTable4.setBorder(javax.swing.BorderFactory.createTitledBorder(""));
jTable4.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {},
        new String [] {
            "Branches"
        }
    },
    new boolean[] {
        false
    },
    new boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
));
jTable4.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable4MouseClicked(evt);
    }
});
jScrollPane3.setViewportView(jTable4);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jScrollPane3, javax.swing.GroupLayout.DEFAULT_SIZE, 680, Short.MAX_VALUE)
            .addContainerGap())
);

```

```

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
            .addGroup(0, 26, Short.MAX_VALUE)
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 562,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGroup(945, 945, 945))
            .addGroup(layout.createSequentialGroup()
                .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(selectAllButton, javax.swing.GroupLayout.PREFERRED_SIZE,
154, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(deleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 154,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGroup(18, 18, 18)
                        .addComponent(saveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 154,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(deleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 154,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(clearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 150,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(backButton, javax.swing.GroupLayout.PREFERRED_SIZE, 150,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 60,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(jScrollPane1)))
                    .addGroup(12, 12, 12))))
            );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 63,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(deleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 63,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, 63,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGroup(12, 12, 12)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                    .addComponent(jScrollPane3, javax.swing.GroupLayout.DEFAULT_SIZE, 412,
Short.MAX_VALUE)
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
Short.MAX_VALUE))
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(selectAllButton, javax.swing.GroupLayout.PREFERRED_SIZE, 412,
Short.MAX_VALUE)
                        .addComponent(deleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 412,
Short.MAX_VALUE)
                        .addComponent(clearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 412,
Short.MAX_VALUE))
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(backButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGroup(layout.createSequentialGroup()
                            .addComponent(selectAllButton, javax.swing.GroupLayout.PREFERRED_SIZE,
89, javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(deleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(clearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addGroup(13, 13, 13)
                            .addComponent(selectAllButton, javax.swing.GroupLayout.PREFERRED_SIZE,
89, javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(deleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(clearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addGroup(0, 0, Short.MAX_VALUE)))))
                        .addGroup(12, 12, 12))
                );
        );
    
```

```

        pack();
} // </editor-fold> //GEN-END:initComponents

private void lastNameFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_lastNameFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_lastNameFieldActionPerformed

private void salaryFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_salaryFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_salaryFieldActionPerformed

private void idFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_idFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_idFieldActionPerformed

private void branchFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_branchFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_branchFieldActionPerformed

private void passwordFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_passwordFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_passwordFieldActionPerformed

private void startDateFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_startDateFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_startDateFieldActionPerformed

private void endDateFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_endDateFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_endDateFieldActionPerformed

private void jTableMouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTableMouseClicked
    int selectedRowIndex = jTable.getSelectedRow();
    idField.setText(tmodel.getValueAt(selectedRowIndex ,0 ).toString());
    nameField.setText(tmodel.getValueAt(selectedRowIndex ,1 ).toString());
    lastNameField.setText(tmodel.getValueAt(selectedRowIndex ,2 ).toString());
    salaryField.setText(tmodel.getValueAt(selectedRowIndex ,3 ).toString());
    branchField.setText(tmodel.getValueAt(selectedRowIndex ,4 ).toString());
    passwordField.setText(tmodel.getValueAt(selectedRowIndex ,5).toString());
    startDateField.setText(tmodel.getValueAt(selectedRowIndex ,6).toString());

    try{
        endDateField.setText(tmodel.getValueAt(selectedRowIndex ,7 ).toString());
    }
    catch(NullPointerException e){
        endDateField.setText("");
    }

    if(tmodel.getValueAt(selectedRowIndex ,8).toString().equals("Y")){
        privilegesBox.setSelectedItem("All Privileges");
    }
    else{
        privilegesBox.setSelectedItem("Select Privileges");
    }
} //GEN-LAST:event_jTableMouseClicked

private void saveButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_saveButtonActionPerformed
    clearTable(tmodel);
    try {
        insertItAdmin();
    } catch (SQLException e) {
        e.printStackTrace();
    }
    selectAll();
} //GEN-LAST:event_saveButtonActionPerformed

```

```

private void clearButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_clearButtonActionPerformed
    //clear text fields
    nameField.setText("");
    lastNameField.setText("");
    idField.setText("");
    salaryField.setText("");
    branchField.setText("");
    passwordField.setText("");
    startDateField.setText("");
    endDateField.setText("");
} //GEN-LAST:event_clearButtonActionPerformed

private void selectAllButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_selectAllButtonActionPerformed
    clearTable(tmodel);
    selectAll();
} //GEN-LAST:event_selectAllButtonActionPerformed

private void deleteButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_deleteButtonActionPerformed
    // TODO add your handling code here:
    clearTable(tmodel);
    deleteItAdmin();
    selectAll();
} //GEN-LAST:event_deleteButtonActionPerformed

private void backButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_backButtonActionPerformed
    // TODO add your handling code here:
    this.dispose();
    menu.requestFocus();
} //GEN-LAST:event_backButtonActionPerformed

private void jTable4MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable4MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable4.getModel();
    int selectedRowIndex = jTable4.getSelectedRow();
    branchField.setText(model.getValueAt(selectedRowIndex , 0 ).toString());
} //GEN-LAST:event_jTable4MouseClicked

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) " >
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(ItAdmin.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(ItAdmin.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(ItAdmin.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(ItAdmin.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
}

```

```

//</editor-fold>
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new ItAdmin().setVisible(true);
    }
});

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton backButton;
private javax.swing.JLabel branchCodeLabel;
private javax.swing.JTextField branchField;
private javax.swing.JButton clearButton;
private javax.swing.JButton deleteButton;
private javax.swing.JTextField endDateField;
private javax.swing.JLabel endDateLabel;
private javax.swing.JTextField idField;
private javax.swing.JLabel jLabel;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel16;
private javax.swing.JLabel jLabel17;
private javax.swing.JLabel jLabel19;
private javax.swing.JPanel jPanel3;
private javax.swing.JScrollPane jScrollPane;
private javax.swing.JScrollPane jScrollPane3;
private javax.swing.JTable jTable;
private javax.swing.JTable jTable4;
private javax.swing.JTextField lastNameField;
private javax.swing.JLabel lastNameLabel;
private javax.swing.JTextField nameField;
private javax.swing.JLabel nameLabel;
private javax.swing.JTextField passwordField;
private javax.swing.JLabel passwordLabel;
private javax.swing.JComboBox<String> privilegesBox;
private javax.swing.JLabel privilegesLabel;
private javax.swing.JTextField salaryField;
private javax.swing.JLabel salaryLabel;
private javax.swing.JButton saveButton;
private javax.swing.JButton selectAllButton;
private javax.swing.JTextField startDateField;
private javax.swing.JLabel startDateLabel;
// End of variables declaration//GEN-END:variables
}

```

Log_Destination

```

package classes;

import static classes.Login.*;
import java.sql.*;
import javax.swing.table.DefaultTableModel;
import java.sql.PreparedStatement;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;

public class Log_Destination extends javax.swing.JFrame {

    public Log_Destination() throws SQLException {
        initComponents();
        table_load();
    }

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT * FROM log_destination ";
        ResultSet rs = st.executeQuery(table_sql);
    }
}

```

```

while(rs.next()){

    String log_type = rs.getString("log_type");
    String log_it_lname = rs.getString("log_it_lname");
    String log_timestamp = rs.getString("log_timestamp");
    String log_dst_id = String.valueOf(rs.getInt("log_dst_id"));
    String log_dst_name = rs.getString("log_dst_name");
    String log_dst_dscr = rs.getString("log_dst_dscr");
    String log_dst_rtype = rs.getString("log_dst_rtype");
    String log_dst_language = rs.getString("log_dst_language");
    String log_dst_location = rs.getString("log_dst_location");

    String tbData[] = {log_type,log_it_lname,log_timestamp ,log_dst_id
    ,log_dst_name,log_dst_dscr,log_dst_rtype,log_dst_language,log_dst_location };

    DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
    tblModel.addRow(tbData);
}

}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

    jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
    jLabel1.setText("History of Destinations Table");

    jTable1.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {

            },
        new String [] {
            "Action Type", "Admin Last Name", "Timestamp", "Destination ID", "Destination Name", "Describer",
            "Type", "Language", "Location"
        }
    ) {
        boolean[] canEdit = new boolean [] {
            false, false, false, false, false, false, false
        };

        public boolean isCellEditable(int rowIndex, int columnIndex) {
            return canEdit [columnIndex];
        }
    });
    jScrollPane1.setViewportView(jTable1);

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(144, 144, 144)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 467, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(144, 144, 144)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 445, javax.swing.GroupLayout.PREFERRED_SIZE))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(144, 144, 144)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 60, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(12, 12, 12)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 445, javax.swing.GroupLayout.PREFERRED_SIZE))
    );

    pack();
}// </editor-fold>//GEN-END:initComponents

public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
}

```

```

        */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(Log_Destination.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(Log_Destination.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(Log_Destination.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(Log_Destination.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
}
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        try {
            new Log_Destination().setVisible(true);
        } catch (SQLException ex) {
            Logger.getLogger(Log_Destination.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
});
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JLabel jLabel1;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JTable jTable1;
// End of variables declaration//GEN-END:variables
}

```

Log_Events

```

package classes;

import static classes.Login.*;
import java.sql.*;
import javax.swing.table.DefaultTableModel;

import java.sql.PreparedStatement;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;

public class Log_Event extends javax.swing.JFrame {

    public Log_Event() throws SQLException {
        initComponents();

        table_load();
    }
    PreparedStatement pst;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT * FROM log_event ";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String log_type = rs.getString("log_type");
            String log_it_lname = rs.getString("log_it_lname");
            String log_timestamp = String.valueOf("log_timestamp ");
            String log_ev_tr_id = String.valueOf(rs.getInt("log_ev_tr_id"));
            String log_ev_start = rs.getString("log_ev_start");
            String log_ev_end = rs.getString("log_ev_end");
            String log_ev_descr = rs.getString("log_ev_descr");
        }
    }
}

```

```

        String tbData[] = {log_type,log_it_lname,log_timestamp ,log_ev_tr_id ,log_ev_start,log_ev_end,
log_ev_descr};

        DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
        tblModel.addRow(tbData);
    }
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

    jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
    jLabel1.setText("History of Event Table");

    jTable1.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {

            },
        new String [] {
            "Action Type", "Admin Last Name", "Timestamp", "Event Travel ID", "Event Start Date", "Event End Date", "Event Describe"
        }
    );
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false, false
    };
    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
));
jScrollPane1.setViewportView(jTable1);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 1113, Short.MAX_VALUE)
            .addGap(16, 16, 16)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 0, Short.MAX_VALUE)
                .addGroup(layout.createSequentialGroup()
                    .addGap(395, 395, 395)
                    .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE, 0, Short.MAX_VALUE)
                    .addGap(386, 386, 386)
                )
            )
        );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addGap(27, 27, 27)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE, 0, Short.MAX_VALUE)
                .addGap(17, 17, 17)
            )
        );
    }

    pack();
}// </editor-fold>//GEN-END:initComponents

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    }
}

```

```

        } catch (ClassNotFoundException ex) {
            java.util.logging.Logger.getLogger(Log_Event.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
        } catch (InstantiationException ex) {
            java.util.logging.Logger.getLogger(Log_Event.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
        } catch (IllegalAccessException ex) {
            java.util.logging.Logger.getLogger(Log_Event.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
            java.util.logging.Logger.getLogger(Log_Event.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
        }
    } //
```

/* Create and display the form */

```

java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        try {
            new Log_Event().setVisible(true);
        } catch (SQLException ex) {
            Logger.getLogger(Log_Event.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
});
```

```

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JLabel jLabel1;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JTable jTable1;
// End of variables declaration//GEN-END:variables
}
}
```

Log_Reservation

```

package classes;

import static classes.Login.conn;
import java.sql.*;
import javax.swing.table.DefaultTableModel;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;

public class Log_Reservation extends javax.swing.JFrame {

    public Log_Reservation() throws SQLException {
        initComponents();

        table_load();
    }
    PreparedStatement pst;
```

```

public void table_load() throws SQLException {
    Statement st = conn.createStatement();
    String table_sql = "SELECT * FROM log_reservation ";
    ResultSet rs = st.executeQuery(table_sql);

    while(rs.next()){

        String log_type = rs.getString("log_type");
        String log_it_lname = rs.getString("log_it_lname");
        String log_timestamp = String.valueOf("Log_timestamp ");
        String log_res_tr_id = String.valueOf(rs.getInt("log_res_tr_id"));
        String log_res_seatnum = rs.getString("log_res_seatnum");
        String log_res_name = rs.getString("log_res_name");
        String log_res_lname = rs.getString("log_res_lname");
```

```

        String log_res_isadult = rs.getString("log_res_isadult");

        String tbData[] = {log_type,log_it_lname,log_timestamp ,log_res_tr_id
,log_res_seatnum,log_res_name, log_res_lname ,log_res_isadult };

        DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
        tblModel.addRow(tbData);
    }
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">/GEN-BEGIN:initComponents
private void initComponents() {
    jLabel1 = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

    jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
    jLabel1.setText("History of Reservation Table");

    jTable1.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {

            },
        new String [] {
            "Action Type", "Admin Last Name", "Timestamp", "Reservation Travel ID", "Reservation
Seat Number", "Name", "Last Name", "Adult / Minor"
        }
    ) {
        boolean[] canEdit = new boolean [] {
            false, false, false, false, false, false, false
        };

        public boolean isCellEditable(int rowIndex, int columnIndex) {
            return canEdit [columnIndex];
        }
    });
    jScrollPane1.setViewportView(jTable1);

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(14, 14, 14)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(14, 14, 14))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(14, 14, 14)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(14, 14, 14))
    );

    pack();
} // </editor-fold>/GEN-END:initComponents

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */

```

```

//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
/* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
 * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html 
 */
try {
    for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
        if ("Nimbus".equals(info.getName())) {
            javax.swing.UIManager.setLookAndFeel(info.getClassName());
            break;
        }
    }
} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Log_Reservation.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Log_Reservation.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Log_Reservation.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Log_Reservation.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
}

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        try {
            new Log_Reservation().setVisible(true);
        } catch (SQLException ex) {
            Logger.getLogger(Log_Reservation.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
});
```

// Variables declaration - do not modify//GEN-BEGIN:variables

private javax.swing.JLabel jLabel1;

private javax.swing.JScrollPane jScrollPane1;

private javax.swing.JTable jTable1;

// End of variables declaration//GEN-END:variables

}

Log_Travel_To

```

package classes;

import static classes.Login.conn;
import java.sql.*;
import javax.swing.table.DefaultTableModel;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;

public class Log_Travel_To extends javax.swing.JFrame {

PreparedStatement pst;
```

```

public void table_load() throws SQLException {
    Statement st = conn.createStatement();
    String table_sql = "SELECT log_type , log_it_lname , log_timestamp , log_to_tr_id
,log_to_dst_id,log_to_arrival,log_to_departure FROM log_travel_to ";
    ResultSet rs = st.executeQuery(table_sql);

    while(rs.next()){

        String log_type = rs.getString("log_type");
        String log_it_lname = rs.getString("log_it_lname");
        String log_timestamp = String.valueOf("log_timestamp");
        String log_to_tr_id = String.valueOf(rs.getInt("log_to_tr_id"));
        String log_to_dst_id = String.valueOf(rs.getInt("log_to_dst_id"));
        String log_to_arrival = rs.getString("log_to_arrival");
        String log_to_departure =rs.getString("log_to_departure");

        String tbData[] = {log_type,log_it_lname,log_timestamp ,log_to_tr_id
,log_to_dst_id,log_to_arrival,log_to_departure};

        DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
        tblModel.addRow(tbData);
    }
}

public Log_Travel_To() throws SQLException {
    initComponents();
    table_load();
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

    jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
    jLabel1.setText("History of Travel To Table");

    jTable1.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {

        },
        new String [] {
            "Action Type", "Admin Last Name", "Timestamp", "Travel ID", "Destination ID", "Arrival
", "Departure"
        }
    ) {
        boolean[] canEdit = new boolean [] {
            false, false, false, false, false, false
        };

        public boolean isCellEditable(int rowIndex, int columnIndex) {
            return canEdit [columnIndex];
        }
    });
    jScrollPane1.setViewportView(jTable1);

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            )
    );
}

```

```

);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE, 56, Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 435, Short.MAX_VALUE)
        .addGap(25, 25, 25))
);
}

pack();
}// </editor-fold>/GEN-END:initComponents

public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(Log_Travel_To.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(Log_Travel_To.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(Log_Travel_To.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(Log_Travel_To.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
    //</editor-fold>
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                new Log_Travel_To().setVisible(true);
            } catch (SQLException ex) {
                Logger.getLogger(Log_Travel_To.class.getName()).log(Level.SEVERE, null, ex);
            }
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JLabel jLabel1;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JTable jTable1;
// End of variables declaration//GEN-END:variables
}

```

Log_Trip

```
package classes;

import static classes.Login.conn;
import java.sql.*;
import javax.swing.table.DefaultTableModel;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;

public class Log_Trip extends javax.swing.JFrame {

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT log_type , log_it_lname , log_timestamp , log_tr_id
,log_tr_departure,log_tr_return,log_tr_maxseats,log_tr_cost,"
                + "log_tr_br_code, log_tr_gui_AT ,log_tr_drv_AT FROM log_trip ";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String log_type = rs.getString("log_type");
            String log_it_lname = rs.getString("log_it_lname");
            String log_timestamp = rs.getString("log_timestamp");
            String log_tr_id = String.valueOf(rs.getInt("log_tr_id"));
            String log_tr_departure = rs.getString("log_tr_departure");
            String log_tr_return = rs.getString("log_tr_return");
            String log_tr_maxseats =rs.getString("log_tr_maxseats");
            String log_tr_cost = rs.getString("log_tr_cost");
            String log_tr_br_code = rs.getString(rs.getInt("log_tr_br_code"));
            String log_tr_gui_AT = rs.getString("log_tr_gui_AT");
            String log_tr_drv_AT = rs.getString("log_tr_drv_AT");

            String tbData[] = {log_type,log_it_lname,log_timestamp ,log_tr_id,log_tr_departure ,
log_tr_return,log_tr_maxseats,log_tr_cost,log_tr_br_code,log_tr_gui_AT,log_tr_drv_AT};

            DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
            tblModel.addRow(tbData);
        }
    }

    public Log_Trip() throws SQLException {
        initComponents();

        table_load();
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();

        setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

        jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
        jLabel1.setText("History of Trip Table");

