THE CAB CO.

Group - 179
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Scope of the Project:

The project aims to build a **cab booking application** that allows users to search for and book cabs in their area. The system will store information about available cabs, their locations, and their current status (e.g. available or in-use). Users will be able to book cabs by location, type of vehicle, and other criteria, and will be able to view detailed information about each cab before booking it. Additionally, the system will provide an administrative interface for managing The Cab Co.'s fleet, such as adding new cabs and editing existing cab information. This project includes customers who book the cabs, drivers who provide the cab services, and The Cab Co. as the administrator of the system.

Technical Requirements:

Entities:

1. Customer: (User_ID, First_Name, Last_Name, Contact_Details, Address)
2. Driver: (Driver_ID, First_Name, Last_Name, Contact_Details, Address)
3. Booking: (Booking_ID, Customer_ID, Driver_ID, PickUp_Location, Destination_Location, Cost)
4. Ride: (Ride_ID, Booking_ID, Start_Time, End_Time, Distance, Rating)

- The customer entity would likely have a one-to-many relationship with the order entity. This means that one customer can have multiple orders, but each order can only belong to one customer. The cardinality here would be *one customer to many orders.*
- The retailer entity would likely have a one-to-many relationship with the order entity. This means that one retailer can have multiple orders, but each order can only belong to one retailer. The cardinality here would be *one retailer to many orders*.
- The delivery partner entity would likely have a many-to-many relationship with the order entity. This means that a delivery partner can handle multiple orders and an order can be handled by multiple delivery partners. The cardinality here would be *many delivery partners to many orders.*

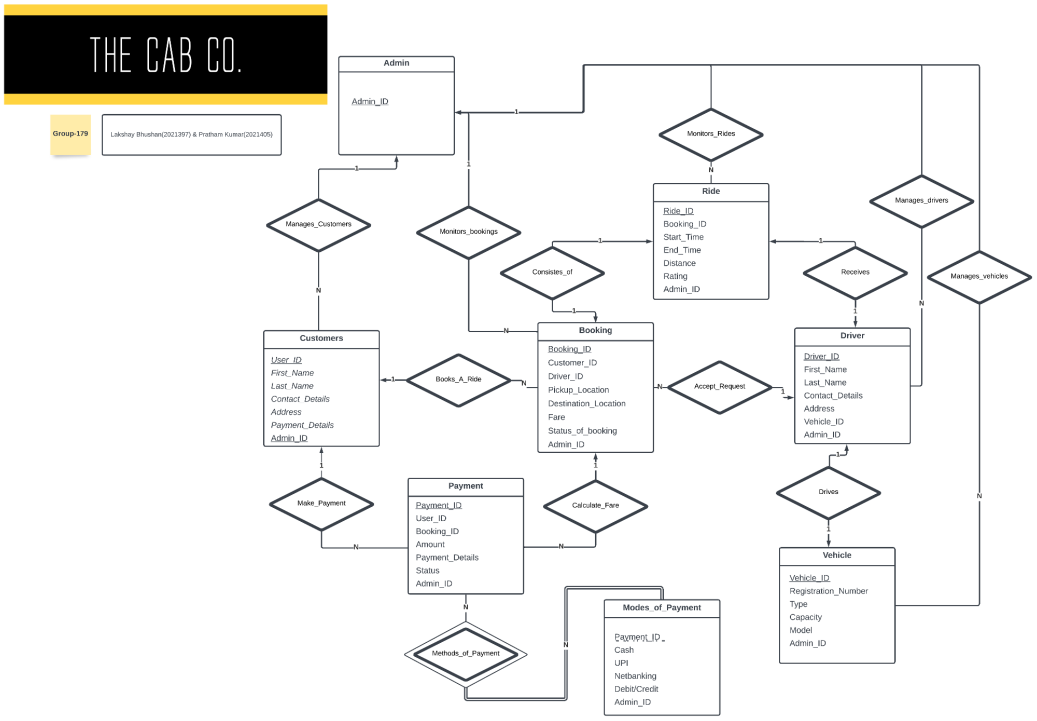
Tech stack:

- Front-end: Python (Tkinter, CustomTkinter)
- Back-end: MySQL

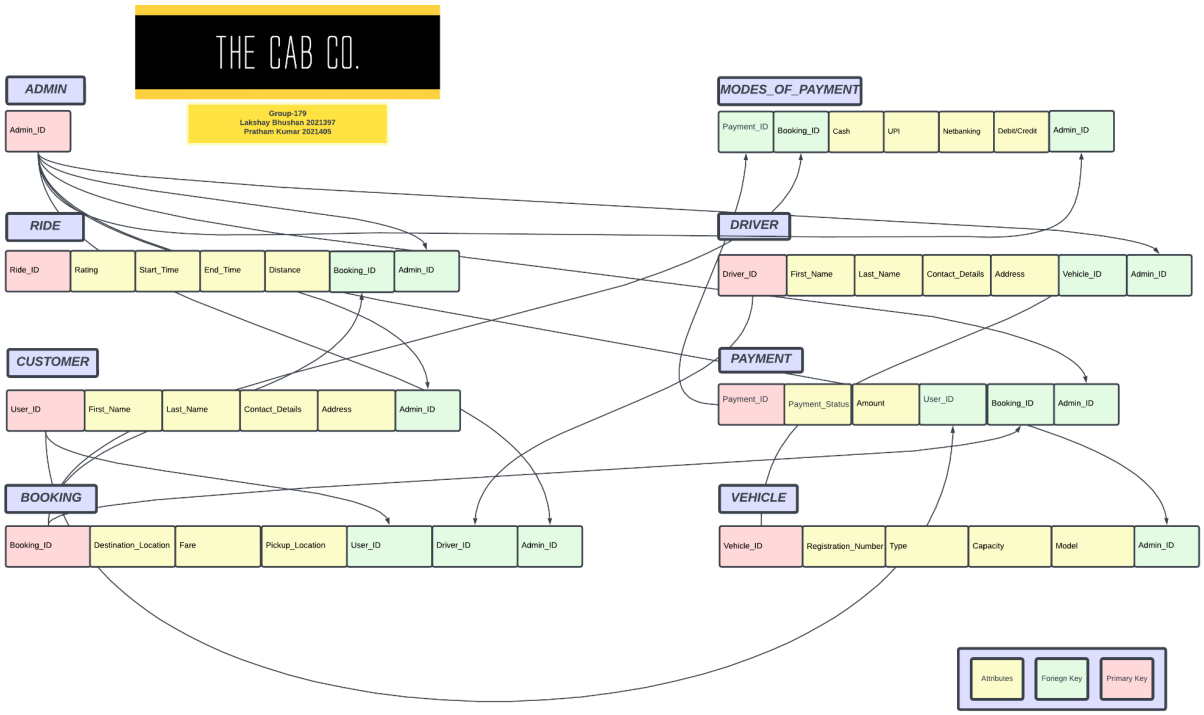
Functional Requirements:

- Customers create their account, and with purchases get access to special offers.
- Customers get to know the cars nearby for a specific radius.
- Searching, viewing and booking cabs for specific time and location.
- Real-time tracking of cabs and receiving updates on the status of the cab.
- Drivers can register themselves on the website and start accepting bookings.
- Different databases will be designed in accordance with the required functionalities.
- Payments can be made through the application.
- Canceling of the booking can also be done, and once the ride is done, the users would be allowed to rate the driver.
- If the customers would have any questions regarding the functionality of the service, they'd be allowed to drop a message to the admin.