        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {

            },
            new String [] {

            }
        ));
    }
}
```

```

        "Action Type", "Admin Last Name", "Timestamp", "Trip ID", "Trip Departure", "Trip
Return", "Max Seats", "Cost", "Branch Code", "Guide AT", "Driver AT"
    }
)
{
    boolean[] canEdit = new boolean [] {
        false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
);
jScrollPane.setViewportView(jTable1);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jScrollPane1)
        .addContainerGap())
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
        .addContainerGap(437, Short.MAX_VALUE)
        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 335,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(440, 440, 440))
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE, 58, Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 437, Short.MAX_VALUE)
        .addGap(25, 25, 25))
);
}

pack();
}// </editor-fold>//GEN-END:initComponents

public static void main(String args[]) {

    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                new Log_Trip().setVisible(true);
            } catch (SQLException ex) {
                Logger.getLogger(Log_Trip.class.getName()).log(Level.SEVERE, null, ex);
            }
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JLabel jLabel1;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JTable jTable1;
// End of variables declaration//GEN-END:variables
}

```

Login

```

package classes;

import java.awt.event.*;
import java.io.BufferedReader;
import java.io.File;

```

```

import java.io.FileInputStream;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.io.InputStreamReader;
import java.nio.charset.StandardCharsets;
import java.sql.*;
import java.util.ArrayList;
import java.util.Random;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;

public class Login extends javax.swing.JFrame {
    public static Connection conn;
    public static Login login;

    public String username;
    public String password;

    public Login() {

        initComponents();
        login = this;
        //prosthtw enan keylistener gia na kanw focus sto password field otan valw to
username
        userNameField.addKeyListener(new KeyAdapter() {
            @Override
            public void keyPressed(KeyEvent e) {
                if (e.getKeyCode() == KeyEvent.VK_ENTER) {
                    passwordField.requestFocus();
                }
            }
        });
        //prosthtw enan keylistener gia na pataei to enterButton otan patisw to enter key
passwordField.addKeyListener(new KeyAdapter() {
            @Override
            public void keyPressed(KeyEvent e) {
                if (e.getKeyCode() == KeyEvent.VK_ENTER) {
                    enterButton.doClick();
                }
            }
        });
    }

    private void insert(){
        ArrayList<String> names = new ArrayList<>();
        ArrayList<String> lastNames = new ArrayList<>();

        File file = new File("../names.txt");

        try (FileInputStream fis = new FileInputStream(file);
             InputStreamReader isr = new InputStreamReader(fis, StandardCharsets.UTF_16);
             BufferedReader reader = new BufferedReader(isr)){
            String str;
            while ((str = reader.readLine()) != null) {
                String[] parts = str.split("\t");
                names.add(parts[0]);
                lastNames.add(parts[1]);
            }
        } catch (FileNotFoundException e) {
            System.out.println("File not found: " + e.getMessage());
        } catch (IOException ex) {
            Logger.getLogger(Login.class.getName()).log(Level.SEVERE, null, ex);
        }
        int di = 1;
        for(int j = 1; j<4 ; j++ ){

```

```

for (int i = 0; i <= 25000; i++) {
    Random random = new Random();
    int min = 0;
    int max = 9999;
    int index = random.nextInt(max - min) + min;
    String Name = names.get(index);
    String Last_Name = lastNames.get(index);

    String id = Integer.toString(di);

    min = 70;
    max = 200;
    int dep = random.nextInt(max - min) + min;
    String depos = Integer.toString(dep);
    PreparedStatement pst;

    try{
        pst= conn.prepareStatement("insert into
reservation_offers(rsv_name,rsv_lastname,deposit_amount,rsv_offer_id)values(?, ?, ?, ?)");
        pst.setString(1,Name);
        pst.setString(2,Last_Name);
        pst.setString(3,depos);
        pst.setString(4,id);
        pst.executeUpdate();
        }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}
di +=1;
}
}

private boolean connect(String uname, String pass){
try{
    //connect to the database
    String DB_URL =
"jdbc:mysql://localhost:3306/travel_agency?allowPublicKeyRetrieval=true";
    username = uname;
    password = pass;
    conn = DriverManager.getConnection(DB_URL, username, password);

}catch(SQLException e){
    e.printStackTrace();
    return false;
}
return true;
}
/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    jPanel11 = new javax.swing.JPanel();
    jLabel6 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    userNameField = new javax.swing.JTextField();
    passwordField = new javax.swing.JPasswordField();
    enterButton = new javax.swing.JButton();
    resetButton = new javax.swing.JButton();

```

```

        setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jPanel1.setBackground(javax.swing.UIManager.getDefaults().getColor("Button.default.focusedBorderColor"));

jLabel6.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jLabel6.setText("Username");

jLabel5.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jLabel5.setText("Password");

userNameField.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
userNameField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        userNameFieldActionPerformed(evt);
    }
});

passwordField.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N

enterButton.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
enterButton.setText("Enter");
enterButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        enterButtonActionPerformed(evt);
    }
});

resetButton.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
resetButton.setText("Clear");
resetButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        resetButtonActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(24, 24, 24)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(30, 30, 30)
                    .addComponent(userNameField, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(30, 30, 30)
                    .addComponent(passwordField, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(30, 30, 30)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addComponent(enterButton, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(30, 30, 30)
                    .addComponent(resetButton, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addGap(126, 126, 126)
                    .addComponent(preferredGap, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(53, 53, 53)
        )
);

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 39, Short.MAX_VALUE)
    .addComponent(resetButton, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(53, 53, 53))
);

```

```

jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(26, 26, 26)

    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 23,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(userNameField, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel5)
        .addComponent(passwordField, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(enterButton, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(resetButton, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(79, 79, 79))
);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, 148,
javax.swing.GroupLayout.PREFERRED_SIZE)
);
pack();
} // </editor-fold> //GEN-END:initComponents

private void enterButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_enterButtonActionPerformed
    String uname = userNameField.getText();
    String password = String.valueOf(passwordField.getPassword());
    boolean connected = false;
    connected = connect(uname, password);
    if(connected){
        Menu menu = new Menu();
        this.setVisible(false);
        menu.setLocationRelativeTo(null);
        menu.setVisible(true);
    }
    else {
        JOptionPane.showMessageDialog(this, "Username or Password Wrong..");
        userNameField.setText("");
        passwordField.setText("");
        userNameField.requestFocus();
    }
}

try {

```

```

        Statement statement = conn.createStatement();
        String reservation_offers ="reservation_offers";
        ResultSet resultSet = statement.executeQuery("SELECT COUNT(*) FROM "
+reservation_offers);

        if (resultSet.next()) {
            int count = resultSet.getInt(1);
            if (count == 0) {
                System.out.println("Table is empty");
                insert();
            } else {
                System.out.println("Table is not empty");
            }
        }
    } catch (SQLException e) {
        System.out.println("An error occurred while connecting to the database");
    }
} //GEN-LAST:event_enterButtonActionPerformed

private void resetButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_resetButtonActionPerformed
    userNameField.setText("");
    passwordField.setText("");
    userNameField.requestFocus();
} //GEN-LAST:event_resetButtonActionPerformed

private void userNameFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_userNameFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_userNameFieldActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code
(optional) " >
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look
and feel.
     * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
 */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
}
}

```

```

        java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
    //
```

```

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new Login().setVisible(true);
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton enterButton;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JPanel jPanel1;
private javax.swing.JPasswordField passwordField;
private javax.swing.JButton resetButton;
private javax.swing.JTextField userNameField;
// End of variables declaration//GEN-END:variables
}

```

Main

```

package classes;

public class Main{
    //public static Login login;

    public static void main(String[] args) {

        Login login = new Login();
        //center the window
        login.setLocationRelativeTo(null);
        // Show the login window
        login.setVisible(true);

    }
}

```

Menu

```

package classes;

import static classes.Login.login;
import java.sql.SQLException;
public class Menu extends javax.swing.JFrame {

    public static Menu menu;

    public Menu() {

        initComponents();
        menu = this;
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */

```

```

//@SuppressWarnings("unchecked");
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    insertButton = new javax.swing.JButton();
    insertButton1 = new javax.swing.JButton();
    jTabbedPane1 = new javax.swing.JTabbedPane();
    jPanel5 = new javax.swing.JPanel();
    jButton1 = new javax.swing.JButton();
    jButton6 = new javax.swing.JButton();
    jButton7 = new javax.swing.JButton();
    jButton8 = new javax.swing.JButton();
    jButton12 = new javax.swing.JButton();
    jButton19 = new javax.swing.JButton();
    jButton20 = new javax.swing.JButton();
    jPanel11 = new javax.swing.JPanel();
    jButton3 = new javax.swing.JButton();
    jButton5 = new javax.swing.JButton();
    jButton13 = new javax.swing.JButton();
    jButton4 = new javax.swing.JButton();
    jPanel7 = new javax.swing.JPanel();
    jButton14 = new javax.swing.JButton();
    jButton15 = new javax.swing.JButton();
    jButton16 = new javax.swing.JButton();
    jButton17 = new javax.swing.JButton();
    jButton18 = new javax.swing.JButton();
    jPanel6 = new javax.swing.JPanel();
    jButton9 = new javax.swing.JButton();
    jButton10 = new javax.swing.JButton();
    jButton11 = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    insertButton.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    insertButton.setText("Exit");
    insertButton.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            insertButtonActionPerformed(evt);
        }
    });

    insertButton1.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    insertButton1.setText("Back");
    insertButton1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            insertButton1ActionPerformed(evt);
        }
    });

    jTabbedPane1.setFont(new java.awt.Font("sansserif", 0, 18)); // NOI18N
    jPanel5.setToolTipText("");

    jButton1.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
    jButton1.setText("Branches");
    jButton1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton1ActionPerformed(evt);
        }
    });

    jButton6.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
    jButton6.setText("Trips / Events");
    jButton6.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton6ActionPerformed(evt);
        }
    });

    jButton7.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
    jButton7.setText("Destinations");
    jButton7.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton7ActionPerformed(evt);
        }
    });
}

```

```

});;

jButton8.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton8.setText("Reservations");
jButton8.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton8ActionPerformed(evt);
    }
});
};

jButton12.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton12.setText("Offers");
jButton12.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton12ActionPerformed(evt);
    }
});
};

jButton19.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton19.setText("Reservation Offers");
jButton19.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton19ActionPerformed(evt);
    }
});
};

jButton20.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton20.setText("Travel To Log");
jButton20.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton20ActionPerformed(evt);
    }
});
};

javax.swing.GroupLayout jPanel5Layout = new javax.swing.GroupLayout(jPanel5);
jPanel5.setLayout(jPanel5Layout);
jPanel5Layout.setHorizontalGroup(
    jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel5Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel5Layout.createSequentialGroup()
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 153, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                    .addComponent(jButton8, javax.swing.GroupLayout.PREFERRED_SIZE, 153, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel5Layout.createSequentialGroup()
                    .addComponent(jButton20, javax.swing.GroupLayout.PREFERRED_SIZE, 160, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                    .addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(jPanel5Layout.createSequentialGroup()
                            .addComponent(jButton7, javax.swing.GroupLayout.PREFERRED_SIZE, 160, javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                            .addComponent(jButton12, javax.swing.GroupLayout.PREFERRED_SIZE, 160, javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGroup(jPanel5Layout.createSequentialGroup()
                            .addComponent(jButton19, javax.swing.GroupLayout.PREFERRED_SIZE, 153, javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                            .addComponent(jButton6, javax.swing.GroupLayout.PREFERRED_SIZE, 153, javax.swing.GroupLayout.PREFERRED_SIZE))))))
            .addGapContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );
    jPanel5Layout.setVerticalGroup(
        jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel5Layout.createSequentialGroup()
                .addGap(18, 18, 18)
                .addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton1)
                    .addComponent(jButton8))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton20)
                    .addComponent(jButton7)
                    .addComponent(jButton12)))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton19)
                    .addComponent(jButton6)))
                .addGap(18, 18, 18)
                .addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton7)
                    .addComponent(jButton6)
                    .addComponent(jButton1)))
                .addGap(18, 18, 18)
                .addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton12)
                    .addComponent(jButton19)))
            .addGapContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );
    jPanel5Layout.setVerticalGroup(
        jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel5Layout.createSequentialGroup()
                .addGap(17, 17, 17)
                .addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton7)
                    .addComponent(jButton6)
                    .addComponent(jButton1)))
                .addGap(18, 18, 18)
                .addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton12)
                    .addComponent(jButton19)))
            .addGapContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );
    );
);

```

```

        .addComponent(jButton19)
        .addComponent(jButton12)
        .addComponent(jButton8))
    .addGap(18, 18, 18)
    .addComponent(jButton20)
    .addContainerGap(82, Short.MAX_VALUE))
);
jTabbedPane1.addTab("Manipulate Table", jPanel5);

jButton3.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton3.setText("Drivers");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});
jButton5.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton5.setText("Guides");
jButton5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton5ActionPerformed(evt);
    }
});
jButton13.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton13.setText("IT Admis");
jButton13.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton13ActionPerformed(evt);
    }
});
jButton4.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton4.setText("Admins");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGroup(jPanel1Layout.createSequentialGroup()
                            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jButton13, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                            .addGap(10, 10, 10)
                            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                .addGroup(jPanel1Layout.createSequentialGroup()
                                    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                        .addGroup(jPanel1Layout.createSequentialGroup()
                                            .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                .addGroup(jPanel1Layout.createSequentialGroup()
                                                    .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                                                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 10, javax.swing.GroupLayout.PREFERRED_SIZE)
                                                    .addComponent(jButton13, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                                                .addGroup(jPanel1Layout.createSequentialGroup()
                                                    .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                        .addGroup(jPanel1Layout.createSequentialGroup()
                                                            .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                .addGroup(jPanel1Layout.createSequentialGroup()
                                                                    .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                        .addGroup(jPanel1Layout.createSequentialGroup()
                                                                            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                    .addGroup(jPanel1Layout.createSequentialGroup()
                                                                                        .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                            .addGroup(jPanel1Layout.createSequentialGroup()
                                                                                                .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                                    .addGroup(jPanel1Layout.createSequentialGroup()
                                                                                                        .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                                            .addGroup(jPanel1Layout.createSequentialGroup()
                                                                                                                .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                                                    .addGroup(jPanel1Layout.createSequentialGroup()
                                                                                                                        .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                                                            .addGroup(jPanel1Layout.createSequentialGroup()
                                                                                                                                .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                                                                .addGroup(jPanel1Layout.createSequentialGroup()
                                                                                                                                    .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                                                                        .addGroup(jPanel1Layout.createSequentialGroup()
                                                                                                                                            .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                                                                                                .addGroup(jPanel1Layout.createSequentialGroup()
                                                                                                                                                    .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                                                ................................................................

```

```

        .addGroup(jPanel11Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jButton3)
            .addComponent(jButton4))
        .addContainerGap(143, Short.MAX_VALUE))
    );

jTabbedPane1.addTab("Workers", jPanel1);

 jButton14.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton14.setText("Destination Log");
jButton14.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton14ActionPerformed(evt);
    }
});

jButton15.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton15.setText("Event Log");
jButton15.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton15ActionPerformed(evt);
    }
});

jButton16.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton16.setText("Reservation Log");
jButton16.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton16ActionPerformed(evt);
    }
});

jButton17.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton17.setText("Travel To Log");
jButton17.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton17ActionPerformed(evt);
    }
});

jButton18.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton18.setText("Trip Log");
jButton18.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton18ActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel7Layout = new javax.swing.GroupLayout(jPanel7);
jPanel7.setLayout(jPanel7Layout);
jPanel7Layout.setHorizontalGroup(
    jPanel7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel7Layout.createSequentialGroup()
            .addGroup(jPanel7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
                .addGroup(jPanel7Layout.createSequentialGroup()
                    .addGap(143, 143, 143)
                    .addComponent(jButton18, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addGap(22, 22, 22))
                .addGroup(jPanel7Layout.createSequentialGroup()
                    .addGap(143, 143, 143)
                    .addComponent(jButton14, javax.swing.GroupLayout.PREFERRED_SIZE, 189, javax.swing.GroupLayout.PREFERRED_SIZE, Short.MAX_VALUE)
                    .addGap(22, 22, 22))
                .addGroup(jPanel7Layout.createSequentialGroup()
                    .addGap(143, 143, 143)
                    .addComponent(jButton15, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addGap(22, 22, 22))
                .addGroup(jPanel7Layout.createSequentialGroup()
                    .addGap(143, 143, 143)
                    .addComponent(jButton16, javax.swing.GroupLayout.PREFERRED_SIZE, 189, javax.swing.GroupLayout.PREFERRED_SIZE, Short.MAX_VALUE)
                    .addGap(22, 22, 22)))
            .addGroup(jPanel7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel7Layout.createSequentialGroup()
                    .addGap(120, 120, 120)
                    .addComponent(jButton17, javax.swing.GroupLayout.PREFERRED_SIZE, 189, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel7Layout.createSequentialGroup()
                    .addGap(104, 104, 104)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 189, javax.swing.GroupLayout.PREFERRED_SIZE)))
            )
        )
    );

```

```

jPanel7Layout.setVerticalGroup(
    jPanel7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel7Layout.Alignment.TRAILING, jPanel7Layout.createSequentialGroup()
            .addContainerGap()
            .addGroup(jPanel7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton18)
                .addComponent(jButton15))
            .addGap(18, 18, 18)
            .addGroup(jPanel7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton14)
                .addComponent(jButton16))
            .addGap(18, 18, 18)
            .addComponent(jButton17)
            .addContainerGap(93, Short.MAX_VALUE)))
);

jTabbedPane1.addTab("Logs", jPanel7);

jButton9.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton9.setText("Trips In Date Range");
jButton9.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton9ActionPerformed(evt);
    }
});

jButton10.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton10.setText("Reserved Offers");
jButton10.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton10ActionPerformed(evt);
    }
});

jButton11.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N
jButton11.setText("Branch Info");
jButton11.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton11ActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel6Layout = new javax.swing.GroupLayout(jPanel6);
jPanel6.setLayout(jPanel6Layout);
jPanel6Layout.setHorizontalGroup(
    jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel6Layout.createSequentialGroup()
            .addGroup(jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jButton11, javax.swing.GroupLayout.PREFERRED_SIZE, 199,
                    javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton10, javax.swing.GroupLayout.PREFERRED_SIZE, 199,
                    javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton9, javax.swing.GroupLayout.PREFERRED_SIZE, 199,
                    javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(300, 300, 300))
);
jPanel6Layout.setVerticalGroup(
    jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel6Layout.createSequentialGroup()
            .addGroup(jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jButton11, javax.swing.GroupLayout.PREFERRED_SIZE, 199,
                    javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton10, javax.swing.GroupLayout.PREFERRED_SIZE, 199,
                    javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton9, javax.swing.GroupLayout.PREFERRED_SIZE, 199,
                    javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(300, 300, 300))
);

jTabbedPane1.addTab("Procedures", jPanel6);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

```

```

        .addGroup(layout.createSequentialGroup()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
                .addGroup(layout.createSequentialGroup()
                    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(insertButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 72,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                    .addComponent(insertButton, javax.swing.GroupLayout.PREFERRED_SIZE, 72,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(6, 6, 6))
                .addComponent(jTabbedPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 510,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGapGap(0, 28, Short.MAX_VALUE))
        );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jTabbedPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 246,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(insertButton)
                .addComponent(insertButton1))
            .addGapContainerGap(21, Short.MAX_VALUE))
        );
    pack();
} // </editor-fold> //GEN-END: initComponents

private void insertButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_insertButtonActionPerformed
    System.exit(0);
} //GEN-LAST:event_insertButtonActionPerformed

private void insertButton1ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_insertButton1ActionPerformed
    // TODO add your handling code here:
    this.setVisible(false);
    login.setVisible(true);
} //GEN-LAST:event_insertButton1ActionPerformed

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton5ActionPerformed
    // TODO add your handling code here:
    try {
        GuideWorker frame = new GuideWorker();
        frame.setLocationRelativeTo(null);
        frame.setVisible(true);
    } catch (SQLException ex) {
        ex.printStackTrace();
    }
} //GEN-LAST:event_jButton5ActionPerformed

private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton6ActionPerformed
    // TODO add your handling code here:
    try {
        TripEvent frame = new TripEvent();
        frame.setLocationRelativeTo(null);
        frame.setVisible(true);
    } catch (SQLException ex) {
        ex.printStackTrace();
    }
} //GEN-LAST:event_jButton6ActionPerformed

private void jButton7ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton7ActionPerformed
    // TODO add your handling code here:
    try {
        Destination frame = new Destination();
        frame.setLocationRelativeTo(null);
        frame.setVisible(true);
    } catch (SQLException ex) {

```

```

        ex.printStackTrace();
    }
} //GEN-LAST:event_jButton7ActionPerformed

private void jButton8ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton8ActionPerformed
    // TODO add your handling code here:
    try {
        // TODO add your handling code here:
        Reservations frame = new Reservations();
        frame.setLocationRelativeTo(null);
        frame.setVisible(true);
    } catch (SQLException ex) {
        ex.printStackTrace();
    }
} //GEN-LAST:event_jButton8ActionPerformed

private void jButton13ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton13ActionPerformed
    ItAdmin frame = new ItAdmin();
    frame.setLocationRelativeTo(null);
    frame.setVisible(true);
} //GEN-LAST:event_jButton13ActionPerformed

private void jButton15ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton15ActionPerformed
    try {
        // TODO add your handling code here:
        Log_Event frame = new Log_Event();
        frame.setLocationRelativeTo(null);
        frame.setVisible(true);
    } catch (SQLException ex) {
        ex.printStackTrace();
    }
} //GEN-LAST:event_jButton15ActionPerformed

private void jButton16ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton16ActionPerformed
    // TODO add your handling code here:
    try {
        // TODO add your handling code here:
        Log_Reservation frame = new Log_Reservation();
        frame.setLocationRelativeTo(null);
        frame.setVisible(true);
    } catch (SQLException ex) {
        ex.printStackTrace();
    }
} //GEN-LAST:event_jButton16ActionPerformed

private void jButton17ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton17ActionPerformed
    // TODO add your handling code here:
    try {
        // TODO add your handling code here:
        Log_Travel_To frame = new Log_Travel_To();
        frame.setLocationRelativeTo(null);
        frame.setVisible(true);
    } catch (SQLException ex) {
        ex.printStackTrace();
    }
} //GEN-LAST:event_jButton17ActionPerformed

private void jButton9ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton9ActionPerformed
    // TODO add your handling code here:
    ProcedureResults frame = new ProcedureResults();
    frame.setLocationRelativeTo(null);
    frame.setVisible(true);
} //GEN-LAST:event_jButton9ActionPerformed

private void jButton10ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton10ActionPerformed
    // TODO add your handling code here:
    ProcedureResults frame = new ProcedureResults();

```

```

        frame.setLocationRelativeTo(null);
        frame.setVisible(true);
    } //GEN-LAST:event_jButton10ActionPerformed

    private void jButton11ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton11ActionPerformed
        // TODO add your handling code here:
        BranchInfo frame = new BranchInfo();
        frame.setLocationRelativeTo(null);
        frame.setVisible(true);
    } //GEN-LAST:event_jButton11ActionPerformed

    private void jButton18ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton18ActionPerformed
        try {
            // TODO add your handling code here:
            Log_Trip frame = new Log_Trip();
            frame.setLocationRelativeTo(null);
            frame.setVisible(true);
        } catch (SQLException ex) {
            ex.printStackTrace();
        }
    } //GEN-LAST:event_jButton18ActionPerformed

    private void jButton14ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton14ActionPerformed
        // TODO add your handling code here:
        try {
            // TODO add your handling code here:
            Log_Destination frame = new Log_Destination();
            frame.setLocationRelativeTo(null);
            frame.setVisible(true);
        } catch (SQLException ex) {
            ex.printStackTrace();
        }
    } //GEN-LAST:event_jButton14ActionPerformed

    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton3ActionPerformed
        // TODO add your handling code here:
        try {
            // TODO add your handling code here:
            DriverWorker frame = new DriverWorker();
            frame.setLocationRelativeTo(null);
            frame.setVisible(true);
        } catch (SQLException ex) {
            ex.printStackTrace();
        }
    } //GEN-LAST:event_jButton3ActionPerformed

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton1ActionPerformed
        // TODO add your handling code here:
        try {
            // TODO add your handling code here:
            Branches frame = new Branches();
            frame.setLocationRelativeTo(null);
            frame.setVisible(true);
        } catch (SQLException ex) {
            ex.printStackTrace();
        }
    } //GEN-LAST:event_jButton1ActionPerformed

    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton4ActionPerformed
        // TODO add your handling code here:
        try {
            // TODO add your handling code here:
            AdminWorker frame = new AdminWorker();
            frame.setLocationRelativeTo(null);
            frame.setVisible(true);
        } catch (SQLException ex) {
            ex.printStackTrace();
        }
    } //GEN-LAST:event_jButton4ActionPerformed

```

```

    private void jButton12ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton12ActionPerformed
        // TODO add your handling code here:
        try {
            // TODO add your handling code here:
            Offers frame = new Offers();
            frame.setLocationRelativeTo(null);
            frame.setVisible(true);
        } catch (SQLException ex) {
            ex.printStackTrace();
        }
    }//GEN-LAST:event_jButton12ActionPerformed

    private void jButton19ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton19ActionPerformed
        // TODO add your handling code here:
        try {
            // TODO add your handling code here:
            ReservationOffers frame = new ReservationOffers();
            frame.setLocationRelativeTo(null);
            frame.setVisible(true);
        } catch (SQLException ex) {
            ex.printStackTrace();
        }
    }//GEN-LAST:event_jButton19ActionPerformed

    private void jButton20ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton20ActionPerformed
        try {
            // TODO add your handling code here:
            Travel_To frame = new Travel_To();
            frame.setLocationRelativeTo(null);
            frame.setVisible(true);
        } catch (SQLException ex) {
            ex.printStackTrace();
        }
    }//GEN-LAST:event_jButton20ActionPerformed

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) " >
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
         * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Menu.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Menu.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Menu.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Menu.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        }
        // </editor-fold>

        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new Menu().setVisible(true);
            }
        });
    }
}

```

```

        }
    });

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton insertButton;
private javax.swing.JButton insertButton1;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton10;
private javax.swing.JButton jButton11;
private javax.swing.JButton jButton12;
private javax.swing.JButton jButton13;
private javax.swing.JButton jButton14;
private javax.swing.JButton jButton15;
private javax.swing.JButton jButton16;
private javax.swing.JButton jButton17;
private javax.swing.JButton jButton18;
private javax.swing.JButton jButton19;
private javax.swing.JButton jButton20;
private javax.swing.JButton jButton3;
private javax.swing.JButton jButton4;
private javax.swing.JButton jButton5;
private javax.swing.JButton jButton6;
private javax.swing.JButton jButton7;
private javax.swing.JButton jButton8;
private javax.swing.JButton jButton9;
private javax.swing.JPanel jPanel11;
private javax.swing.JPanel jPanel15;
private javax.swing.JPanel jPanel16;
private javax.swing.JPanel jPanel17;
private javax.swing.JTabbedPane jTabbedPane1;
// End of variables declaration//GEN-END:variables
}

```

Offers

```

package classes;

import static classes.Login.conn;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class Offers extends javax.swing.JFrame {

    public Offers() throws SQLException {
        initComponents();
        table_load();
        table_load2();
    }

    PreparedStatement pst;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT offer_id,offer_trip_start_date , offer_trip_end_date ,Price_per_Person ,offer_dst_id
from offers";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String offer_id = String.valueOf(rs.getInt("offer_id"));
            String offer_trip_start_date = rs.getString("offer_trip_start_date");
            String offer_trip_end_date= rs.getString("offer_trip_end_date");
            String Price_per_Person = String.valueOf(rs.getInt("Price_per_Person"));
            String offer_dst_id= String.valueOf(rs.getInt("offer_dst_id"));
        }
    }
}

```

```

        String tbData[] = {offer_id,offer_trip_start_date , offer_trip_end_date, Price_per_Person ,offer_dst_id};

        DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
        tblModel.addRow(tbData);
    }

}

public void table_load2() throws SQLException {
    Statement st = conn.createStatement();
    String table_sql = "SELECT dst_id , dst_name, dst_dscr , dst_rtype FROM destination";
    ResultSet rs = st.executeQuery(table_sql);

    while(rs.next()){

        String dst_id= String.valueOf(rs.getInt("dst_id"));
        String dst_name= rs.getString("dst_name");
        String dst_dscr = rs.getString("dst_dscr");
        String dst_rtype = rs.getString("dst_rtype");

        String tbData[] = {dst_name, dst_dscr , dst_rtype, dst_id};

        DefaultTableModel tblModel = (DefaultTableModel)jTable2.getModel();
        tblModel.addRow(tbData);
    }
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jPanel3 = new javax.swing.JPanel();
    jLabel5 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    StartDateField = new javax.swing.JTextField();
    jLabel8 = new javax.swing.JLabel();
    StartEndField = new javax.swing.JTextField();
    LnameField = new javax.swing.JTextField();
    jLabel9 = new javax.swing.JLabel();
    PriceField = new javax.swing.JTextField();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();
    jScrollPane2 = new javax.swing.JScrollPane();
    jTable2 = new javax.swing.JTable();
    ExitButton = new javax.swing.JButton();
    ClearButton = new javax.swing.JButton();
    DeleteButton1 = new javax.swing.JButton();
    UpdateButton2 = new javax.swing.JButton();
    SaveButton = new javax.swing.JButton();
    jPanel4 = new javax.swing.JPanel();
    jLabel13 = new javax.swing.JLabel();
    SearchField1 = new javax.swing.JTextField();

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

    jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
    jLabel1.setText("Offers");

    jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Add Offers",
    javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT_POSITION, new
    java.awt.Font("Segoe UI", 0, 24))); // NOI18N

    jLabel5.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel5.setText("End Date");

    jLabel7.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel7.setText("Price");

    StartDateField.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            StartDateFieldActionPerformed(evt);
        }
    });

    jLabel8.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel8.setText("Destination ID");

    StartEndField.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            StartEndFieldActionPerformed(evt);
        }
    });

    LnameField.setEditable(false);
    LnameField.addActionListener(new java.awt.event.ActionListener() {

```



```

        }
    });
jScrollPane1.setViewportView(jTable1);

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        },
    new String [] {
        "Destinatio Name", "Discriber", "Type", "Destination ID"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable2MouseClicked(evt);
    }
});
jScrollPane2.setViewportView(jTable2);

ExitButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
ExitButton.setText("Exit");
ExitButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExitButtonActionPerformed(evt);
    }
});

ClearButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
ClearButton.setText("Clear");
ClearButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ClearButtonActionPerformed(evt);
    }
});

DeleteButton1.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
DeleteButton1.setText("Delete");
DeleteButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteButton1ActionPerformed(evt);
    }
});

UpdateButton2.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
UpdateButton2.setText("Update");
UpdateButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateButton2ActionPerformed(evt);
    }
});

SaveButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
SaveButton.setText("Save");
SaveButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SaveButtonActionPerformed(evt);
    }
});

jPanel4.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Search",
    javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT_POSITION, new
    java.awt.Font("Segoe UI", 0, 22))); // NOI18N

jLabel13.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel13.setText("Offer ID");

SearchField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchField1ActionPerformed(evt);
    }
});
SearchField1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        SearchField1KeyReleased(evt);
    }
});

```

```

javax.swing.GroupLayout jPanel4Layout = new javax.swing.GroupLayout(jPanel4);
jPanel4.setLayout(jPanel4Layout);
jPanel4Layout.setHorizontalGroup(
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel4Layout.createSequentialGroup()
            .addGap(15, 15, 15)
            .addComponent(jLabel13, javax.swing.GroupLayout.PREFERRED_SIZE, 130,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
                javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(SearchField1, javax.swing.GroupLayout.PREFERRED_SIZE, 269,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGapGap(0, 7, Short.MAX_VALUE))
    );
jPanel4Layout.setVerticalGroup(
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel4Layout.createSequentialGroup()
            .addGap(15, 15, 15)
            .addComponent(SearchField1, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, Short.MAX_VALUE))
    );
}

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(14, 14, 14)
            .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 126,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGapGap(32, 32, 32)
            .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 124,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(34, 34, 34)
            .addComponent>DeleteButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 127,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addGap(14, 14, 14)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                        .addComponent(jLabel1, javax.swing.GroupLayout.Alignment.LEADING,
                            javax.swing.GroupLayout.PREFERRED_SIZE, 189, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(jPanel3, javax.swing.GroupLayout.Alignment.LEADING,
                            javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
                            javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGroup(layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 127,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 852, Short.MAX_VALUE)
                    .addComponent(jScrollPane1)
                    .addGapGap(0, 20, Short.MAX_VALUE)))
            )
        )
    );
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(14, 14, 14)
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 189,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 127,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 852, Short.MAX_VALUE)
            .addComponent(jScrollPane1)
            .addGapGap(0, 20, Short.MAX_VALUE))
        )
    );
}

```

```

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(DeleteButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap(26, Short.MAX_VALUE))
    );

    pack();
}// </editor-fold> //GEN-END:initComponents

private void StartDateFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_StartDateFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_StartDateFieldActionPerformed

private void StartEndFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_StartEndFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_StartEndFieldActionPerformed

private void LnameFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_LnameFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_LnameFieldActionPerformed

private void jTable2MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable2MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable2.getModel();
    int selectedRowIndex = jTable2.getSelectedRow();
    StartDateField.setText(model.getValueAt(selectedRowIndex ,1 ).toString());
    StartEndField.setText(model.getValueAt(selectedRowIndex ,2 ).toString());
    LnameField.setText(model.getValueAt(selectedRowIndex ,3 ).toString());
} //GEN-LAST:event_jTable2MouseClicked

private void jTable1MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable1MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
    int selectedRowIndex = jTable1.getSelectedRow();
    SearchField1.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
    StartDateField.setText(model.getValueAt(selectedRowIndex ,1 ).toString());
    StartEndField.setText(model.getValueAt(selectedRowIndex ,2 ).toString());
    PriceField.setText(model.getValueAt(selectedRowIndex ,3 ).toString());
    LnameField.setText(model.getValueAt(selectedRowIndex ,4 ).toString());
} //GEN-LAST:event_jTable1MouseClicked

private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_ExitButtonActionPerformed
    System.exit(0);
} //GEN-LAST:event_ExitButtonActionPerformed

private void ClearButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_ClearButtonActionPerformed
    StartDateField.setText("");
    StartEndField.setText("");
    PriceField.setText("");
    LnameField.setText("");
    SearchField1.setText("");
} //GEN-LAST:event_ClearButtonActionPerformed

private void DeleteButton1ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_DeleteButton1ActionPerformed
    String search1 ;
    search1 = SearchField1.getText();
    try{
        pst= conn.prepareStatement("delete from offers WHERE offer_id =?");
        pst.setString(1, search1);
        pst.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Deleted!!!");
        jTable1.setModel(new DefaultTableModel(null , new String[]{"Offer ID","Trip Start Date","Trip End Date","Price", "Destination ID"}));
        table_load();
        StartDateField.setText("");
        StartEndField.setText("");
    }
}

```

```

        PriceField.setText("");
        LnameField.setText("");
        SearchField1.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_DeleteButton1ActionPerformed

private void UpdateButton2ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_UpdateButton2ActionPerformed

    String offer_trip_start_date ,offer_trip_end_date ,Price_per_Person ,offer_dst_id ;

    offer_trip_start_date = StartDateField.getText();
    offer_trip_end_date = StartEndField.getText();
    Price_per_Person =PriceField.getText();
    offer_dst_id = LnameField.getText();
    String sr1 = SearchField1.getText();

    try{

        pst= conn.prepareStatement("update offers set offer_trip_start_date=? , offer_trip_end_date=? ,
Price_per_Person =?, offer_dst_id = ? WHERE offer_id =?");
        pst.setString(1,offer_trip_start_date);
        pst.setString(2,offer_trip_end_date);
        pst.setString(3,Price_per_Person);
        pst.setString(4,offer_dst_id);
        pst.setString(5,sr1);
        pst.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Updated!!!");
        jTable1.setModel(new DefaultTableModel(null , new String[]{"Offer ID","Trip Start Date","Trip
End Date","Price", "Destination ID"}));
        table_load();
        StartDatefield.setText("");
        StartEndField.setText("");
        PriceField.setText("");
        LnameField.setText("");
        SearchField1.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_UpdateButton2ActionPerformed

private void SaveButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_SaveButtonActionPerformed

    String offer_trip_start_date ,offer_trip_end_date ,Price_per_Person ,offer_dst_id ;

    offer_trip_start_date = StartDateField.getText();
    offer_trip_end_date = StartEndField.getText();
    Price_per_Person =PriceField.getText();
    offer_dst_id = LnameField.getText();
    try{

        pst= conn.prepareCall("insert into offers
(offer_trip_start_date,offer_trip_end_date,Price_per_Person,offer_dst_id )values(?, ?, ?, ?)");
        pst.setString(1,offer_trip_start_date);
        pst.setString(2,offer_trip_end_date);
        pst.setString(3,Price_per_Person);
        pst.setString(4,offer_dst_id);
        pst.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Updated!!!");
        jTable1.setModel(new DefaultTableModel(null , new String[]{"Offer ID","Trip Start Date","Trip End
Date","Price", "Destination ID"}));
        table_load();
        StartDatefield.setText("");
        StartEndField.setText("");
        PriceField.setText("");
        LnameField.setText("");
        SearchField1.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_SaveButtonActionPerformed

private void SearchField1ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_SearchField1ActionPerformed
    // TODO add your handling code here:
}//GEN-LAST:event_SearchField1ActionPerformed

private void SearchField1KeyReleased(java.awt.event.KeyEvent evt) { //GEN-FIRST:event_SearchField1KeyReleased
    //GEN-LAST:event_SearchField1KeyReleased
}

```