ER Diagram:



Relational Schema:



Complex Queries For Deadline-4:

1) -- Retrive Customer Name with associated Driver's name completed in a ride.

```
SELECT c.First_Name AS customer_first_name, c.Last_Name AS customer_last_name,

d.First_Name AS driver_first_name, d.Last_Name AS driver_last_name FROM
Customer c

JOIN Booking b ON c.User_ID = b.Customer_ID JOIN Driver d ON b.Driver_ID =
d.Driver_ID
```

2) -- Retrive the Cusotmer Name, Driver Name and time taken to complete the ride for

distance less than 10 kms:

```
SELECT c.First_Name AS customer_first_name, c.Last_Name AS customer_last_name,

d.First_Name AS driver_first_name, d.Last_Name AS driver_last_name, r.Distance,

CONCAT(HOUR(r.End_Time),':',MINUTE(r.End_Time)) AS time_took FROM Customer c
JOIN

Booking b ON c.User_ID = b.Customer_ID JOIN Driver d ON b.Driver_ID = d.Driver_ID
JOIN

Ride r ON b.Booking_ID = r.Booking_ID WHERE r.Distance < 10;
```

3) -- Retrive the Vehicle Type, Customer got in a particular ride.

```
SELECT c.User_ID, c.First_Name, c.Last_Name, v.Registration_Number, v.Type FROM
Customer

c JOIN Booking b ON c.User_ID = b.Customer_ID JOIN Driver d ON b.Driver_ID =
d.Driver_ID

JOIN Vehicle v ON d.Vehicle_ID = v.Vehicle_ID ORDER BY c.User_ID ASC;
```

4) -- Get the list of all customers who have taken at least one ride with a distance
greater

than 10 km, along with the total number of such rides:

```
SELECT c.User_ID, c.First_Name, c.Last_Name, COUNT(*) AS num_rides FROM
Customer c

JOIN Booking b ON c.User_ID = b.Customer_ID JOIN Ride r ON b.Booking_ID =
r.Booking_ID
```

WHERE r.Distance > 10 GROUP BY c.User_ID HAVING num_rides > 0;

5) -- Retrieve the total distance covered by each car:

SELECT v.Vehicle_ID, v.Registration_Number, v.Type, SUM(r.Distance) AS total_distance_covered

FROM Vehicle v JOIN Driver d ON v.Vehicle_ID = d.Vehicle_ID JOIN Booking b ON

d.Driver_ID = b.Driver_ID JOIN Ride r ON b.Booking_ID = r.Booking_ID GROUP BY

v.Vehicle_ID HAVING COUNT(*) >= 5 ORDER BY v.Vehicle_ID ASC;

6) -- Retrieve the total booking done in a particular period:

SELECT COUNT(*) AS num_bookings FROM Ride WHERE start_time BETWEEN '2023-01-01

00:00:00' AND '2023-01-31 23:59:59';

7) -- Retrieve the details of all customers who have not made any bookings:

SELECT Customer.User_ID, Customer.First_Name, Customer.Last_Name FROM Customer LEFT

JOIN Booking ON Booking.Customer_ID = Customer.User_ID WHERE Booking.Booking_ID IS

NULL;

8) -- Retrieve the details of all drivers who have completed more than 50 rides:

SELECT Driver.Driver_ID, Driver.First_Name, Driver.Last_Name, COUNT(*) AS Total_Rides

FROM Driver INNER JOIN Booking ON Booking.Driver_ID = Driver.Driver_ID INNER JOIN

Ride ON Ride.Booking_ID = Booking.Booking_ID GROUP BY Driver.Driver_ID HAVING

COUNT(*) > 15;

9) -- Retrieve the total fare earned by the company for a specific date (e.g. 2023-01-31):

SELECT SUM(b.Fare) AS total_earnings FROM Booking b JOIN Ride r ON b.Booking_ID =

r.Booking_ID WHERE DATE(r.Start_Time) = '2023-01-31';

10) -- Retrieve the total rating got by all drivers.

SELECT AVG(Rating) AS Avg_Rating FROM Ride;

11) -- Retrieve the details of all drivers who have completed at least one ride with a rating

greater than 4.0:

SELECT Driver.First_Name, Driver.Last_Name, AVG(Ride.Rating) AS Avg_Rating FROM Driver

INNER JOIN Booking ON Driver.Driver_ID = Booking.Driver_ID INNER JOIN Ride ON

Booking.Booking_ID = Ride.Booking_ID GROUP BY Driver.Driver_ID HAVING

AVG(Ride.Rating) > 4.0;

12) -- Retrieve the details of all bookings made by customers who have used all modes of

payment (Cash, UPI, Netbanking, Debit/Credit):

SELECT Booking.Booking_ID, Customer.First_Name, Customer.Last_Name,

Modes_of_payment.Cash, Modes_of_payment.UPI, Modes_of_payment.Netbanking,

Modes_of_payment.Debit_Credit FROM Booking INNER JOIN Modes_of_payment ON

Booking.Booking_ID = Modes_of_payment.Booking_ID INNER JOIN Customer ON

Booking.Customer_ID = Customer.User_ID WHERE (Modes_of_payment.Cash = TRUE) AND

(Modes_of_payment.UPI = TRUE) AND (Modes_of_payment.Netbanking = TRUE) AND

(Modes_of_payment.Debit_Credit = TRUE);

- INSERT INTO payment (Payment_ID, Ride_ID, Amount, Date, Payment_Details, Status, admin_ID) VALUES (789, 432, 200.50, '2023-04-24', 'UPI', 'Completed', '4');

- UPDATE booking SET status_of_booking = 'Cancelled' WHERE User_ID = 123;

- UPDATE vehicle SET Capacity = 5 -- Set capacity to 5 WHERE Driver_ID = 46;

- INSERT INTO customer (User_ID, First_Name, Last_Name, Contact_Details, Address, Payment_Details, admin_ID) VALUES ('123', 'John', 'Doe', '91919191919', 'IIITD', UPI, 123);

14) -- Retrieve the details of the bookings made by customers who have a first name

starting with the letter 'A' and a fare greater than or equal to 1000:

SELECT * FROM Booking WHERE Customer_ID IN (SELECT User_ID FROM Customer WHERE

First_Name LIKE 'A%') AND Fare >= 1000;

15) -- Retrieve the details of all bookings made in a given date range:

SELECT Booking.Booking_ID, Booking.Customer_ID, Booking.Driver_ID,

Booking.PickUp_Location, Booking.Destination_Location, Booking.FareFROM

BookingWHERE Booking.Booking_ID IN (SELECT Ride.Booking_ID FROM Ride WHERE

Start_Time BETWEEN '2023-01-28 00:00:00' AND '2023-12-28 23:59:59');

Embedded Queries: (Deadline 5)

```
import mysql.connector
from prettytable import PrettyTable

db_connection = mysql.connector.connect(
  host = "localhost",
  user = "root",
  passwd = "lakshay24",
  database = "thecabco"
  )
FLAG = True # Creating a flag variable to run the program in a loop

print('''


         _____ _  _ ___    ___  _  ___    ___ ___
  ___ ___  |_   _| || | __|  / __| /_\ | _ )  / __/ _ \   ___ ___
 |___|___|   | | | __ | _|  | (__ / _ \|  _ \ | (_| (_) _ |___|___|
          |_| |_||_|___|  \___/_/ \_|___/  \___\___(_)


''')

if db_connection.is_connected():
    print(">> Status >> : Database is successfully connected\n")
mycursor = db_connection.cursor()

while FLAG:

  print("Select the query you want to run: \n")
  print("Query 1: To Show details of the bookings made by customers who have a first name
starting with the letter '_' and a fare greater than or equal to _____:\n")
  print("Query 2: To show the details of all drivers who have completed at least one ride with a
rating Greater than __:\n")
  query = int(input("Enter the query number: "))

  if query == 1:
    name = input("Enter the first letter from first name of the customer: ")
    fare = input("Enter the fare: ")
    mycursor.execute("SELECT Booking.*, Customer.First_Name, Customer.Last_Name FROM
Booking JOIN Customer ON Booking.Customer_Id = Customer.User_ID WHERE
Customer.First_Name LIKE %s AND Booking.fare >= %s", (name+'%', fare))
    table = PrettyTable()
    table.field_names = [i[0] for i in mycursor.description]
    for row in mycursor:
      table.add_row(row)
    print(table)
```

```
  elif query == 2:
    rating = float(input("Enter the minimum rating: "))
    if rating > 5:
      print("Invalid rating. Please enter a rating between 0 and 5.")
    else:
      mycursor.execute("SELECT Driver.First_Name, Driver.Last_Name, AVG(Ride.Rating) AS
Avg_Rating FROM Driver INNER JOIN Booking ON Driver.Driver_ID = Booking.Driver_ID
INNER JOIN Ride ON Booking.Booking_ID = Ride.Booking_ID GROUP BY Driver.Driver_ID
HAVING AVG(Ride.Rating) > %s", (rating,))
      table = PrettyTable()
      table.field_names = ["First Name", "Last Name", "Average Rating"]
      for row in mycursor:
        table.add_row(row)
      print(table)

  # An Update Query (if time permits)
  else:
    print("Invalid query number.. Please Try Again !!")

  ask = input("Do you want to continue? (Y/N): ")
  if ask.lower() != "y":
    break
```