```

private void PriceFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_PriceFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_PriceFieldActionPerformed

/** 
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html 
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(Offers.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(Offers.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(Offers.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(Offers.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
    // </editor-fold>
    // </editor-fold>
}

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        try {
            new Offers().setVisible(true);
        } catch (SQLException ex) {
            Logger.getLogger(Offers.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
});

// Variables declaration - do not modify //GEN-BEGIN:variables
private javax.swing.JButton ClearButton;
private javax.swing.JButton DeleteButton1;
private javax.swing.JButton ExitButton;
private javax.swing.JTextField LnameField;
private javax.swing.JTextField PriceField;
private javax.swing.JButton SaveButton;
private javax.swing.JTextField SearchField1;
private javax.swing.JTextField StartDateField;
private javax.swing.JTextField StartEndField;
private javax.swing.JButton UpdateButton2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel13;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel17;
private javax.swing.JLabel jLabel18;
private javax.swing.JLabel jLabel19;
private javax.swing.JPanel jPanel13;
private javax.swing.JPanel jPanel14;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;

```

```
// End of variables declaration//GEN-END:variables
}
```

ProcedureResults

```
package classes;

import static classes.Login.*;
import static classes.Menu.menu;
import java.sql.*;
import javax.swing.table.*;

public class ProcedureResults extends javax.swing.JFrame {

    //private Connection conn;
    private DefaultTableModel tmodel1;
    private DefaultTableModel tmodel2_1;
    private DefaultTableModel tmodel2_2;

    public ProcedureResults() {
        initComponents();
    }

    private int call_search_trip(int branch_code, String start_date, String end_date) {
        try{
            //create statement object
            CallableStatement stmt = conn.prepareCall("{call search_trip(?, ?, ?)}");

            //set procedure input args
            stmt.setInt(1, branch_code);
            stmt.setString(2, start_date);
            stmt.setString(3, end_date);

            //execute procedure
            stmt.execute();

            //process the results
            ResultSet rs = stmt.getResultSet();
            if(rs == null){
                return -1;
            }
            ResultSetMetaData metaData = rs.getMetaData();
            int columnCount = metaData.getColumnCount();

            //prosthetw tis sthles tou sql pianaka sto TableModel mono gia tin prwti klisi
            tou procedure
            if(tmodel1.getColumnCount() == 0){
                tmodel1.addColumn("Trip Id");
                tmodel1.addColumn("Cost");
                tmodel1.addColumn("MaxSeats");
                tmodel1.addColumn("Number Of Reservations");
                tmodel1.addColumn("Empty Seats");
                tmodel1.addColumn("Driver Lastname");
                tmodel1.addColumn("Driver Name");
                tmodel1.addColumn("Guide Lastname");
                tmodel1.addColumn("Guide Name");
                tmodel1.addColumn("Departure");
                tmodel1.addColumn("Return");
            }
        }
```

```

//prosthetw tis grammes tou pinaka
Object[] row;
while (rs.next()) {
    row = new Object[columnCount];
    for (int i = 1; i <= columnCount; i++) {
        row[i - 1] = rs.getString(i);
    }
    tmodel1.addRow(row);
}
//process the next result set(s) epeidi to stored procedure dinei pollous
pinakes
while (stmt.getMoreResults()) {
    rs = stmt.getResultSet();
    while (rs.next()) {
        row = new Object[columnCount];
        for (int i = 1; i <= columnCount; i++) {
            row[i - 1] = rs.getString(i);
        }
        tmodel1.addRow(row);
    }
}

//close the resources
rs.close();
stmt.close();

return 0; //an den yparxei exception return 0
}catch (SQLException e) {
    e.printStackTrace();
    return 1; //an yparxei exception return 1
}
}

private int res_names(String last_name){
try{
    //create statement object
    CallableStatement stmt = conn.prepareCall("{call res_names(?) }");

    //set procedure input args
    stmt.setString(1, last_name);

    //execute procedure
    stmt.execute();

    //process the results
    ResultSet rs = stmt.getResultSet();
    if(rs == null){
        return -1; //epistrefw -1 otan exw kanei lathos to sql query
    }

    tmodel2_1.addColumn("Offer Id");
    tmodel2_1.addColumn("Number Of Reserved Offers");

    ResultSetMetaData metaData;
    int columnCount = 0;
    rs.next();
    Object[] row;
    //an exw pollapla reservations apo to idio epitheto gia kapoia reservations
    if(rs.getString(1).equals("Reserved offers for last name")){
        while (stmt.getMoreResults()) {
            rs = stmt.getResultSet();
            rs.next();
            metaData = rs.getMetaData();
            columnCount = metaData.getColumnCount();

```

```

                if(rs.getString(1).equals("Reserved offers with one reservation per
offer")) {
                    break;
                }
                row = new Object[columnCount];
                for (int i = 1; i <= columnCount; i++) {
                    row[i - 1] = rs.getString(i);
                }
                tmodel2_1.addRow(row);
            }
        }

        tmodel2_2.addColumn("Name");
        tmodel2_2.addColumn("Last Name");
        tmodel2_2.addColumn("Offer Id");

        //an exw ena reservations gia ena epitheto se kapoio offer
        if(rs.getString(1).equals("Reserved offers with one reservation per offer")){
            while (stmt.getMoreResults()) {
                rs = stmt.getResultSet();
                rs.next();
                metaData = rs.getMetaData();
                columnCount = metaData.getColumnCount();
                row = new Object[columnCount];
                for (int i = 1; i <= columnCount; i++) {
                    row[i - 1] = rs.getString(i);
                }
                tmodel2_2.addRow(row);
            }
        }
        //close the resources
        rs.close();
        stmt.close();

        return 0; //an den yparxei exception return 0
    } catch (SQLException e) {
        e.printStackTrace();
        return 1; //an yparxei exception return 1
    }
}

//fortwnoume ton pinaka tmodel1 sto jTable1 tou parathiroumas
private void load_data(DefaultTableModel model){
    //set the model for the jTable1
    jTable1.setModel(model);
}

private void load_data(DefaultTableModel model1, DefaultTableModel model2){
    //set the model for the jTable1 kai jTable2
    jTable1.setModel(model1);
    jTable2.setModel(model2);
}

//epistredei ton aritmo twn branches pou exei to travel_agency
private int getDistBranchCount(){
    int num_of_branches = 0;
    try {
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery("SELECT DISTINCT COUNT(br_code) FROM branch");
        rs.next();
        num_of_branches = rs.getInt(1);

        rs.close();
        stmt.close();
    } catch (SQLException e) {

```

```

        e.printStackTrace();
    }
    return num_of_branches;
}

/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    jPanel1 = new javax.swing.JPanel();
    jButton1 = new javax.swing.JButton();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    start_date = new javax.swing.JTextField();
    end_date = new javax.swing.JTextField();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    jPanel2 = new javax.swing.JPanel();
    jLabel6 = new javax.swing.JLabel();
    last_name = new javax.swing.JTextField();
    jButton2 = new javax.swing.JButton();
    jLabel3 = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();
    jScrollPane2 = new javax.swing.JScrollPane();
    jTable2 = new javax.swing.JTable();
    jLabel7 = new javax.swing.JLabel();
    jLabel8 = new javax.swing.JLabel();
    jButton3 = new javax.swing.JButton();
    backButton = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

    jButton1.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jButton1.setText("Search Trips");
    jButton1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton1ActionPerformed(evt);
        }
    });
    });

    jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel1.setText("Start Date:");

    jLabel2.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel2.setText("End Date:");

    start_date.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    start_date.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            start_dateActionPerformed(evt);
        }
    });
    });

    end_date.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    end_date.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            end_dateActionPerformed(evt);
        }
    });
}

```

```

jLabel4.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jLabel4.setText("(YYYY-MM-DD HH:MM:SS)");

jLabel5.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jLabel5.setText("(YYYY-MM-DD HH:MM:SS)");

jLabel6.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel6.setText("Last Name:");

last_name.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
last_name.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        last_nameActionPerformed(evt);
    }
});

jButton2.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jButton2.setText("Show Reserved Offers");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(113, 113, 113)
            .addComponent(jButton2)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(66, 66, 66)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel6)
                .addComponent(last_name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel4)
                .addComponent(jLabel5))
            .addGap(26, 26, 26)
            .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(48, 48, 48)
            .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(78, 78, 78)
            .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(63, 63, 63)
            .addComponent(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel6)
                .addComponent(last_name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel4)
                .addComponent(jLabel5)))
    .addContainerGap())
);

jPanel2Layout.setVerticalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(113, 113, 113)
            .addComponent(jButton2)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel6)
                .addComponent(last_name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel4)
                .addComponent(jLabel5))
            .addGap(26, 26, 26)
            .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(48, 48, 48)
            .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(78, 78, 78)
            .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(63, 63, 63)
            .addComponent(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel6)
                .addComponent(last_name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel4)
                .addComponent(jLabel5)))
    .addContainerGap())
);

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(113, 113, 113)
            .addComponent(jButton1)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel6)
                .addComponent(last_name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel4)
                .addComponent(jLabel5)))
            .addGap(26, 26, 26)
            .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(48, 48, 48)
            .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(78, 78, 78)
            .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(63, 63, 63)
            .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel6)
                .addComponent(last_name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel4)
                .addComponent(jLabel5)))
    .addContainerGap())
);

jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(113, 113, 113)
            .addComponent(jButton1)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel6)
                .addComponent(last_name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel4)
                .addComponent(jLabel5))
            .addGap(26, 26, 26)
            .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(48, 48, 48)
            .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(78, 78, 78)
            .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(63, 63, 63)
            .addComponent(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel6)
                .addComponent(last_name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel4)
                .addComponent(jLabel5)))
    .addContainerGap())
);

```

```

        .addGroup(jPanel1Layout.createSequentialGroup()
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel1,
        javax.swing.GroupLayout.Alignment.TRAILING)
            .addComponent(jLabel2,
        javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, 88,
        javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(end_date,
        javax.swing.GroupLayout.PREFERRED_SIZE, 253, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(start_date,
        javax.swing.GroupLayout.PREFERRED_SIZE, 253, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGap(6, 6, 6)
                    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,
        149, javax.swing.GroupLayout.PREFERRED_SIZE)))
                    .addGapContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
        Short.MAX_VALUE)))
            );
        jPanel1Layout.setVerticalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGapContainerGap()
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(start_date, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel1))
                .addGapPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel5)
                .addGapGap(32, 32, 32)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(end_date, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
        javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel2))
                .addGapPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel4)
                .addGapPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
        Short.MAX_VALUE)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
        javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGapPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))
            );
        jLabel3.setFont(new java.awt.Font("Segoe UI", 0, 28)); // NOI18N
        jLabel3.setText("Procedures");

        jTable1.setAutoCreateRowSorter(true);
        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {
                {},
                {},
            }
        )
    
```

```

        {},
        {}
    },
    new String [] {
        {}
    );
jScrollPane1.setViewportView(jTable1);

jTable2.setAutoCreateRowSorter(true);
jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {},
        {},
        {},
        {},
        {}
    },
    new String [] {
        {}
    }
));
jScrollPane2.setViewportView(jTable2);

jLabel7.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jLabel7.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel7.setText(" ");
jLabel7.setToolTipText("");

jLabel8.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jLabel8.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel8.setText(" ");

jButton3.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jButton3.setText("Clear");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

backButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
backButton.setText("Back");
backButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        backButtonActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, 377,
        javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 142,
        javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jScrollPane1, javax.swing.GroupLayout.Alignment.LEADING,
        javax.swing.GroupLayout.DEFAULT_SIZE, 839, Short.MAX_VALUE)
        .addComponent(jScrollPane2, javax.swing.GroupLayout.Alignment.LEADING)
    )
);

```

```

        .addComponent(jLabel7, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jLabel8, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addGap(15, 15, 15))
    .addGroup(layout.createSequentialGroup())
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 208,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(194, 194, 194)
    .addComponent(backButton, javax.swing.GroupLayout.PREFERRED_SIZE, 123,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addContainerGap())
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(12, 12, 12)
            .addComponent(jLabel7)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
230, javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jLabel8)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE,
230, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGroup(layout.createSequentialGroup()
            .addComponent(jLabel3)
            .addGap(32, 32, 32)
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 18,
Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 45,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(backButton, javax.swing.GroupLayout.PREFERRED_SIZE, 45,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap())
);

    pack();
} // </editor-fold> //GEN-END: initComponents

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton1ActionPerformed
    // TODO add your handling code here:
    jLabel7.setText("Trip in the given date range");
    tmodel1 = new DefaultTableModel();
    int num_of_branches = getDistBranchCount();
    String start = start_date.getText();
    String end = end_date.getText();
    if(start.equals("") || end.equals("")) {
        return;
    }
    //call the stored procedure for all the branches;
    for(int i=1; i<=num_of_branches; i++) {

```

```

        //an i synartisei petaksei exception kanw break
        if(call_search_trip(i,start,end) == 1){
            break;
        }
    }
    load_data(tmodel1);
}//GEN-LAST:event_jButton1ActionPerformed

private void end_dateActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_end_dateActionPerformed
    // TODO add your handling code here:
}//GEN-LAST:event_end_dateActionPerformed

private void start_dateActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_start_dateActionPerformed
    // TODO add your handling code here:
}//GEN-LAST:event_start_dateActionPerformed

private void last_nameActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_last_nameActionPerformed
    // TODO add your handling code here:
}//GEN-LAST:event_last_nameActionPerformed

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton2ActionPerformed
    // TODO add your handling code here:
    tmodel2_1 = new DefaultTableModel();
    tmodel2_2 = new DefaultTableModel();
    String lname = last_name.getText();
    jLabel7.setText("Reserved offers for costumers with the lastname " + lname);
    jLabel8.setText("Reserved offers for costumers with one reservation per offer");
    res_names(lname);
    load_data(tmodel2_1, tmodel2_2);
}//GEN-LAST:event_jButton2ActionPerformed

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_jButton3ActionPerformed
    // TODO add your handling code here:
    jLabel7.setText(" ");
    jLabel8.setText(" ");
    //clear JTables
    DefaultTableModel model = new DefaultTableModel();
    jTable1.setModel(model);
    jTable2.setModel(model);
}

//GEN-LAST:event_jButton3ActionPerformed

private void backButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_backButtonActionPerformed
    // TODO add your handling code here:
    this.dispose();
    menu.requestFocus();
}//GEN-LAST:event_backButtonActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code
(optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look
and feel.
     * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
*/
}

```

```

        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(ProcedureResults.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(ProcedureResults.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(ProcedureResults.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(ProcedureResults.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        }

//</editor-fold>
//</editor-fold>
//</editor-fold>
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new ProcedureResults().setVisible(true);
    }
});
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton backButton;
private javax.swing.JTextField end_date;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
private javax.swing.JTextField last_name;
private javax.swing.JTextField start_date;
// End of variables declaration//GEN-END:variables
}

```

ReservationOffers

```
package classes;

import static classes.Login.conn;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class ReservationOffers extends javax.swing.JFrame {

    public ReservationOffers() throws SQLException {
        initComponents();
        table_load();
        table_load2();
    }

    PreparedStatement pst;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT rsv_id , rsv_name ,rsv_lastname ,deposit_amount ,rsv_offer_id FROM reservation_offers";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String rsv_id = String.valueOf(rs.getInt("rsv_id"));
            String rsv_name= rs.getString("rsv_name");
            String rsv_lastname = rs.getString("rsv_lastname");
            String deposit_amount= String.valueOf(rs.getInt("deposit_amount"));
            String rsv_offer_id = String.valueOf(rs.getInt("rsv_offer_id"));

            String tbData[] = {rsv_id , rsv_name, rsv_lastname ,deposit_amount ,rsv_offer_id};

            DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
            tblModel.addRow(tbData);
        }
    }

    public void table_load2() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT offer_id ,offer_trip_start_date , offer_trip_end_date ,Price_per_Person , dst_name from offers INNER JOIN destination ON dst_id = offer_dst_id ";
        ResultSet rs = st.executeQuery(table_sql);
        while(rs.next()){

            String offer_id = String.valueOf(rs.getInt("offer_id"));
            String offer_trip_start_date = rs.getString("offer_trip_start_date");
            String offer_trip_end_date = rs.getString("offer_trip_end_date");
            String Price_per_Person = String.valueOf(rs.getInt("Price_per_Person"));
            String dst_name = rs.getString("dst_name");

            String tbData[] = {offer_id, offer_trip_start_date,
offer_trip_end_date,Price_per_Person , dst_name};

            DefaultTableModel tblModel = (DefaultTableModel)jTable2.getModel();
        }
    }
}
```

```

        tblModel.addRow(tbData);
    }
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">/GEN-
BEGIN:initComponents
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jPanel3 = new javax.swing.JPanel();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    NameField = new javax.swing.JTextField();
    jLabel8 = new javax.swing.JLabel();
    DepositField = new javax.swing.JTextField();
    IDFfield = new javax.swing.JTextField();
    LastField = new javax.swing.JTextField();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();
    jScrollPane2 = new javax.swing.JScrollPane();
    jTable2 = new javax.swing.JTable();
    ExitButton = new javax.swing.JButton();
    ClearButton = new javax.swing.JButton();
    DeleteButton1 = new javax.swing.JButton();
    UpdateButton2 = new javax.swing.JButton();
    SaveButton = new javax.swing.JButton();
    jPanel4 = new javax.swing.JPanel();
    jLabel13 = new javax.swing.JLabel();
    SearchField1 = new javax.swing.JTextField();

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

    jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
    jLabel1.setText("Reservation Offers");

    jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Add Destination", javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 24))); // NOI18N

    jLabel5.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel5.setText("Name");

    jLabel6.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel6.setText("Last Name");

    jLabel7.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel7.setText("Deposit");

    NameField.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            NameFieldActionPerformed(evt);
        }
    });

    jLabel8.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
    jLabel8.setText("Offer ID");

    DepositField.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            DepositFieldActionPerformed(evt);
        }
    });

    javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
    jPanel3.setLayout(jPanel3Layout);
    jPanel3Layout.setHorizontalGroup(
        jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addContainerGap()
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel5)
                .addComponent(jLabel6)
                .addComponent(jLabel7)
                .addComponent(NameField, javax.swing.GroupLayout.PREFERRED_SIZE, 150, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel8)
                .addComponent(DepositField, javax.swing.GroupLayout.PREFERRED_SIZE, 150, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(180, Short.MAX_VALUE))
    );
    jPanel3Layout.setVerticalGroup(
        jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jLabel5)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel6)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel7)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(NameField, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel8)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(DepositField, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(180, Short.MAX_VALUE))
    );
}

```



```

        .addGap(18, 18, 18)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel7)
        .addComponent(DepositField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
        .addGap(19, 19, 19)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel8)
        .addComponent(IDField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
        .addGap(23, 23, 23))
);

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
        new String [] {
            "ID", "Name", "Last Name", "Deposit Amount", "Offer ID "
        }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable1);

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
        new String [] {
            "Offer ID", "Name", "Start Date", "End Date", "Price", "Destination"
        }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable2MouseClicked(evt);
    }
});
jScrollPane2.setViewportView(jTable2);

ExitButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
ExitButton.setText("Exit");
ExitButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExitButtonActionPerformed(evt);
    }
});

```

```

        }
    });

ClearButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
ClearButton.setText("Clear");
ClearButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ClearButtonActionPerformed(evt);
    }
});

DeleteButton1.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
DeleteButton1.setText("Delete");
DeleteButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteButton1ActionPerformed(evt);
    }
});

UpdateButton2.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
UpdateButton2.setText("Update");
UpdateButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateButton2ActionPerformed(evt);
    }
});

SaveButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
SaveButton.setText("Save");
SaveButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SaveButtonActionPerformed(evt);
    }
});

jPanel4.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Search",
javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 22)));
// NOI18N

jLabel13.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel13.setText("Reservation ID");

SearchField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchField1ActionPerformed(evt);
    }
});
SearchField1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        SearchField1KeyReleased(evt);
    }
});

javax.swing.GroupLayout jPanel4Layout = new javax.swing.GroupLayout(jPanel4);
jPanel4.setLayout(jPanel4Layout);
jPanel4Layout.setHorizontalGroup(
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel4Layout.createSequentialGroup()
    .addGap(15, 15, 15)
    .addComponent(jLabel13, javax.swing.GroupLayout.PREFERRED_SIZE, 130,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(49, 49, 49)
    .addComponent(SearchField1, javax.swing.GroupLayout.PREFERRED_SIZE, 218,
javax.swing.GroupLayout.PREFERRED_SIZE)
);

```

```

        .addGap(0, 0, Short.MAX_VALUE))
    );
jPanel4Layout.setVerticalGroup(
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel4Layout.createSequentialGroup()
    .addContainerGap()

.addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jLabel13)
    .addComponent(SearchField1, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addContainerGap(16, Short.MAX_VALUE))
);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addGap(14, 14, 14)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
    .addComponent(jPanel4, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
        .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE,
126, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(32, 32, 32)
        .addComponent(UpdateButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 124, javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(DeleteButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 127, javax.swing.GroupLayout.PREFERRED_SIZE))
    .addComponent(jPanel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 305,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE,
127, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE,
127, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING,
false)
            .addComponent(jScrollPane1,
javax.swing.GroupLayout.DEFAULT_SIZE, 688, Short.MAX_VALUE)
            .addComponent(jScrollPane2))
        .addGroup(layout.createSequentialGroup()
            .addGap(16, 16, 16)))))

);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

```

```

        .addGroup(layout.createSequentialGroup())
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE,
                javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING,
            layout.createSequentialGroup()
                .addGap(87, 87, 87)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
                    259, javax.swing.GroupLayout.PREFERRED_SIZE)))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
        .addComponent(jPanel4, javax.swing.GroupLayout.DEFAULT_SIZE,
            javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
            Short.MAX_VALUE))
    .addGap(18, 18, 18)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
            javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
            javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(DeleteButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
            javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
            javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
            javax.swing.GroupLayout.PREFERRED_SIZE))
    .addContainerGap(27, Short.MAX_VALUE))
);

    pack();
} // </editor-fold> //GEN-END: initComponents

private void NameFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_NameFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_NameFieldActionPerformed

private void DepositFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_DepositFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_DepositFieldActionPerformed

private void IDFActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_IDFActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_IDFActionPerformed

private void jTable2MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable2MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable2.getModel();
    int selectedRowIndex = jTable2.getSelectedRow();
    IDF.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
}

//GEN-LAST:event_jTable2MouseClicked

private void jTable1MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable1MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable1.getModel();

```

```

        int selectedRowIndex = jTable1.getSelectedRow();
        SearchField1.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
        NameField.setText(model.getValueAt(selectedRowIndex ,1 ).toString());
        LastField.setText(model.getValueAt(selectedRowIndex ,2 ).toString());
        DepositField.setText(model.getValueAt(selectedRowIndex ,3).toString());
        IDFfield.setText(model.getValueAt(selectedRowIndex ,4 ).toString());
    }//GEN-LAST:event_jTable1MouseClicked

    private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ExitButtonActionPerformed
        System.exit(0);
    }//GEN-LAST:event_ExitButtonActionPerformed

    private void ClearButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ClearButtonActionPerformed
        LastField.setText("");
        NameField.setText("");
        DepositField.setText("");
        IDFfield.setText("");
        SearchField1.setText("");
    }//GEN-LAST:event_ClearButtonActionPerformed

    private void DeleteButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_DeleteButton1ActionPerformed
        String search1;
        search1 = SearchField1.getText();
        try{
            pst= conn.prepareStatement("delete from reservation_offers WHERE rsv_id =?");
            pst.setString(1, search1);
            pst.executeUpdate();
            JOptionPane.showMessageDialog(null , "Record Deleted!!");

            jTable1.setModel(new DefaultTableModel(null , new String[]{"ID","Name","Last Name","Deposit Amoun","Offer ID"}));
        }
        catch(SQLException e){
            JOptionPane.showMessageDialog(null , e.getMessage());
        }
    }//GEN-LAST:event_DeleteButton1ActionPerformed

    private void UpdateButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_UpdateButton2ActionPerformed
        String rsv_name ,rsv_lastname , deposit_amount, rsv_offer_id , srl ;
        rsv_name = NameField.getText();
        rsv_lastname = LastField.getText();
        deposit_amount = DepositField.getText();
        rsv_offer_id = IDFfield.getText();
        srl = SearchField1.getText();

        try{
            pst= conn.prepareStatement("update reservation_offers set rsv_name=? , rsv_lastname =? , deposit_amount = ? , rsv_offer_id=? WHERE rsv_id=? ");

```

```

        pst.setString(1,rsv_name);
        pst.setString(2,rsv_lastname);
        pst.setString(3,deposit_amount);
        pst.setString(4, rsv_offer_id);
        pst.setString(5,sr1);

        pst.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Updated!!");

        jTable1.setModel(new DefaultTableModel(null , new String[]{"ID","Name","Last
Name","Deposit Amoun","Offer ID "}));

        table_load();
        LastField.setText("");
        NameField.setText("");
        DepositField.setText("");
        IDFfield.setText("");
        SearchField1.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
} //GEN-LAST:event_UpdateButton2ActionPerformed

private void SaveButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-
FIRST:event_SaveButtonActionPerformed

    String rsv_name ,rsv_lastname , deposit_amount, rsv_offer_id ;

    rsv_name = NameField.getText();
    rsv_lastname = LastField.getText();
    deposit_amount = DepositField.getText();
    rsv_offer_id = IDFfield.getText();

    try{
        pst= conn.prepareCall("insert into reservation_offers (rsv_name, rsv_lastname ,
deposit_amount , rsv_offer_id)values(?, ?, ?, ?)");
        pst.setString(1,rsv_name);
        pst.setString(2,rsv_lastname);
        pst.setString(3,deposit_amount);
        pst.setString(4,rsv_offer_id);
        pst.executeUpdate();

        JOptionPane.showMessageDialog(null , "Record Adddedd!!");

        jTable1.setModel(new DefaultTableModel(null , new String[]{"ID","Name","Last
Name","Deposit Amoun","Offer ID "}));

        table_load();
        LastField.setText("");
        NameField.setText("");
        DepositField.setText("");
        IDFfield.setText("");
        SearchField1.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
} //GEN-LAST:event_SaveButtonActionPerformed

private void SearchField1ActionPerformed(java.awt.event.ActionEvent evt) { //GEN-
FIRST:event_SearchField1ActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_SearchField1ActionPerformed

private void SearchField1KeyReleased(java.awt.event.KeyEvent evt) { //GEN-
FIRST:event_SearchField1KeyReleased

```

```

} //GEN-LAST:event_SearchField1KeyReleased

private void LastFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_LastFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_LastFieldActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code
(optional) >
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look
and feel.
     * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(ReservationOffers.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(ReservationOffers.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(ReservationOffers.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(ReservationOffers.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
    // </editor-fold>
    // </editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {

            try {
                new ReservationOffers().setVisible(true);
            } catch (SQLException ex) {
                Logger.getLogger(ReservationOffers.class.getName()).log(Level.SEVERE,
null, ex);
            }
        }
    });
}

```

```

}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton ClearButton;
private javax.swing.JButton DeleteButton1;
private javax.swing.JTextField DepositField;
private javax.swing.JButton ExitButton;
private javax.swing.JTextField IDFfield;
private javax.swing.JTextField LastField;
private javax.swing.JTextField NameField;
private javax.swing.JButton SaveButton;
private javax.swing.JTextField SearchField1;
private javax.swing.JButton UpdateButton2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel13;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JPanel jPanel13;
private javax.swing.JPanel jPanel14;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
// End of variables declaration//GEN-END:variables
}

```

Reservations

```

package classes;

import static classes.Login.conn;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class Reservations extends javax.swing.JFrame {

    public Reservations() throws SQLException {
        initComponents();
        table_load();
        table_load2();
    }

    PreparedStatement pst;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT res_tr_id , res_seatnum ,res_name
, res_lname,res_isadult FROM reservation";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String res_tr_id = String.valueOf(rs.getInt("res_tr_id"));

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```

        String res_seatnum= String.valueOf(rs.getInt("res_seatnum"));
        String res_name = rs.getString("res_name");
        String res_lname= rs.getString("res_lname");
        String res_isadult = rs.getString("res_isadult");

        String tbData[] = {res_tr_id , res_seatnum, res_name ,res_lname
, res_isadult};

        DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
        tblModel.addRow(tbData);
    }
}

public void table_load2() throws SQLException {
    Statement st = conn.createStatement();
    String table_sql = "SELECT tr_id ,tr_departure, tr_return ,dst_name from
trip INNER JOIN travel_to ON tr_id = to_tr_id INNER JOIN destination ON to_dst_id
= dst_id";
    ResultSet rs = st.executeQuery(table_sql);

    while(rs.next()){

        String tr_id= String.valueOf(rs.getInt("tr_id"));
        String tr_departure= rs.getString("tr_departure");
        String tr_return= rs.getString("tr_return");
        String dst_nam= rs.getString("dst_name");

        String tbData[] = {tr_id, dst_nam, tr_departure,tr_return};

        DefaultTableModel tblModel = (DefaultTableModel)jTable2.getModel();
        tblModel.addRow(tbData);
    }
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-BEGIN:initComponents
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jPanel3 = new javax.swing.JPanel();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    SeatNumberField = new javax.swing.JTextField();
    jLabel8 = new javax.swing.JLabel();
    NameField = new javax.swing.JTextField();
    DestinationIDField = new javax.swing.JTextField();
    LnameField = new javax.swing.JTextField();
    TypeBox = new javax.swing.JComboBox();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();
    jScrollPane2 = new javax.swing.JScrollPane();
    jTable2 = new javax.swing.JTable();
    ExitButton = new javax.swing.JButton();
    ClearButton = new javax.swing.JButton();
    DeleteButton1 = new javax.swing.JButton();
}

```

```

UpdateButton2 = new javax.swing.JButton();
SaveButton = new javax.swing.JButton();
jPanel4 = new javax.swing.JPanel();
jLabel13 = new javax.swing.JLabel();
SearchField1 = new javax.swing.JTextField();
SearchField2 = new javax.swing.JTextField();
jLabel14 = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
jLabel1.setText("Reservation");

jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Add Destination", javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 24))); // NOI18N

jLabel4.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel4.setText("Trip ID");

jLabel5.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel5.setText("Seat Number");

jLabel6.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel6.setText("Adult / Minor");

jLabel7.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel7.setText("Name");

SeatNumberField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SeatNumberFieldActionPerformed(evt);
    }
});

jLabel8.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel8.setText("Lname");

NameField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        NameFieldActionPerformed(evt);
    }
});

DestinationIDField.setEditable(false);

LnameField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        LnameFieldActionPerformed(evt);
    }
});

TypeBox.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {"ADULT", "MINOR"}));
TypeBox.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        TypeBoxActionPerformed(evt);
    }
});

```

```

        javax.swing.GroupLayout jPanel3Layout = new
javax.swing.GroupLayout(jPanel3);
        jPanel3.setLayout(jPanel3Layout);
        jPanel3Layout.setHorizontalGroup(
jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(16, 16, 16)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 106, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 88, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel14, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(jLabel15, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(jLabel16))
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addComponent(NameField, javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(TypeBox, javax.swing.GroupLayout.Alignment.TRAILING, 0, 273, Short.MAX_VALUE)
                    .addComponent(SeatNumberField, javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(DestinationIDField, javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(LnameField)))
            .addGapGap(19, 19, 19))
        );
        jPanel3Layout.setVerticalGroup(
jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGapGap(22, 22, 22)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel4)
                .addComponent(DestinationIDField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
            .addGapPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel5)
                .addComponent(SeatNumberField, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
            .addGapGap(17, 17, 17)
        )
    );

```

```

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel6)
            .addComponent(TypeBox, javax.swing.GroupLayout.DEFAULT_SIZE,
33, Short.MAX_VALUE))
            .addGap(18, 18, 18)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel7)
            .addComponent(NameField, javax.swing.GroupLayout.DEFAULT_SIZE,
34, Short.MAX_VALUE))
            .addGap(19, 19, 19)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel8)
            .addComponent(LnameField,
javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE))
            .addGap(16, 16, 16))
);

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
    new String [] {
        "Trip ID", "Seat Number", "Name", "Last Name", " Is Adult "
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
));
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable1);

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
    new String [] {
        "Trip ID", "Name", "Departure", "Return"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, true, true
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});

```

```

        }
    });
jTable2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable2MouseClicked(evt);
    }
});
jScrollPane2.setViewportView(jTable2);

ExitButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
ExitButton.setText("Exit");
ExitButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExitButtonActionPerformed(evt);
    }
});

ClearButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
ClearButton.setText("Clear");
ClearButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ClearButtonActionPerformed(evt);
    }
});

DeleteButton1.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
DeleteButton1.setText("Delete");
DeleteButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteButton1ActionPerformed(evt);
    }
});

UpdateButton2.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
UpdateButton2.setText("Update");
UpdateButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateButton2ActionPerformed(evt);
    }
});

SaveButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
SaveButton.setText("Save");
SaveButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SaveButtonActionPerformed(evt);
    }
});

jPanel4.setBorder(javax.swing.BorderFactory.createTitledBorder(null,
"Search", javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0,
22))); // NOI18N

jLabel13.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel13.setText("Trip ID");

SearchField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchField1ActionPerformed(evt);
    }
});

```

```

        }
    });
    SearchField1.addKeyListener(new java.awt.event.KeyAdapter() {
        public void keyReleased(java.awt.event.KeyEvent evt) {
            SearchField1KeyReleased(evt);
        }
    });
}

SearchField2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchField2ActionPerformed(evt);
    }
});
SearchField2.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        SearchField2KeyReleased(evt);
    }
});
jLabel14.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel14.setText("SeatNumber");

javax.swing.GroupLayout jPanel4Layout = new
javax.swing.GroupLayout(jPanel4);
jPanel4.setLayout(jPanel4Layout);
jPanel4Layout.setHorizontalGroup(
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel4Layout.createSequentialGroup()
            .addGap(15, 15, 15)
            .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addGroup(jPanel4Layout.createSequentialGroup()
                    .addComponent(jPanel4Layout.createSequentialGroup()
                        .addComponent(jLabel13, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jLabel14, javax.swing.GroupLayout.DEFAULT_SIZE, 130, Short.MAX_VALUE))
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(jPanel4Layout.createSequentialGroup()
                            .addComponent(jPanel4Layout.createSequentialGroup()
                                .addComponent(SearchField1, javax.swing.GroupLayout.DEFAULT_SIZE, 269, Short.MAX_VALUE)
                                .addComponent(SearchField2))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                .addGroup(jPanel4Layout.createSequentialGroup()
                                    .addGap(0, 0, Short.MAX_VALUE))
                                .addGroup(jPanel4Layout.createSequentialGroup()
                                    .addGap(0, 0, Short.MAX_VALUE)
                                    .addComponent(jPanel4Layout.createSequentialGroup()
                                        .addGap(0, 0, Short.MAX_VALUE)
                                        .addComponent(jLabel13)))))))
                .addGroup(jPanel4Layout.createSequentialGroup()
                    .addGap(0, 0, Short.MAX_VALUE)
                    .addComponent(jPanel4Layout.createSequentialGroup()
                        .addGap(0, 0, Short.MAX_VALUE)
                        .addComponent(jLabel13)))
            .addGap(0, 0, Short.MAX_VALUE)
        )
    );
    jPanel4Layout.setVerticalGroup(
        jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel4Layout.createSequentialGroup()
                .addGap(15, 15, 15)
                .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                    .addGroup(jPanel4Layout.createSequentialGroup()
                        .addComponent(jPanel4Layout.createSequentialGroup()
                            .addComponent(SearchField1, javax.swing.GroupLayout.DEFAULT_SIZE, 269, Short.MAX_VALUE)
                            .addComponent(SearchField2))
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addGroup(jPanel4Layout.createSequentialGroup()
                                .addGap(0, 0, Short.MAX_VALUE))
                            .addGroup(jPanel4Layout.createSequentialGroup()
                                .addGap(0, 0, Short.MAX_VALUE)
                                .addComponent(jPanel4Layout.createSequentialGroup()
                                    .addGap(0, 0, Short.MAX_VALUE)
                                    .addComponent(jLabel13)))))))
                    .addGroup(jPanel4Layout.createSequentialGroup()
                        .addGap(0, 0, Short.MAX_VALUE)
                        .addComponent(jPanel4Layout.createSequentialGroup()
                            .addGap(0, 0, Short.MAX_VALUE)
                            .addComponent(jLabel13)))
                .addGap(0, 0, Short.MAX_VALUE)
            )
        );
    jPanel4Layout.setVerticalGroup(
        jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel4Layout.createSequentialGroup()
                .addGap(15, 15, 15)
                .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                    .addGroup(jPanel4Layout.createSequentialGroup()
                        .addComponent(jPanel4Layout.createSequentialGroup()
                            .addComponent(SearchField1, javax.swing.GroupLayout.DEFAULT_SIZE, 269, Short.MAX_VALUE)
                            .addComponent(SearchField2))
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addGroup(jPanel4Layout.createSequentialGroup()
                                .addGap(0, 0, Short.MAX_VALUE))
                            .addGroup(jPanel4Layout.createSequentialGroup()
                                .addGap(0, 0, Short.MAX_VALUE)
                                .addComponent(jPanel4Layout.createSequentialGroup()
                                    .addGap(0, 0, Short.MAX_VALUE)
                                    .addComponent(jLabel13)))))))
                    .addGroup(jPanel4Layout.createSequentialGroup()
                        .addGap(0, 0, Short.MAX_VALUE)
                        .addComponent(jPanel4Layout.createSequentialGroup()
                            .addGap(0, 0, Short.MAX_VALUE)
                            .addComponent(jLabel13)))
                .addGap(0, 0, Short.MAX_VALUE)
            )
        );
    jPanel4Layout.setVerticalGroup(
        jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addGroup(jPanel4Layout.createSequentialGroup()
                .addGap(15, 15, 15)
                .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jPanel4Layout.createSequentialGroup()
                        .addComponent(SearchField1, javax.swing.GroupLayout.DEFAULT_SIZE, 269, Short.MAX_VALUE)
                        .addComponent(SearchField2))
                    .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jPanel4Layout.createSequentialGroup()
                            .addGap(0, 0, Short.MAX_VALUE)
                            .addComponent(jLabel13)))))))
    );
}

```