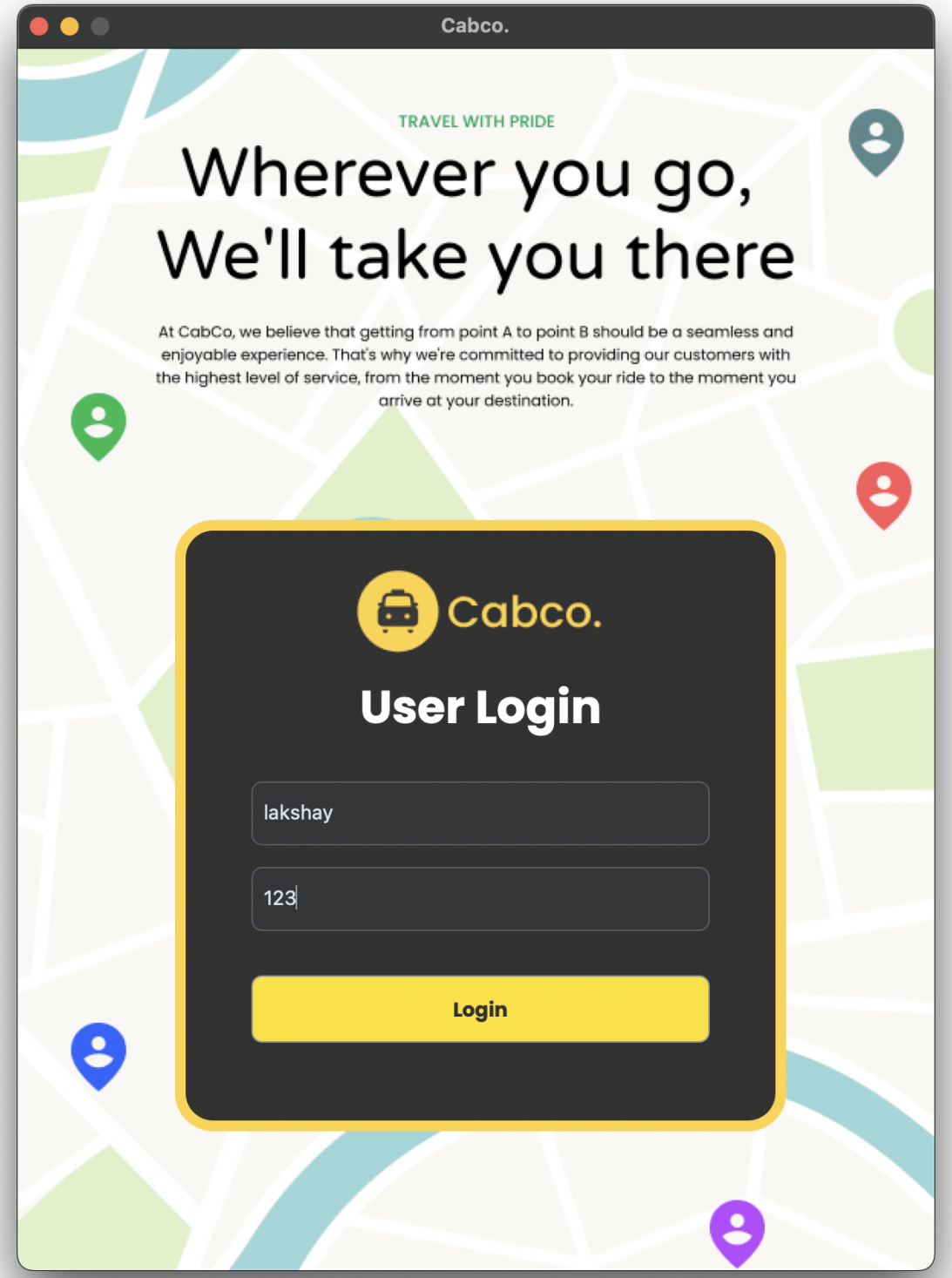
OLAP QUERIES & TRIGGERS:

```
-- TRIGGER 1 --
DELIMITER $$
CREATE TRIGGER TR_Ride_Rating
BEFORE INSERT ON Ride
FOR EACH ROW
BEGIN
   IF NEW.Rating < 0 THEN
      SET NEW.Rating = 0;
   ELSEIF NEW.Rating > 5 THEN
      SET NEW.Rating = 5;
   END IF;
END$$
DELIMITER ;

-- QUERIES TO CHECK WHETHER THE TRIGGER IS WORKING OR NOT --
INSERT INTO Ride (Rating, Start_Time, End_Time, Distance, Booking_ID)
VALUES (7, '2023-03-26 10:00:00', '2023-03-26 11:00:00', 10.44, 338);

INSERT INTO Ride (Rating, Start_Time, End_Time, Distance, Booking_ID)
VALUES (-5, '2023-04-21 01:12:23', '2023-04-21 07:34:35', 34.33, 339);

-- TRIGGER 2 --
```

```
DELIMITER $$
CREATE TRIGGER check_payment_mode
BEFORE INSERT ON Modes_of_Payment
FOR EACH ROW
BEGIN
   IF NOT (NEW.NetBanking = 1 OR NEW.UPI = 1 OR NEW.Debit_Credit = 1) THEN
      SET NEW.Cash = 1;
   END IF;
END $$
DELIMITER ;

-- QUERY TO CHECK WHETHER THE TRIGGER IS WORKING OR NOT --
INSERT INTO Modes_of_Payment (Booking_ID, Cash, Upi, NetBanking, Debit_Credit)
VALUES (6, 0, 1, 0, 0);

-- OLAP Queries --

-- # 1 --
-- To retrieve the total amount paid by each customer who has made a payment, sorted in
descending order of the total amount, and filtered by payment status.
SELECT Customer.First_Name, Customer.Last_Name, Payment.Status, SUM(Payment.Amount)
AS Total_Amount
FROM Customer
JOIN Booking ON Customer.User_ID = Booking.User_ID
JOIN Ride ON Booking.Booking_ID = Ride.Booking_ID
JOIN Payment ON Ride.Ride_ID = Payment.Ride_ID
WHERE Payment.Status = 1
GROUP BY Customer.User_ID, Payment.Status with rollup
ORDER BY Total_Amount DESC;

-- # 2 --
-- To calculate the average rating received by each driver based on their ride history
SELECT Driver.Driver_ID, AVG(Ride.Rating) AS Avg_Rating
FROM Driver
INNER JOIN Ride ON Driver.Driver_ID = Ride.Driver_ID
GROUP BY Driver.Driver_ID with rollup;

-- # 3 --
-- To show the total fare earned by each driver who has accepted cash or UPI payment, grouped
by payment mode.
SELECT Driver.First_Name, Driver.Last_Name, Modes_of_Payment.Payment_ID,
SUM(Booking.Fare) AS Total_Fare
FROM Driver
JOIN Booking ON Driver.Driver_ID = Booking.Driver_IDx
JOIN Modes_of_Payment ON Booking.Booking_ID = Modes_of_Payment.Booking_ID
WHERE Modes_of_Payment.Cash = 1 OR Modes_of_Payment.Upi = 1
GROUP BY Driver.First_Name, Driver.Last_Name, Modes_of_Payment.Payment_ID with rollup;
```

```
-- # 4 --
-- to show the total distance traveled by each customer based on their ride history, grouped by customer.
SELECT Customer.First_Name, Customer.Last_Name, SUM(Ride.Distance) AS Total_Distance
FROM Customer
JOIN Booking ON Customer.User_ID = Booking.User_Id
JOIN Ride ON Booking.Booking_ID = Ride.Booking_ID
GROUP BY Customer.First_Name, Customer.Last_Name with rollup;
```

USER INTERFACE (Customer):