```

        .addComponent(SearchField1,
javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

.addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(SearchField2,
javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel14))
        .addContainerGap())
);

javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addGap(14, 14, 14)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING,
false)
        .addGroup(layout.createSequentialGroup()
            .addComponent(SaveButton,
javax.swing.GroupLayout.PREFERRED_SIZE, 126,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(32, 32, 32)
            .addComponent(UpdateButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 124,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 34,
Short.MAX_VALUE)
            .addComponent(DeleteButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 127,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addComponent(jLabel1,
javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE,
189, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jPanel3,
javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(jPanel4,
javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 17,
Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
            .addComponent(jScrollPane1,
javax.swing.GroupLayout.DEFAULT_SIZE, 934, Short.MAX_VALUE)

```

```

        .addComponent(jScrollPane2))
        .addContainerGap(17, Short.MAX_VALUE))
    .addGroup(layout.createSequentialGroup()
        .addGap(88, 88, 88)
        .addComponent(ClearButton,
javax.swing.GroupLayout.PREFERRED_SIZE, 127,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(59, 59, 59)
        .addComponent(ExitButton,
javax.swing.GroupLayout.PREFERRED_SIZE, 127,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)))
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel1)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(jPanel3,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
            .addGroup(jPanel3,
javax.swing.GroupLayout.PREFERRED_SIZE, 298,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(jPanel4, javax.swing.GroupLayout.PREFERRED_SIZE,
121, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jScrollPane2,
javax.swing.GroupLayout.PREFERRED_SIZE, 108,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(SaveButton,
javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(UpdateButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(DeleteButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(ClearButton,
javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(ExitButton,
javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap(34, Short.MAX_VALUE))
);

```

```

        pack();
} // </editor-fold> //GEN-END:initComponents

private void SeatNumberFieldActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_SeatNumberFieldActionPerformed
{
    // TODO add your handling code here:
} //GEN-LAST:event_SeatNumberFieldActionPerformed

private void NameFieldActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_NameFieldActionPerformed
{
    // TODO add your handling code here:
} //GEN-LAST:event_NameFieldActionPerformed

private void LnameFieldActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_LnameFieldActionPerformed
{
    // TODO add your handling code here:
} //GEN-LAST:event_LnameFieldActionPerformed

private void TypeBoxActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_TypeBoxActionPerformed
{
    // TODO add your handling code here:
} //GEN-LAST:event_TypeBoxActionPerformed

private void jTable2MouseClicked(java.awt.event.MouseEvent evt) //GEN-FIRST:event_jTable2MouseClicked
{
    DefaultTableModel model = (DefaultTableModel)jTable2.getModel();
    int selectedRowIndex = jTable2.getSelectedRow();
    DestinationIDField.setText(model.getValueAt(selectedRowIndex ,0
).toString());
}

} //GEN-LAST:event_jTable2MouseClicked

private void jTable1MouseClicked(java.awt.event.MouseEvent evt) //GEN-FIRST:event_jTable1MouseClicked
{
    DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
    int selectedRowIndex = jTable1.getSelectedRow();
    DestinationIDField.setText(model.getValueAt(selectedRowIndex ,0
).toString());
    SeatNumberField.setText(model.getValueAt(selectedRowIndex ,1
).toString());
    String type = model.getValueAt(selectedRowIndex ,4 ).toString();
    NameField.setText(model.getValueAt(selectedRowIndex ,2 ).toString());
    LnameField.setText(model.getValueAt(selectedRowIndex ,3 ).toString());
    SearchField1.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
    SearchField2.setText(model.getValueAt(selectedRowIndex ,1 ).toString());

    for (int i = 0 ; i < TypeBox.getItemCount(); i++){
        if(TypeBox.getItemAt(i).toString().equalsIgnoreCase( type)){
            TypeBox.setSelectedIndex(i);
        }
    }
}

} //GEN-LAST:event_jTable1MouseClicked

private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt) //GEN-FIRST:event_ExitButtonActionPerformed
{
    System.exit(0);
} //GEN-LAST:event_ExitButtonActionPerformed

```

```

private void ClearButtonActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_ClearButtonActionPerformed

    DestinationIDField.setText("");
    SeatNumberField.setText("");
    NameField.setText("");
    LnameField.setText("");
    SearchField1.setText("");
    SearchField1.setText("");
}//GEN-LAST:event_ClearButtonActionPerformed

private void DeleteButton1ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_DeleteButton1ActionPerformed
    String search1, search2 ;

    search1 = SearchField1.getText();
    search2 = SearchField2.getText();

    try{

        pst= conn.prepareStatement("delete from reservation WHERE res_tr_id =?
and res_seatnum =?");
        pst.setString(1, search1);
        pst.setString(2, search2);
        pst.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Deleted!!!");
        jTable1.setModel(new DefaultTableModel(null , new String[]{"Trip
ID","Seat Number","Name","Last Name","IS Adult"}));
        table_load();
        DestinationIDField.setText("");
        SeatNumberField.setText("");
        NameField.setText("");
        LnameField.setText("");
        SearchField1.setText("");
        SearchField1.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_DeleteButton1ActionPerformed

private void UpdateButton2ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_UpdateButton2ActionPerformed

    String res_tr_id ,res_seatnum ,res_name ,res_lname,res_isadult ,search1 ,
search2 ;
    String tr_maxseats = null;
    res_tr_id = DestinationIDField.getText();
    res_seatnum = SeatNumberField.getText();
    res_isadult =
    TypeBox.getSelectedItem().toString();TypeBox.getSelectedItem().toString();
    res_name= NameField.getText();
    res_lname = LnameField.getText();
    search1 = SearchField1.getText();
    search2 = SearchField2.getText();
    String srl1 = SearchField1.getText();

    try{

```

```

        pst = conn.prepareStatement("SELECT tr_maxseats from trip WHERE
tr_id =?");
        pst.setString(1 , srl);
        ResultSet rs = pst.executeQuery();
        if(rs.next() == true)
        {
            tr_maxseats = rs.getString(1);
        }

        if ( Integer.valueOf(res_seatnum) > Integer.valueOf(tr_maxseats)
) {
            JOptionPane.showMessageDialog(null , "Seat Number Bigger than
the availables");
        }
        pst= conn.prepareStatement("update reservation set res_tr_id=? ,
res_seatnum=? , res_name =? , res_lname = ? , res_isadult =? WHERE res_tr_id =? and
res_seatnum =?");
        pst.setString(1,res_tr_id);
        pst.setString(2,res_seatnum);
        pst.setString(3,res_name);
        pst.setString(4,res_lname);
        pst.setString(5, res_isadult);
        pst.setString(6,search1);
        pst.setString(7,search2);
        pst.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Updated!!!");
        jTable1.setModel(new DefaultTableModel(null , new String[]{"Trip
ID","Seat Number","Name","Last Name","IS Adult"}));
        table_load();
        DestinationIDField.setText("");
        SeatNumberField.setText("");
        NameField.setText("");
        LnameField.setText("");
        SearchField1.setText("");
        SearchField1.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_UpdateButton2ActionPerformed

private void SaveButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_SaveButtonActionPerformed

    String res_tr_id , res_seatnum ,res_name ,res_lname,res_isadult ;
    String tr_maxseats = null;
    res_tr_id = DestinationIDField.getText();
    res_seatnum = SeatNumberField.getText();
    res_isadult =
    TypeBox.getSelectedItem().toString();TypeBox.getSelectedItem().toString();
    res_name= NameField.getText();
    res_lname = LnameField.getText();
    String srl = DestinationIDField.getText();

    try{

        pst = conn.prepareStatement("SELECT tr_maxseats from trip WHERE
tr_id =?");
        pst.setString(1 , srl);

```

```

        ResultSet rs = pst.executeQuery();
        if(rs.next() == true)
        {
            tr_maxseats = rs.getString(1);
        }

        if ( Integer.valueOf(res_seatnum) > Integer.valueOf(tr_maxseats)
) {
            JOptionPane.showMessageDialog(null , "Seat Number Bigger than
the availables");
        }

        pst= conn.prepareCall("insert into reservation
(res_tr_id,res_seatnum,res_name,res_lname,res_isadult )values(?, ?, ?, ?, ?)");
        pst.setString(1,res_tr_id);
        pst.setString(2,res_seatnum);
        pst.setString(3,res_name);
        pst.setString(4,res_lname);
        pst.setString(5,res_isadult);
        pst.executeUpdate();

        JOptionPane.showMessageDialog(null , "Record Addedd!!!");
        jTable1.setModel(new DefaultTableModel(null , new String[]{"Trip
ID","Seat Number","Name","Last Name","IS Adult"}));
        table_load();
        DestinationIDField.setText("");
        SeatNumberField.setText("");
        NameField.setText("");
        LnameField.setText("");
        SearchField1.setText("");
        SearchField1.setText("");
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
} //GEN-LAST:event_SaveButtonActionPerformed

private void SearchField1ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_SearchField1ActionPerformed
    // TODO add your handling code here:
}//GEN-LAST:event_SearchField1ActionPerformed

private void SearchField1KeyReleased(java.awt.event.KeyEvent evt) {//GEN-
FIRST:event_SearchField1KeyReleased

}//GEN-LAST:event_SearchField1KeyReleased

private void SearchField2ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_SearchField2ActionPerformed
    // TODO add your handling code here:
}//GEN-LAST:event_SearchField2ActionPerformed

private void SearchField2KeyReleased(java.awt.event.KeyEvent evt) {//GEN-
FIRST:event_SearchField2KeyReleased

try{

    String sr1 = SearchField1.getText();
    String sr2 = SearchField2.getText();

```

```

        pst = conn.prepareStatement("SELECT ev_tr_id , ev_start, ev_end,
ev_descr FROM reservation WHERE ev_tr_id =? and ev_start =?");
        pst.setString(1 , sr1);
        pst.setString(2 , sr2);
        ResultSet rs = pst.executeQuery();

        if(rs.next() == true)
        {
            String res_tr_id = rs.getString(1);
            String res_seatnum = rs.getString(2);
            String res_name= rs.getString(3);
            String res_lname = rs.getString(4);
            String res_isadult = rs.getString(5);

            DestinationIDField.setText(res_tr_id);
            SeatNumberField.setText(res_seatnum);
            NameField.setText(res_name);
            LnameField.setText(res_lname);
            for (int i = 0 ; i < TypeBox.getItemCount(); i++){

if(TypeBox.getItemAt(i).toString().equalsIgnoreCase(res_isadult)){
                TypeBox.setSelectedIndex(i);
            }
        }

        }else{

            DestinationIDField.setText("");
            SeatNumberField.setText("");
            NameField.setText("");
            LnameField.setText("");
            SearchField1.setText("");
            SearchField1.setText("");
        }

    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
}//GEN-LAST:event_SearchField2KeyReleased

public static void main(String args[]) {

    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {

            try {
                new Reservations().setVisible(true);
            } catch (SQLException ex) {

Logger.getLogger(Reservations.class.getName()).log(Level.SEVERE, null, ex);

            }
        });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton ClearButton;
private javax.swing.JButton DeleteButton1;

```

```

private javax.swing.JTextField DestinationIDField;
private javax.swing.JButton ExitButton;
private javax.swing.JTextField LnameField;
private javax.swing.JTextField NameField;
private javax.swing.JButton SaveButton;
private javax.swing.JTextField SearchField1;
private javax.swing.JTextField SearchField2;
private javax.swing.JTextField SeatNumberField;
private javax.swing.JComboBox<String> TypeBox;
private javax.swing.JButton UpdateButton2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel13;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel16;
private javax.swing.JLabel jLabel17;
private javax.swing.JLabel jLabel18;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
// End of variables declaration//GEN-END:variables
}

```

Travel_To

```

package classes;
import static classes.Login.*;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class Travel_To extends javax.swing.JFrame {

    public Travel_To() throws SQLException {
        initComponents();
        table_load();
        table_load2();
        table_load3();
    }

    PreparedStatement pst;
    CallableStatement cs;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT to_tr_id , to_dst_id ,to_arrival ,to_departure FROM travel_to";
        ResultSet rs = st.executeQuery(table_sql);
        while(rs.next()){
            String to_tr_id = rs.getString("to_tr_id");
            String to_dst_id= rs.getString("to_dst_id");
            String to_arrival = rs.getString("to_arrival");
            String to_departure =  rs.getString("to_departure");
        }
    }
}

```

```

        String tbData[] = {to_tr_id , to_dst_id, to_arrival , to_departure };

        DefaultTableModel tblModel = (DefaultTableModel)jTable2.getModel();
        tblModel.addRow(tbData);
    }

}

public void table_load2() throws SQLException {
Statement st = conn.createStatement();
String table_sql = "SELECT tr_id, tr_departure , tr_return ,tr_br_code FROM trip";
ResultSet rs = st.executeQuery(table_sql);

while(rs.next()){

    String tr_id = rs.getString("tr_id");
    String tr_departure= rs.getString("tr_departure");
    String tr_return = rs.getString("tr_return");
    String tr_br_code = String.valueOf(rs.getInt("tr_br_code"));

    String tbData[] = {tr_id, tr_departure, tr_return , tr_br_code };

    DefaultTableModel tblModel = (DefaultTableModel)jTable1.getModel();
    tblModel.addRow(tbData);
}
}

public void table_load3() throws SQLException {
Statement st = conn.createStatement();
String table_sql = "SELECT dst_id , dst_name FROM destination";
ResultSet rs = st.executeQuery(table_sql);

while(rs.next()){

    String dst_id = String.valueOf(rs.getInt("dst_id"));
    String dst_name = rs.getString("dst_name");

    String tbData[] = {dst_id , dst_name };

    DefaultTableModel tblModel = (DefaultTableModel)jTable3.getModel();
    tblModel.addRow(tbData);
}
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-BEGIN:initComponents
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jPanel3 = new javax.swing.JPanel();
    jLabel10 = new javax.swing.JLabel();
    jLabel11 = new javax.swing.JLabel();
    jLabel17 = new javax.swing.JLabel();
    DepartureField = new javax.swing.JTextField();
    jLabel18 = new javax.swing.JLabel();
    TripField = new javax.swing.JTextField();
    ArrivalField = new javax.swing.JTextField();
    DestinationField = new javax.swing.JTextField();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();
    jScrollPane2 = new javax.swing.JScrollPane();
    jTable2 = new javax.swing.JTable();
    jPanel19 = new javax.swing.JPanel();
    jLabel123 = new javax.swing.JLabel();
    SearchTripField = new javax.swing.JTextField();
    DestinationSField = new javax.swing.JTextField();
    jLabel124 = new javax.swing.JLabel();
    ExitButton = new javax.swing.JButton();
    ClearButton = new javax.swing.JButton();
    DeleteButton = new javax.swing.JButton();
    UpdateButton2 = new javax.swing.JButton();
    SaveButton = new javax.swing.JButton();
    jScrollPane3 = new javax.swing.JScrollPane();
    jTable3 = new javax.swing.JTable();
}

```



```

        .addComponent(DestinationField, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 247, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(TripField, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 247, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(DepartureField, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 247, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(ArrivalField, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 247, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap())
            );
jPanel3Layout.setVerticalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(22, 22, 22)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel10)
                .addComponent(ArrivalField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel11)
                .addComponent(DepartureField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
            .addGap(18, 18, 18)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel7)
                .addComponent(TripField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
            .addGap(18, 18, 18)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel8)
                .addComponent(DestinationField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
            .addContainerGap(24, Short.MAX_VALUE))
        );
jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
        new String [] {
            "Trip ID", "Departure", "Return", "Branch Code"
        }
));
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable1);

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
        new String [] {
            "Trip ID", "Destination ID", "Time Arrival", "Time Departure"
        }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable2.setToolTipText("");
jTable2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable2MouseClicked(evt);
    }
});
jScrollPane2.setViewportView(jTable2);

```

```

jPanel9.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Search",
javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 22))); // NOI18N

jLabel23.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel23.setText("Trip ID");

SearchTripField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchTripFieldActionPerformed(evt);
    }
});
SearchTripField.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        SearchTripFieldKeyReleased(evt);
    }
});

DestinationSField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DestinationSFieldActionPerformed(evt);
    }
});
DestinationSField.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        DestinationSFieldKeyReleased(evt);
    }
});

jLabel24.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel24.setText("Destination ID");

javax.swing.GroupLayout jPanel9Layout = new javax.swing.GroupLayout(jPanel9);
jPanel9.setLayout(jPanel9Layout);
jPanel9Layout.setHorizontalGroup(
    jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel9Layout.createSequentialGroup()
            .addGap(31, Short.MAX_VALUE)
            .addGroup(jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addComponent(jLabel23, javax.swing.GroupLayout.PREFERRED_SIZE, 109, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                    .addComponent(jLabel24))
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addGap(42, 42, 42)
                    .addGroup(jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(SearchTripField, javax.swing.GroupLayout.PREFERRED_SIZE, 218, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(DestinationSField, javax.swing.GroupLayout.PREFERRED_SIZE, 218, javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addGap(21, 21, 21)))
            .addGap(21, 21, 21))
);
jPanel9Layout.setVerticalGroup(
    jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel9Layout.createSequentialGroup()
            .addGap(31, Short.MAX_VALUE)
            .addGroup(jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addComponent(jLabel23, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                    .addComponent(jLabel24))
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addGap(42, 42, 42)
                    .addGroup(jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(SearchTripField, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(DestinationSField, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addGap(21, 21, 21)))
            .addGap(21, 21, 21))
);
jPanel9Layout.setHorizontalGroup(
    jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel9Layout.createSequentialGroup()
            .addGap(31, Short.MAX_VALUE)
            .addGroup(jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addComponent(jLabel23, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                    .addComponent(jLabel24))
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addGap(42, 42, 42)
                    .addGroup(jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(SearchTripField, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(DestinationSField, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addGap(21, 21, 21)))
            .addGap(21, 21, 21))
);
jPanel9Layout.setVerticalGroup(
    jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel9Layout.createSequentialGroup()
            .addGap(31, Short.MAX_VALUE)
            .addGroup(jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addComponent(jLabel23, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                    .addComponent(jLabel24))
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addGap(42, 42, 42)
                    .addGroup(jPanel9Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(SearchTripField, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(DestinationSField, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGroup(jPanel9Layout.createSequentialGroup()
                    .addGap(21, 21, 21)))
            .addGap(21, 21, 21))
);

ExitButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
ExitButton.setText("Exit");
ExitButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExitButtonActionPerformed(evt);
    }
});

ClearButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N

```

```

ClearButton.setText("Clear");
ClearButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ClearButtonActionPerformed(evt);
    }
});

DeleteButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
DeleteButton.setText("Delete");
DeleteButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteButtonActionPerformed(evt);
    }
});

UpdateButton2.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
UpdateButton2.setText("Update");
UpdateButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateButton2ActionPerformed(evt);
    }
});

SaveButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
SaveButton.setText("Save");
SaveButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SaveButtonActionPerformed(evt);
    }
});

jTable3.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
        new String [] {
            "Destination ID", "Name"
        }
) {
    boolean[] canEdit = new boolean [] {
        false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable3.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable3MouseClicked(evt);
    }
});
jScrollPane3.setViewportView(jTable3);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addGap(14, 14, 14)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addComponent(jPanel9, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(jPanel3, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 162, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(30, 30, 30)
                .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 104, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGroup(layout.createSequentialGroup()
                .addGap(42, 42, 42)
                .addComponent(UpdateButton2)
                .addGap(42, 42, 42)
                .addComponent(DeleteButton)
                .addGap(42, 42, 42)
                .addComponent(ClearButton)
            )));
}

```

```

        .addComponent(DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(50, 50, 50)
        .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 105,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(50, 50, 50)
        .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
        .addGroup(layout.createSequentialGroup()
            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 483,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(jScrollPane3))
            .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 968,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addContainerGap(18, Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 38,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 128,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                        .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 119,
Short.MAX_VALUE)
                        .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
Short.MAX_VALUE))))
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addGap(18, 50, Short.MAX_VALUE)
                    .addContainerGap())))
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(layout.createSequentialGroup()
                    .addGap(30, 30, 30))
                .addGroup(layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(jPanel9, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addContainerGap())))
            .addGroup(layout.createSequentialGroup()
                .addGap(18, 18, 18)
                .addComponent(jPanel9, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addContainerGap())))
        .addContainerGap())
    );
    pack();
// </editor-fold> //GEN-END:initComponents

private void DepartureFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_DepartureFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_DepartureFieldActionPerformed

private void TripFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_TripFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_TripFieldActionPerformed

```

```

private void ArrivalFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_ArrivalFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_ArrivalFieldActionPerformed

private void DestinationFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_DestinationFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_DestinationFieldActionPerformed

private void DestinationFieldKeyReleased(java.awt.event.KeyEvent evt) { //GEN-FIRST:event_DestinationFieldKeyReleased
    // TODO add your handling code here:
} //GEN-LAST:event_DestinationFieldKeyReleased

private void jTable1MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable1MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
    int selectedRowIndex = jTable1.getSelectedRow();
    TripField.setText(model.getValueAt(selectedRowIndex , 0 ).toString());
} //GEN-LAST:event_jTable1MouseClicked

private void SearchTripFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_SearchTripFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_SearchTripFieldActionPerformed

private void SearchTripFieldKeyReleased(java.awt.event.KeyEvent evt) { //GEN-FIRST:event_SearchTripFieldKeyReleased
} //GEN-LAST:event_SearchTripFieldKeyReleased

private void DestinationSFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_DestinationSFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_DestinationSFieldActionPerformed

private void DestinationSFieldKeyReleased(java.awt.event.KeyEvent evt) { //GEN-FIRST:event_DestinationSFieldKeyReleased
try{
    String sr1 = SearchTripField.getText();
    String sr2 = DestinationSField.getText();

    pst = conn.prepareStatement("SELECT to_tr_id , to_dst_id, to_arrival, to_departure FROM travel_to WHERE to_tr_id =? and to_dst_id =?");
    pst.setString(1 , sr1);
    pst.setString(2 , sr2);
    ResultSet rs = pst.executeQuery();

    if(rs.next() == true)
    {
        String to_tr_id  = rs.getString(1);
        String to_dst_id = rs.getString(2);
        String to_arrival = rs.getString(3);
        String to_departure = rs.getString(4);

        TripField.setText(to_tr_id);
        DestinationField.setText(to_dst_id);
        ArrivalField.setText(to_arrival);
        DepartureField.setText( to_departure);
    }
    else{
        ArrivalField.setText("");
        DepartureField.setText("");
        TripField.setText("");
        DestinationField.setText("");
        SearchTripField.setText("");
        DestinationSField.setText("");
    }
} catch(SQLException e){
}
}

```

```

        System.out.println(e.getMessage());
    }
}//GEN-LAST:event_DestinationSFieldKeyReleased

private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ExitButtonActionPerformed
    System.exit(0);
}//GEN-LAST:event_ExitButtonActionPerformed

private void ClearButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_ClearButtonActionPerformed
    ArrivalField.setText("");
    DepartureField.setText("");
    TripField.setText("");
    DestinationField.setText("");
    SearchTripField.setText("");
    DestinationSField.setText("");
}

//GEN-LAST:event_ClearButtonActionPerformed

private void DeleteButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_DeleteButtonActionPerformed
    String search1 , search2;
    search1 = SearchTripField.getText();
    search2 = DestinationSField.getText();

    try{
        pst= conn.prepareStatement("delete from travel_to WHERE to_tr_id =? and to_dst_id=? ");
        pst.setString(1, search1);
        pst.setString(2, search2);
        pst.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Deleted!!!");
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Trip ID","Destination ID","Time Arrival","Time Departure"}));
        table_load();
        ArrivalField.setText("");
        DepartureField.setText("");
        TripField.setText("");
        DestinationField.setText("");
        SearchTripField.setText("");
        DestinationSField.setText("");
    }catch(SQLException e){
        System.out.println(e.getMessage());
    }
}//GEN-LAST:event_DeleteButtonActionPerformed

private void UpdateButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_UpdateButton2ActionPerformed
    String to_tr_id ,to_dst_id , to_arrival ,to_departure ,search1 ,search2 ;
    to_dst_id =DestinationField.getText();
    to_arrival = ArrivalField.getText();
    to_departure= DepartureField.getText();
    to_tr_id = TripField.getText();
    search1 = SearchTripField.getText();
    search2 = DestinationSField.getText();

    try{
        pst= conn.prepareStatement("update travel_TO set to_tr_id =? ,to_dst_id=? , to_arrival=?, to_departure=? WHERE to_tr_id=? and to_dst_id=?");
        pst.setString(1,to_tr_id);
        pst.setString(2,to_dst_id);
        pst.setString(3,to_arrival);
        pst.setString(4,to_departure);
        pst.setString(5,search1);
        pst.setString(6,search2);
        pst.executeUpdate();
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Trip ID","Destination ID","Time Arrival","Time Departure"}));
        table_load();
    }
}

```

```

        ArrivalField.setText("");
        DepartureField.setText("");
        TripField.setText("");
        DestinationField.setText("");
        SearchTripField.setText("");
        DestinationSField.setText("");
    }catch(SQLException e){
        System.out.println(e.getMessage());
    }
}//GEN-LAST:event_UpdateButton2ActionPerformed

private void SaveButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_SaveButtonActionPerformed

    String to_tr_id ,to_dst_id , to_arrival ,to_departure ;

    to_dst_id = DestinationField.getText();
    to_arrival = ArrivalField.getText();
    to_departure= DepartureField.getText();
    to_tr_id = TripField.getText();

    try{

        cs= conn.prepareCall("insert into travel_to
(to_tr_id,to_dst_id,to_arrival,to_departure)values(?, ?, ?, ?)");
        cs.setString(1,to_tr_id );
        cs.setString(2,to_dst_id );
        cs.setString(3,to_arrival);
        cs.setString(4,to_departure);
        cs.executeUpdate();
        JOptionPane.showMessageDialog(null , "Record Addeddd!!!");
        jTable2.setModel(new DefaultTableModel(null , new String[]{"Trip ID","Destination
ID","Time Arrival","Time Departure"}));
        table_load();
        ArrivalField.setText("");
        DepartureField.setText("");
        TripField.setText("");
        DestinationField.setText("");
        SearchTripField.setText("");
        DestinationSField.setText("");
    }catch(SQLException e){
        System.out.println(e.getMessage());
    }
}//GEN-LAST:event_SaveButtonActionPerformed

private void jTable3MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable3MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable3.getModel();
    int selectedRowIndex = jTable3.getSelectedRow();
    DestinationField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
}

//GEN-LAST:event_jTable3MouseClicked

private void jTable2MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable2MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable2.getModel();
    int selectedRowIndex = jTable2.getSelectedRow();
    TripField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
    SearchTripField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
    DestinationField.setText(model.getValueAt(selectedRowIndex ,1 ).toString());
    DestinationSField.setText(model.getValueAt(selectedRowIndex ,1 ).toString());
    ArrivalField.setText(model.getValueAt(selectedRowIndex ,2 ).toString());
    DepartureField.setText(model.getValueAt(selectedRowIndex ,3 ).toString());
}

//GEN-LAST:event_jTable2MouseClicked

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
}

```

```

        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {
            java.util.logging.Logger.getLogger(Travel_To.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Travel_To.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Travel_To.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Travel_To.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    }
    //
```

//</editor-fold>

```

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        try {
            new Travel_To().setVisible(true);
        } catch (SQLException ex) {
            Logger.getLogger(Travel_To.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
});
```

}

```

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JTextField ArrivalField;
private javax.swing.JButton ClearButton;
private javax.swing.JButton DeleteButton;
private javax.swing.JTextField DepartureField;
private javax.swing.JTextField DestinationField;
private javax.swing.JTextField DestinationSField;
private javax.swing.JButton ExitButton;
private javax.swing.JButton SaveButton;
private javax.swing.JTextField SearchTripField;
private javax.swing.JTextField TripField;
private javax.swing.JButton UpdateButton2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel123;
private javax.swing.JLabel jLabel124;
private javax.swing.JLabel jLabel17;
private javax.swing.JLabel jLabel18;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel9;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JScrollPane jScrollPane3;
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
private javax.swing.JTable jTable3;
// End of variables declaration//GEN-END:variables
}
```

TripEvent

```
package classes;

import static classes.Login.conn;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class TripEvent extends javax.swing.JFrame {

    public TripEvent() throws SQLException {
        initComponents();
        table_load();
        table_load_Branches();
    }

    PreparedStatement pst;
    PreparedStatement pst1;
    PreparedStatement pst2;
    CallableStatement cs;

    public void table_load() throws SQLException {
        Statement st = conn.createStatement();
        String table_sql = "SELECT * FROM trip";
        ResultSet rs = st.executeQuery(table_sql);

        while(rs.next()){

            String tr_id= String.valueOf(rs.getInt("tr_id"));
            String tr_departure = rs.getString("tr_departure");
            String tr_return = rs.getString("tr_return");
            String tr_maxseats = String.valueOf(rs.getInt("tr_maxseats"));
            String cost = String.valueOf(rs.getFloat("tr_cost"));
            String tr_br_code = String.valueOf(rs.getInt("tr_br_code"));
            String tr_gui_AT = rs.getString("tr_gui_AT");
            String tr_drv_AT = rs.getString("tr_drv_AT");

            String tbData[] = {tr_id , tr_departure, tr_return, tr_maxseats , cost , tr_br_code,
tr_gui_AT ,tr_drv_AT };

            DefaultTableModel tblModel = (DefaultTableModel)jTable2.getModel();
            tblModel.addRow(tbData);
        }
    }

    public void table_loadDriver(String bf) throws SQLException {
        pst1 = conn.prepareStatement("SELECT wrk_AT ,wrk_name,wrk_lname,wrk_br_code, drv_route FROM
worker INNER JOIN driver ON drv_AT = wrk_AT WHERE wrk_br_code =?");
        pst1.setString(1,bf);
        ResultSet rs = pst1.executeQuery();

        while(rs.next()){

            String at= rs.getString("wrk_AT");
            String name = rs.getString("wrk_name");
            String laname = rs.getString("wrk_lname");
            String code = String.valueOf(rs.getInt("wrk_br_code"));
            String route = rs.getString("drv_route");

            String tbData[] = {at,name,laname,code,route};

            DefaultTableModel tblModel = (DefaultTableModel)jTabledriver.getModel();
            tblModel.addRow(tbData);
        }
    }

    public void table_loadGuide(String bf) throws SQLException {
```

```

pst2 = conn.prepareStatement( "SELECT wrk_AT ,wrk_name,wrk_lname,wrk_br_code, lng_language FROM
worker INNER JOIN languages ON lng_gui_AT = wrk_AT WHERE wrk_br_code =?");
pst2.setString(1,bf);
ResultSet rs = pst2.executeQuery();

while(rs.next()){

    String at= rs.getString("wrk_AT");
    String name = rs.getString("wrk_name");
    String laname = rs.getString("wrk_lname");
    String code = String.valueOf(rs.getInt("wrk_br_code"));
    String route =rs.getString("lng_language");

    String tbData[] = {at,name,laname,code,route};

    DefaultTableModel tblModel = (DefaultTableModel) jTableguide.getModel();
    tblModel.addRow(tbData);
}

}

public void table_load_Branches() throws SQLException {
    Statement st = conn.createStatement();
    String table_sql = "SELECT br_code FROM branch";
    ResultSet rs = st.executeQuery(table_sql);

    while(rs.next()){

        String br = rs.getString("br_code");
        String tbData[] = {br};
        DefaultTableModel tblModel = (DefaultTableModel) jTable4.getModel();
        tblModel.addRow(tbData);
    }
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-BEGIN:initComponents
private void initComponents() {

    jLabel2 = new javax.swing.JLabel();
    buttonGroup1 = new javax.swing.ButtonGroup();
    jToggleButton1 = new javax.swing.JToggleButton();
    jTable1 = new javax.swing.JTable();
    jScrollPane2 = new javax.swing.JScrollPane();
    jTable3 = new javax.swing.JTable();
    jScrollPane4 = new javax.swing.JScrollPane();
    jTable5 = new javax.swing.JTable();
    jScrollPane5 = new javax.swing.JScrollPane();
    jTable6 = new javax.swing.JTable();
    jScrollPane6 = new javax.swing.JScrollPane();
    jTable7 = new javax.swing.JTable();
    jScrollPane7 = new javax.swing.JScrollPane();
    jTable8 = new javax.swing.JTable();
    jPanel2 = new javax.swing.JPanel();
    jLabel11 = new javax.swing.JLabel();
    jPanel3 = new javax.swing.JPanel();
    jLabel14 = new javax.swing.JLabel();
    jLabel15 = new javax.swing.JLabel();
    jLabel16 = new javax.swing.JLabel();
    jLabel17 = new javax.swing.JLabel();
    ReturnField = new javax.swing.JTextField();
    jLabel18 = new javax.swing.JLabel();
    CostField = new javax.swing.JTextField();
    DepartureField = new javax.swing.JTextField();
    SeatsField = new javax.swing.JTextField();
    BranchField = new javax.swing.JTextField();
    jLabel19 = new javax.swing.JLabel();
    jLabel111 = new javax.swing.JLabel();
    DriverATField = new javax.swing.JTextField();
    GuideATField = new javax.swing.JTextField();
    SaveButton = new javax.swing.JButton();
    ExitButton = new javax.swing.JButton();
    ClearButton = new javax.swing.JButton();
    jPanel11 = new javax.swing.JPanel();
    jLabel10 = new javax.swing.JLabel();
}

```

```

SearchField = new javax.swing.JTextField();
DeleteButton = new javax.swing.JButton();
UpdateButton2 = new javax.swing.JButton();
jScrollPane1 = new javax.swing.JScrollPane();
jTable2 = new javax.swing.JTable();
jScrollPane3 = new javax.swing.JScrollPane();
jTable4 = new javax.swing.JTable();
jScrollPane8 = new javax.swing.JScrollPane();
jTableguide = new javax.swing.JTable();
jScrollPane9 = new javax.swing.JScrollPane();
jTabledriver = new javax.swing.JTable();
AddEventButton = new javax.swing.JButton();

jLabel2.setText("jLabel2");

jToggleButton1.setText("jToggleButton1");

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jTable3.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane2.setViewportView(jTable3);

jTable5.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane4.setViewportView(jTable5);

jTable6.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane5.setViewportView(jTable6);

jTable7.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
),

```

```

        new String [] {
            "Title 1", "Title 2", "Title 3", "Title 4"
        }
    );
jScrollPane6.setViewportView(jTable7);

jTable8.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane7.setViewportView(jTable8);

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
jLabel1.setText("Trip & Events");

jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Add Trip",
javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 24))); // NOI18N

jLabel4.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel4.setText("Trip Departure");

jLabel5.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel5.setText("Trip Return");

jLabel6.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel6.setText("Max Seats");

jLabel7.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel7.setText("Cost");

ReturnField.setText("YYYY-MM-DD HH:MM:SS");
ReturnField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ReturnFieldActionPerformed(evt);
    }
});
jLabel8.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel8.setText("Branch Code");

CostField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        CostFieldActionPerformed(evt);
    }
});
jLabel9.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel9.setText("Branch Code");

DepartureField.setText("YYYY-MM-DD HH:MM:SS");
DepartureField.setToolTipText("");
DepartureField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DepartureFieldActionPerformed(evt);
    }
});
jLabel10.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel10.setText("Branch Code");

SeatsField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SeatsFieldActionPerformed(evt);
    }
});
jLabel11.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel11.setText("Branch Code");

BranchField.setEditable(false);
BranchField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        BranchFieldActionPerformed(evt);
    }
});

```

```

    });

jLabel9.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel9.setText("Guide AT");

jLabel11.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel11.setText("Driver AT");

DriverATField.setEditable(false);
DriverATField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DriverATFieldActionPerformed(evt);
    }
});