Cabco. - Book a Cab

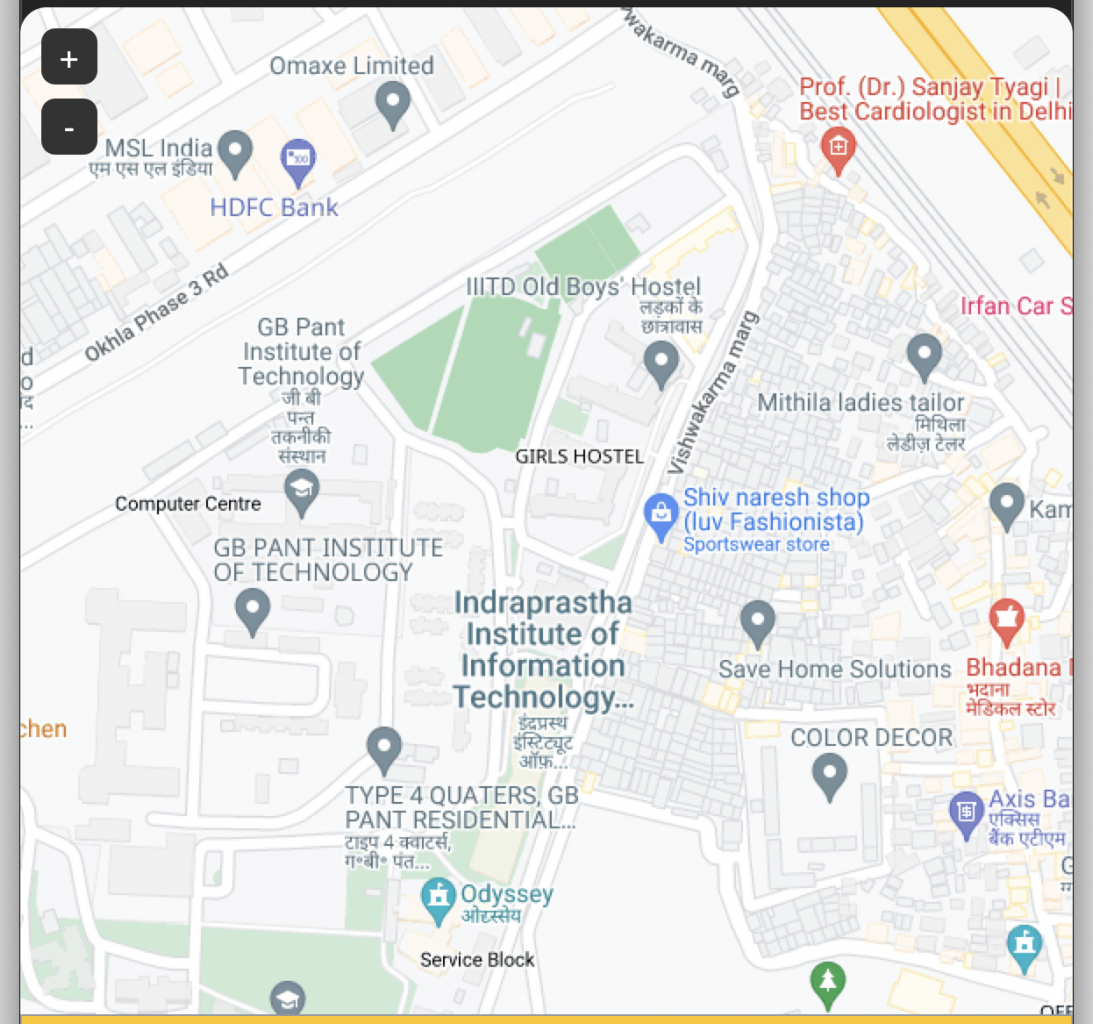
Book your Cab

Pickup Location

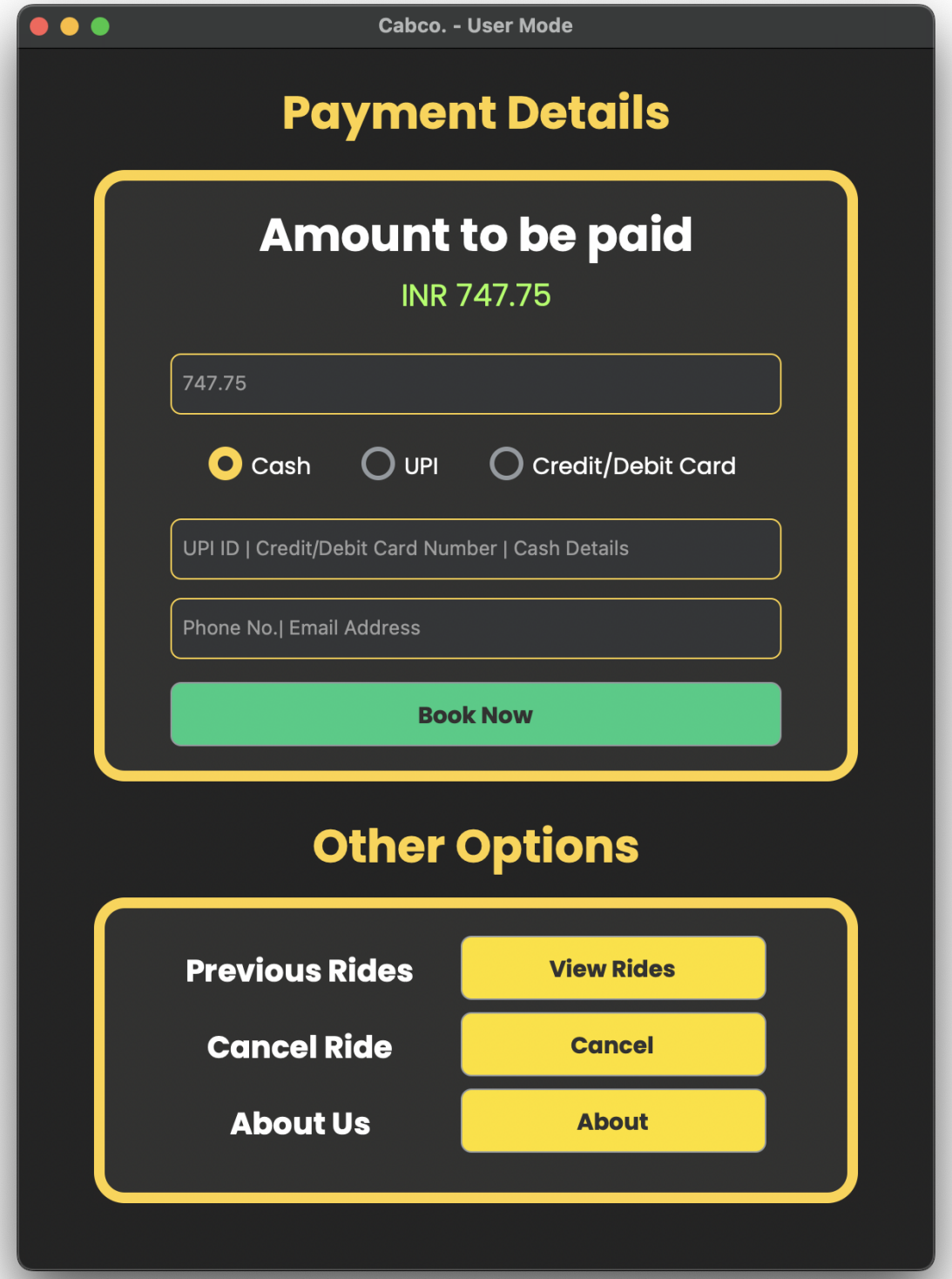
Go

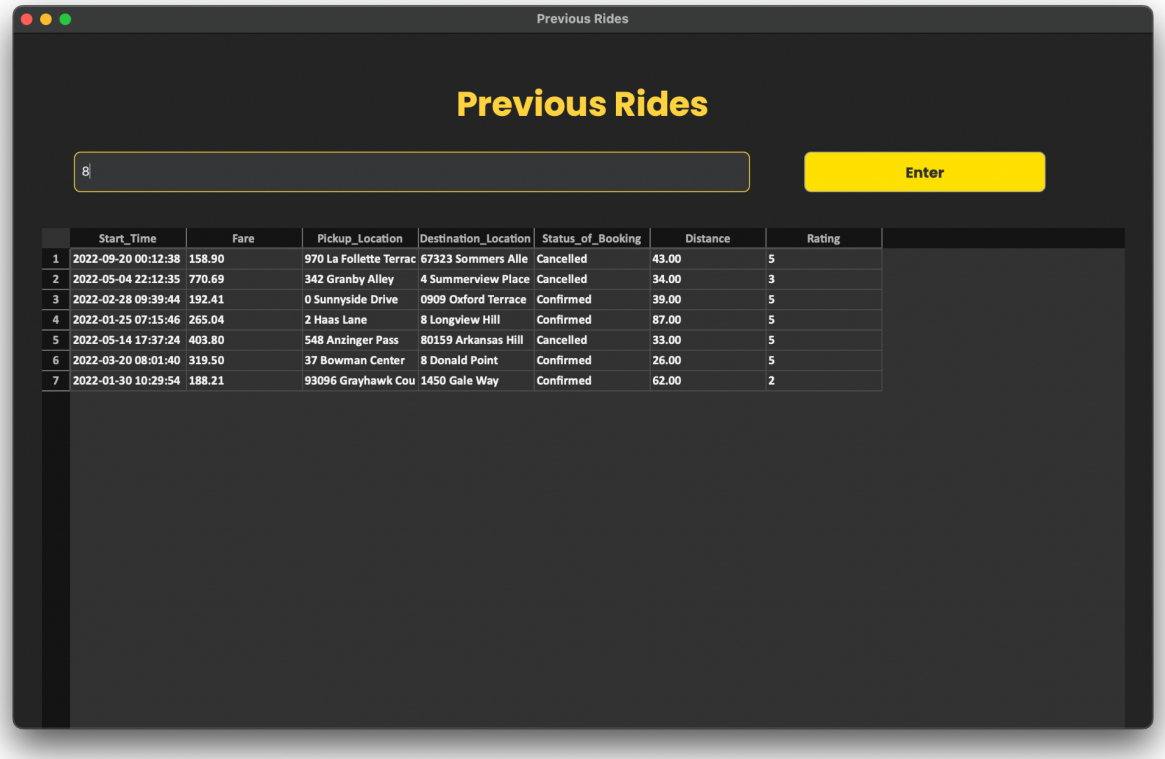
Drop Location

Go

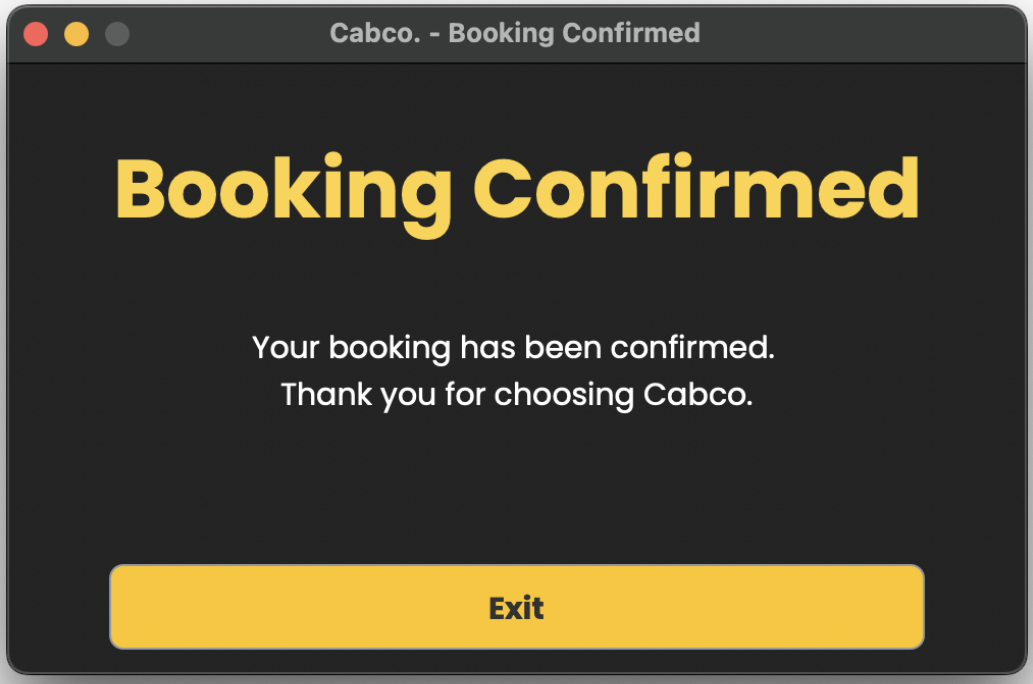


Confirm Booking

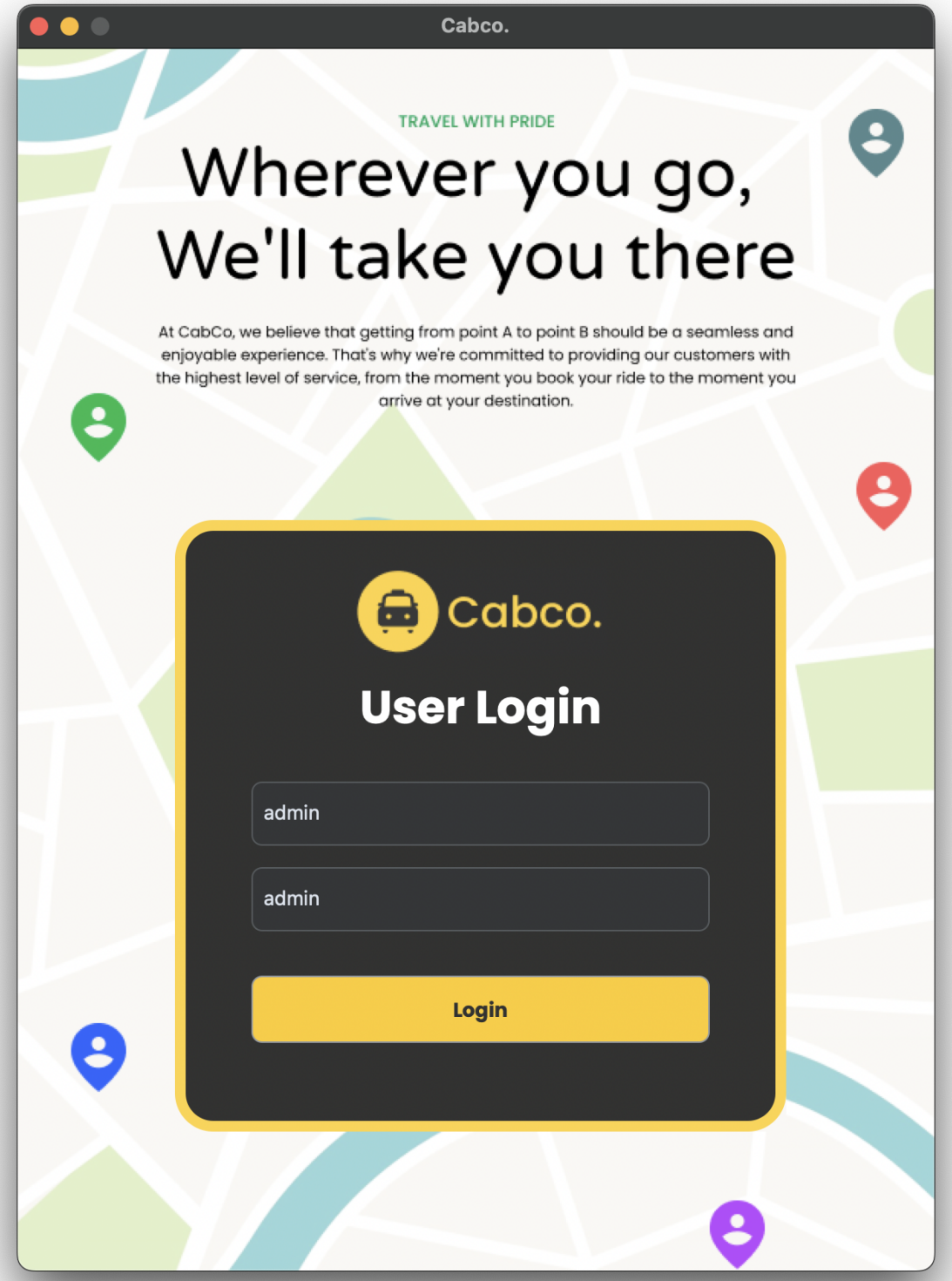

Cabco. - User Mode
Payment Details
Amount to be paid
INR 747.75
747.75
Cash
UPI
Credit/Debit Card
UPI ID | Credit/Debit Card Number | Cash Details
Phone No.| Email Address
Book Now
Other Options
Previous Rides
View Rides
Cancel Ride
Cancel
About Us
About

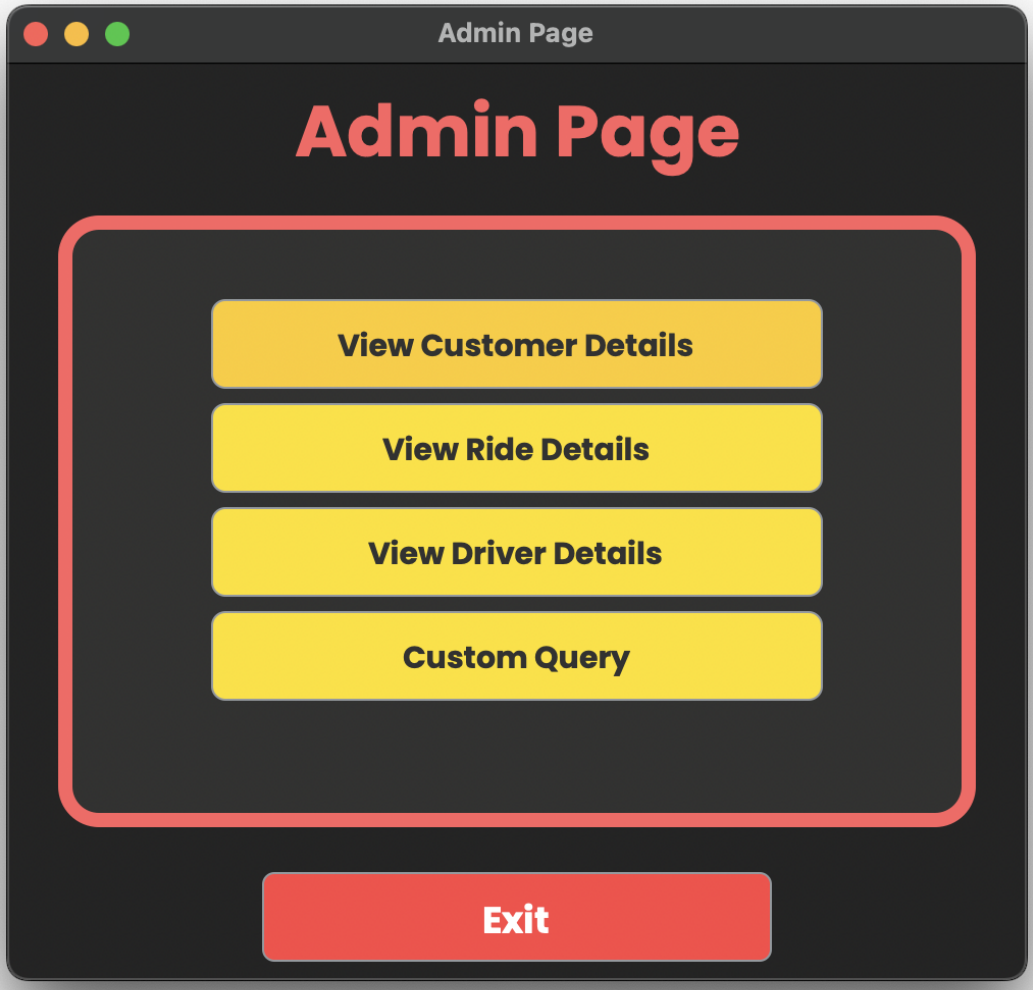


	Start_Time	Fare	Pickup_Location	Destination_Location	Status_of_Booking	Distance	Rating
1	2022-09-20 00:12:38	158.90	970 La Follette Terrac	67323 Sommers Alle	Cancelled	43.00	5
2	2022-05-04 22:12:35	770.69	342 Granby Alley	4 Summerview Place	Cancelled	34.00	3
3	2022-02-28 09:39:44	192.41	0 Sunnyside Drive	0909 Oxford Terrace	Confirmed	39.00	5
4	2022-01-25 07:15:46	265.04	2 Haas Lane	8 Longview Hill	Confirmed	87.00	5
5	2022-05-14 17:37:24	403.80	548 Anzinger Pass	80159 Arkansas Hill	Cancelled	33.00	5
6	2022-03-20 08:01:40	319.50	37 Bowman Center	8 Donald Point	Confirmed	26.00	5
7	2022-01-30 10:29:54	188.21	93096 Grayhawk Cou	1450 Gale Way	Confirmed	62.00	2