GuideATField.setEditable(false);
GuideATField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        GuideATFieldActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
jPanel3.setLayout(jPanel3Layout);
jPanel3Layout.setHorizontalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(201, 201, 201)
            .addComponent(SeatsField, javax.swing.GroupLayout.PREFERRED_SIZE, 187,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(16, 16, 16)

            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addGap(106, 106, 106)
                    .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(16, 16, 16)

                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(152, 152, 152)
                            .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 152,
                                javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addGap(106, 106, 106)

                            .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
                                javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addGap(33, 33, 33)

                            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                                .addGroup(jPanel3Layout.createSequentialGroup()
                                    .addGap(187, 187, 187)
                                    .addComponent(CostField)
                                    .addGap(187, 187, 187)

                                    .addComponent(DepartureField, javax.swing.GroupLayout.PREFERRED_SIZE, 187,
                                        javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addGap(33, 33, 33)

                                    .addComponent(ReturnField)
                                    .addComponent(BranchField)
                                    .addComponent(GuideATField)
                                    .addComponent(DriverATField)))
                                .addGap(32, 32, 32)
                            )
                        )
                    )
                )
            )
        )
);

jPanel3Layout.setVerticalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(201, 201, 201)
            .addComponent(SeatsField, javax.swing.GroupLayout.PREFERRED_SIZE, 187,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(16, 16, 16)

            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel3Layout.createSequentialGroup()
                    .addGap(106, 106, 106)
                    .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(16, 16, 16)

                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(jPanel3Layout.createSequentialGroup()
                            .addGap(152, 152, 152)
                            .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 152,
                                javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addGap(106, 106, 106)

                            .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 106,
                                javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addGap(33, 33, 33)

                            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                                .addGroup(jPanel3Layout.createSequentialGroup()
                                    .addGap(187, 187, 187)
                                    .addComponent(CostField)
                                    .addGap(187, 187, 187)

                                    .addComponent(DepartureField, javax.swing.GroupLayout.PREFERRED_SIZE, 187,
                                        javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addGap(33, 33, 33)

                                    .addComponent(ReturnField)
                                    .addComponent(BranchField)
                                    .addComponent(GuideATField)
                                    .addComponent(DriverATField)))
                                .addGap(32, 32, 32)
                            )
                        )
                    )
                )
            )
        )
);

```

```

        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel4)
            .addComponent(DepartureField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel5)
            .addComponent(ReturnField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel6)
        .addComponent(SeatsField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel7)
        .addComponent(CostField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel8)
        .addComponent(BranchField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel9)
        .addComponent(GuideATField, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE))
    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(DriverATField, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel11))
    .addContainerGap(15, Short.MAX_VALUE))
};

SaveButton.setFont(new java.awt.Font("Segoe UI", 0, 27)); // NOI18N
SaveButton.setText("Save");
SaveButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SaveButtonActionPerformed(evt);
    }
});

ExitButton.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
ExitButton.setText("Exit");
ExitButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExitButtonActionPerformed(evt);
    }
});

ClearButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
ClearButton.setText("Clear");
ClearButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ClearButtonActionPerformed(evt);
    }
});

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Search",
javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Segoe UI", 0, 22))); // NOI18N

jLabel10.setFont(new java.awt.Font("Segoe UI", 0, 20)); // NOI18N
jLabel10.setText("Trip ID");

SearchField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        SearchFieldActionPerformed(evt);
    }
});
SearchField.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {

```

```

        SearchFieldKeyReleased(evt);
    }
});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(32, 32, 32)
        .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 109,
        javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 243,
        javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, Short.MAX_VALUE))
);
jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(15, 15, 15)
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel10)
            .addComponent(SearchField, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
            javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(20, Short.MAX_VALUE))
);
DeleteButton.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
DeleteButton.setText("Delete");
DeleteButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteButtonActionPerformed(evt);
    }
});
UpdateButton2.setFont(new java.awt.Font("Segoe UI", 0, 22)); // NOI18N
UpdateButton2.setText("Update");
UpdateButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateButton2ActionPerformed(evt);
    }
});
jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "Trip ID", "Departure", "Return", "Max Seats", "Cost", "Branch Code", "Guide AT",
        "Driver AT"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable2MouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable2);

jTable4.setBorder(javax.swing.BorderFactory.createTitledBorder(""));
jTable4.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "Branches"
    }
));

```

```

        }
    ) {
        boolean[] canEdit = new boolean [] {
            false
        };

        public boolean isCellEditable(int rowIndex, int columnIndex) {
            return canEdit [columnIndex];
        }
    });
jTable4.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable4MouseClicked(evt);
    }
});
jScrollPane3.setViewportView(jTable4);

jTableguide.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "Guide AT", "Name", "Last Name", "Branch Code", "Language"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTableguide.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTableguideMouseClicked(evt);
    }
});
jScrollPane8.setViewportView(jTableguide);

jTabledriver.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "Driver AT", "Name", "Last Name", "Branch Code", "Route"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTabledriver.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTabledriverMouseClicked(evt);
    }
});
jScrollPane9.setViewportView(jTabledriver);

AddEventButton.setFont(new java.awt.Font("Segoe UI", 0, 25)); // NOI18N
AddEventButton.setText("Add Event");
AddEventButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        AddEventButtonActionPerformed(evt);
    }
});
javaswing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

```

```

        .addGroup(jPanel2Layout.createSequentialGroup())
        .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGroup(jPanel2Layout.createSequentialGroup())
        .addGap(142, 142, 142)
        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 261,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGroup(jPanel2Layout.createSequentialGroup())
        .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 164,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(AddEventButton, javax.swing.GroupLayout.PREFERRED_SIZE, 164,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
        .addGroup(jPanel2Layout.createSequentialGroup())
        .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 153,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 154,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 144,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 144,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanel2Layout.createSequentialGroup())
        .addGap(12, 12, 12)
        .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 56,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jScrollPane9, javax.swing.GroupLayout.PREFERRED_SIZE, 404,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(jScrollPane8))
        .addGroup(jPanel2Layout.createSequentialGroup())
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(jPanel2Layout.createSequentialGroup())
        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 36,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanel2Layout.createSequentialGroup())
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 216,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
        .addComponent(jPanel9, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, 287, Short.MAX_VALUE)
        .addComponent(jPanel3, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 0, Short.MAX_VALUE)

```

```

        .addComponent(jScrollPane8, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
Short.MAX_VALUE)))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(SaveButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(AddEventButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(UpdateButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 87,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent>DeleteButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(ClearButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(ExitButton, javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(22, 22, 22))
);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
    );
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, 698,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(0, 0, Short.MAX_VALUE))
    );
}

pack();
}// </editor-fold> //GEN-END: initComponents

private void jTable4MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable4MouseClicked
    jTabledriver.setModel(new DefaultTableModel(null , new String[]{"Driver AT", "Name","Last Name","Branch Code","Route"}));
    jTableguide.setModel(new DefaultTableModel(null , new String[]{"Guide AT", "Name","Last Name","Branch Code","Language"}));
    DefaultTableModel model = (DefaultTableModel)jTable4.getModel();
    int selectedRowIndex = jTable4.getSelectedRow();
    BranchField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
    try {
        table_loadDriver(model.getValueAt(selectedRowIndex ,0 ).toString());
    } catch (SQLException ex) {
        Logger.getLogger(TripEvent.class.getName()).log(Level.SEVERE, null, ex);
    }
    try {
        table_loadGuide(model.getValueAt(selectedRowIndex ,0 ).toString());
    } catch (SQLException ex) {
        Logger.getLogger(TripEvent.class.getName()).log(Level.SEVERE, null, ex);
    }
} //GEN-LAST:event_jTable4MouseClicked

private void jTable2MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTable2MouseClicked
    DefaultTableModel model = (DefaultTableModel)jTable2.getModel();
    int selectedRowIndex = jTable2.getSelectedRow();
    SearchField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
    DepartureField.setText(model.getValueAt(selectedRowIndex ,1 ).toString());
    ReturnField.setText(model.getValueAt(selectedRowIndex ,2 ).toString());
    SeatsField.setText(model.getValueAt(selectedRowIndex ,3 ).toString());
    CostField.setText(model.getValueAt(selectedRowIndex ,4 ).toString());
}

```

```

BranchField.setText(model.getValueAt(selectedRowIndex , 5 ).toString());
GuideATField.setText(model.getValueAt(selectedRowIndex , 6 ).toString());
DriverATField.setText(model.getValueAt(selectedRowIndex , 7 ).toString());

}//GEN-LAST:event_jTable2MouseClicked

private void UpdateButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_UpdateButton2ActionPerformed

String departure , returnf , seats , cost , brcode ,srid ,Guideat ,Driverat;

departure = DepartureField.getText();
returnf =ReturnField.getText();
seats = SeatsField.getText();
cost = CostField.getText();
brcode = BranchField.getText();
srid = SearchField.getText();
Guideat = GuideATField.getText();
Driverat = DriverATField.getText();

try{

pst= conn.prepareStatement("update trip set tr_departure=? ,tr_return=? ,tr_maxseats=?,
tr_cost=? ,tr_br_code=?, tr_gui_AT=? ,tr_drv_AT=? WHERE tr_id=?");
pst.setString(1,departure);
pst.setString(2,returnf);
pst.setString(3,seats);
pst.setString(4,cost);
pst.setString(5,brcode);
pst.setString(6,Guideat);
pst.setString(7,Driverat);
pst.setString(8,srid);
pst.executeUpdate();
JOptionPane.showMessageDialog(null , "Record Update!!!");
jTable2.setModel(new DefaultTableModel(null , new String[]{"Trip ID",
"Departure","Return","Max Seats","Cost","Branch Code","Guide AT" , "Driver AT "}));
table_load();
DepartureField.setText("");
ReturnField.setText("");
SeatsField.setText("");
CostField.setText("");
BranchField.setText("");
GuideATField.setText("");
DriverATField.requestFocus();
}catch(SQLException e){
JOptionPane.showMessageDialog(null , e.getMessage());
}
}//GEN-LAST:event_UpdateButton2ActionPerformed

private void DeleteButtonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_DeleteButtonActionPerformed
String srid;

srid = SearchField.getText();

try{

pst= conn.prepareStatement("delete from trip WHERE tr_id=?");
pst.setString(1,srid);
pst.executeUpdate();
JOptionPane.showMessageDialog(null , "Record Deleted!!!");
jTable2.setModel(new DefaultTableModel(null , new String[]{"Trip ID",
"Departure","Return","Max Seats","Cost","Branch Code","Guide AT" , "Driver AT "}));
table_load();
DepartureField.setText("");
ReturnField.setText("");
SeatsField.setText("");
CostField.setText("");
BranchField.setText("");
GuideATField.setText("");
DriverATField.requestFocus();
}catch(SQLException e){
JOptionPane.showMessageDialog(null , e.getMessage());
}
}

```

```

} //GEN-LAST:event_DeleteButtonActionPerformed

private void SearchFieldKeyReleased(java.awt.event.KeyEvent evt) { //GEN-FIRST:event_SearchFieldKeyReleased

    try{

        String wrk_AT = SearchField.getText();

        pst = conn.prepareStatement("SELECT tr_id , tr_departure, tr_return ,tr_maxseats , tr_cost
, tr_br_code , tr_gui_AT , tr_drv_AT FROM trip WHERE tr_id = ?");
        pst.setString(1 , wrk_AT);
        ResultSet rs = pst.executeQuery();

        if(rs.next() == true)
        {
            String AT = rs.getString(1);
            String name = rs.getString(2);
            String lname = rs.getString(3);
            String salary = rs.getString(4);
            String code = rs.getString(5);
            String license = rs.getString(6);
            String route = rs.getString(7);
            String experience = rs.getString(8);

            DepartureField.setText(name);
            ReturnField.setText(lname);
            SeatsField.setText(AT);
            CostField.setText(salary);
            BranchField.setText(code);
        }else{
            DepartureField.setText("");
            ReturnField.setText("");
            SeatsField.setText("");
            CostField.setText("");
            BranchField.setText("");
            GuideATField.setText("");
            DriverATField.requestFocus();
        }

    }catch(SQLException e){
        JOptionPane.showMessageDialog(null , e.getMessage());
    }
} //GEN-LAST:event_SearchFieldKeyReleased

private void SearchFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_SearchFieldActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_SearchFieldActionPerformed

private void ClearButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_ClearButtonActionPerformed

    DepartureField.setText("");
    ReturnField.setText("");
    SeatsField.setText("");
    CostField.setText("");
    BranchField.setText("");
    GuideATField.setText("");
    SearchField.setText("");
    DriverATField.requestFocus();

} //GEN-LAST:event_ClearButtonActionPerformed

private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_ExitButtonActionPerformed
    System.exit(0);
} //GEN-LAST:event_ExitButtonActionPerformed

private void SaveButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_SaveButtonActionPerformed

    String tr_departure , tr_return , tr_maxseats ,tr_cost ,tr_br_code ,tr_gui_AT, tr_drv_AT;
    tr_departure = DepartureField.getText();

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```

        tr_return = ReturnField.getText();
        tr_maxseats = SeatsField.getText();
        tr_cost= CostField.getText();
        tr_br_code = BranchField.getText();
        tr_gui_AT = GuideATField.getText();
        tr_drv_AT = DriverATField.getText();

        try{

            cs= conn.prepareCall("insert into trip
(tr_departure,tr_return,tr_maxseats,tr_cost,tr_br_code,tr_gui_AT,tr_drv_AT)values(?,?,?,?,?,?,?,?)");
            cs.setString(1,tr_departure);
            cs.setString(2,tr_return);
            cs.setString(3,tr_maxseats);
            cs.setString(4,tr_cost);
            cs.setString(5,tr_br_code);
            cs.setString(6,tr_gui_AT);
            cs.setString(7,tr_drv_AT);
            cs.executeUpdate();

            JOptionPane.showMessageDialog(null , "Record Added!!!");
            jTable2.setModel(new DefaultTableModel(null , new String[]{"Trip ID",
"Departure","Return","Max Seats","Cost","Branch Code","Guide AT" , "Driver AT "}));
            table_load();
            DepartureField.setText("");
            ReturnField.setText("");
            SeatsField.setText("");
            CostField.setText("");
            BranchField.setText("");
            GuideATField.setText("");
            DriverATField.requestFocus();
        }catch(SQLException e){
            JOptionPane.showMessageDialog(null , e.getMessage());
        }
    } //GEN-LAST:event_SaveButtonActionPerformed

    private void BranchFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_BranchFieldActionPerformed
        // TODO add your handling code here:
    } //GEN-LAST:event_BranchFieldActionPerformed

    private void SeatsFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_SeatsFieldActionPerformed
        // TODO add your handling code here:
    } //GEN-LAST:event_SeatsFieldActionPerformed

    private void CostFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_CostFieldActionPerformed
        // TODO add your handling code here:
    } //GEN-LAST:event_CostFieldActionPerformed

    private void ReturnFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_ReturnFieldActionPerformed
        // TODO add your handling code here:
    } //GEN-LAST:event_ReturnFieldActionPerformed

    private void DepartureFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_DepartureFieldActionPerformed
        // TODO add your handling code here:
    } //GEN-LAST:event_DepartureFieldActionPerformed

    private void DriverATFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_DriverATFieldActionPerformed
        // TODO add your handling code here:
    } //GEN-LAST:event_DriverATFieldActionPerformed

    private void GuideATFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_GuideATFieldActionPerformed
        // TODO add your handling code here:
    } //GEN-LAST:event_GuideATFieldActionPerformed

    private void jTabledriverMouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTabledriverMouseClicked
        DefaultTableModel model = (DefaultTableModel) jTabledriver.getModel();
        int selectedRowIndex = jTabledriver.getSelectedRow();
    }

```

```

        DriverATField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
    } //GEN-LAST:event_jTableguideMouseClicked

    private void jTableguideMouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jTableguideMouseClicked
        DefaultTableModel model = (DefaultTableModel) jTableguide.getModel();
        int selectedRowIndex = jTableguide.getSelectedRow();
        GuideATField.setText(model.getValueAt(selectedRowIndex ,0 ).toString());
    } //GEN-LAST:event_jTableguideMouseClicked

    private void AdddEventButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_AdddEventButtonActionPerformed
        try {
            Events e = new Events();
            e.setVisible(true);
        } catch (SQLException ex) {
            Logger.getLogger(TripEvent.class.getName()).log(Level.SEVERE, null, ex);
        }
    } //GEN-LAST:event_AdddEventButtonActionPerformed

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    new TripEvent().setVisible(true);
                } catch (SQLException ex) {
                    Logger.getLogger(TripEvent.class.getName()).log(Level.SEVERE, null, ex);
                }
            }
        });
    }

    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JButton AdddEventButton;
    private javax.swing.JTextField BranchField;
    private javax.swing.JButton ClearButton;
    private javax.swing.JTextField CostField;
    private javax.swing.JButton DeleteButton;
    private javax.swing.JTextField DepartureField;
    private javax.swing.JTextField DriverATField;
    private javax.swing.JButton ExitButton;
    private javax.swing.JTextField GuideATField;
    private javax.swing.JTextField ReturnField;
    private javax.swing.JButton SaveButton;
    private javax.swing.JTextField SearchField;
    private javax.swing.JTextField SeatsField;
    private javax.swing.JButton UpdateButton2;
    private javax.swing.ButtonGroup buttonGroup1;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel10;
    private javax.swing.JLabel jLabel11;
    private javax.swing.JLabel jLabel12;
    private javax.swing.JLabel jLabel14;
    private javax.swing.JLabel jLabel15;
    private javax.swing.JLabel jLabel16;
    private javax.swing.JLabel jLabel17;
    private javax.swing.JLabel jLabel18;
    private javax.swing.JLabel jLabel19;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JPanel jPanel2;
    private javax.swing.JPanel jPanel3;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JScrollPane jScrollPane2;
    private javax.swing.JScrollPane jScrollPane3;
    private javax.swing.JScrollPane jScrollPane4;
    private javax.swing.JScrollPane jScrollPane5;
    private javax.swing.JScrollPane jScrollPane6;
    private javax.swing.JScrollPane jScrollPane7;
    private javax.swing.JScrollPane jScrollPane8;
    private javax.swing.JScrollPane jScrollPane9;

```

```
private javax.swing.JTable jTable1;
private javax.swing.JTable jTable2;
private javax.swing.JTable jTable3;
private javax.swing.JTable jTable4;
private javax.swing.JTable jTable5;
private javax.swing.JTable jTable6;
private javax.swing.JTable jTable7;
private javax.swing.JTable jTable8;
private javax.swing.JTable jTabledriver;
private javax.swing.JTable jTableguide;
private javax.swing.JToggleButton jToggleButton1;
// End of variables declaration//GEN-END:variables
}
```