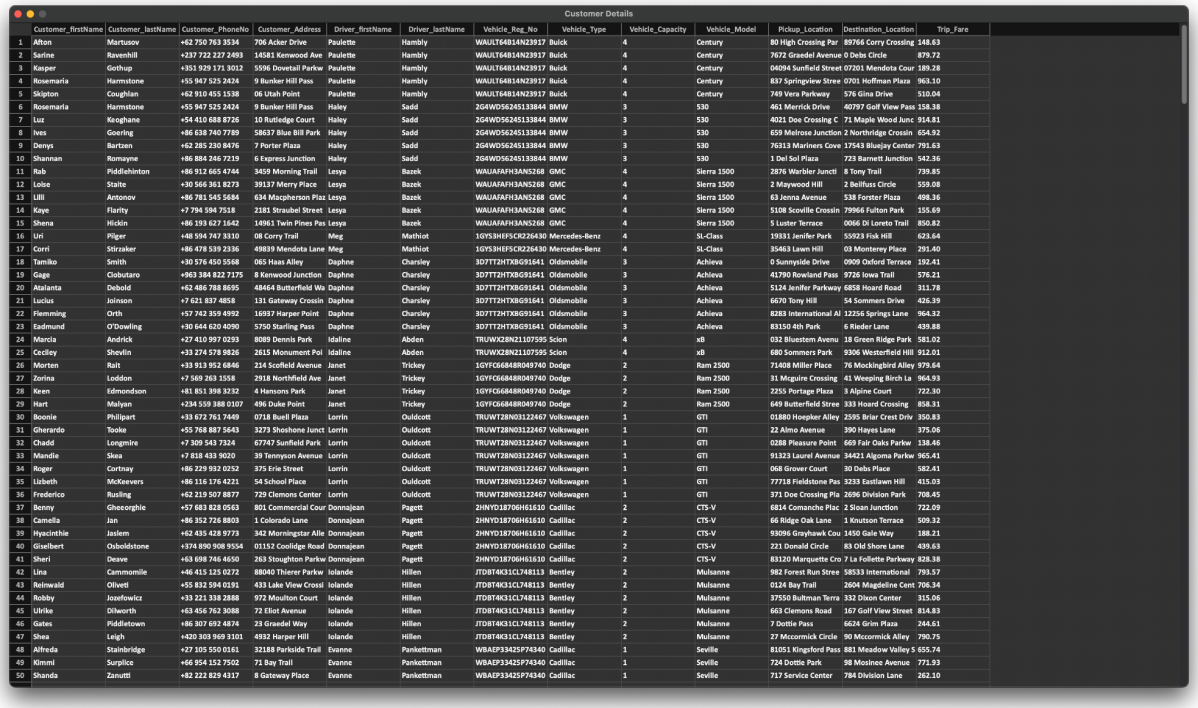


USER INTERFACE (Admin):




Admin Page
Admin Page
View Customer Details
View Ride Details
View Driver Details
Custom Query
Exit

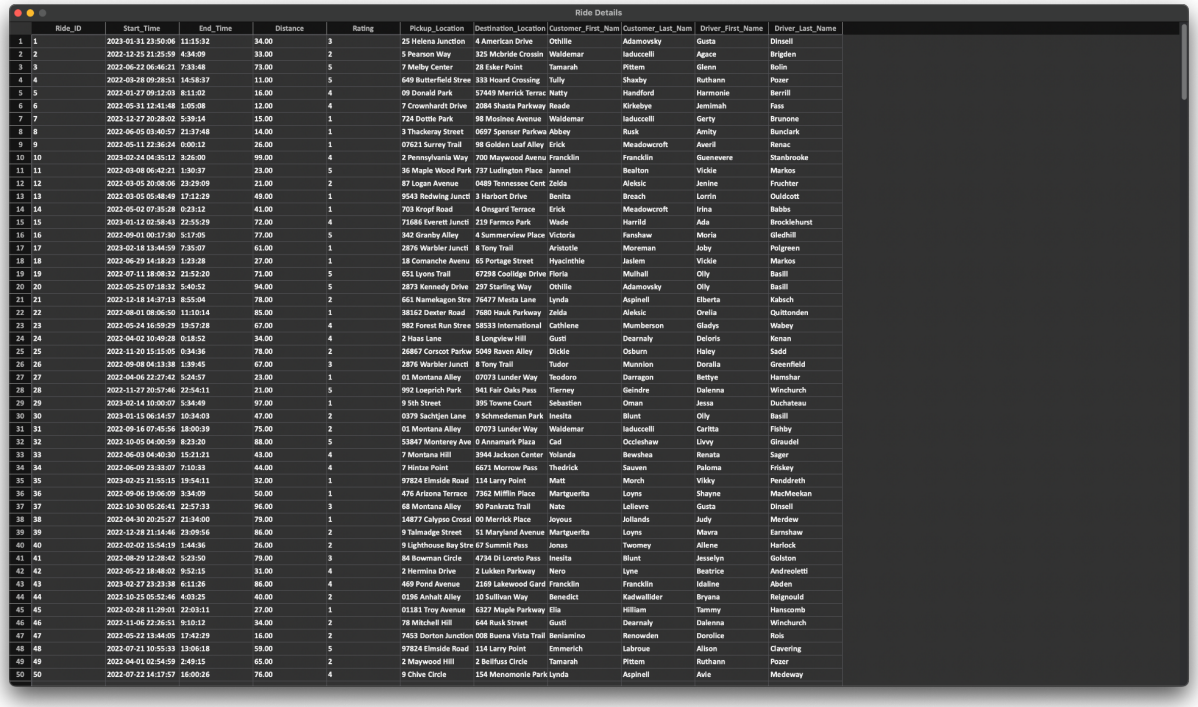
Customer Details Page:



Customer Details

	Customer_firstName	Customer_lastName	Customer_PhoneNo	Customer_Address	Driver_firstName	Driver_lastName	Vehicle_Reg_No	Vehicle_Type	Vehicle_Capacity	Vehicle_Model	Pickup_Location	Destination_Location	Trip_Fare
1	Afton	Martusov	+62 750 763 3534	706 Acker Drive	Paulette	Hambly	WAULT64B14N23917	Buick	4	Century	80 High Crossing Par	89766 Corry Crossing	148.63
2	Sarine	Ravenhill	+237 722 227 2493	14581 Kenwood Ave	Paulette	Hambly	WAULT64B14N23917	Buick	4	Century	7672 Graedel Avenue	0 Debs Circle	879.72
3	Kasper	Gothup	+351 929 171 3012	5596 Dovetail Parkw	Paulette	Hambly	WAULT64B14N23917	Buick	4	Century	04094 Sunfield Street	07201 Mendota Cour	189.28
4	Rosemaria	Harmstone	+55 947 525 2424	9 Bunker Hill Pass	Paulette	Hambly	WAULT64B14N23917	Buick	4	Century	837 Springview Stree	0701 Hoffman Plaza	963.10
5	Skipton	Coughlan	+62 910 455 1538	06 Utah Point	Paulette	Hambly	WAULT64B14N23917	Buick	4	Century	749 Vera Parkway	576 Gina Drive	510.04
6	Rosemarla	Harmstone	+55 947 525 2424	9 Bunker Hill Pass	Haley	Sadd	2G4WD562451338A4	BMW	3	530	461 Merrick Drive	40797 Golf View Pass	158.38
7	Luz	Keoghan	+54 410 688 8726	10 Rutledge Court	Haley	Sadd	2G4WD562451338A4	BMW	3	530	4021 Doe Crossing C	71 Maple Wood Junc	914.81
8	Ives	Goering	+86 638 740 7789	58637 Blue Bill Park	Haley	Sadd	2G4WD562451338A4	BMW	3	530	659 Melrose Junction	2 Northridge Crossin	654.92
9	Denys	Bartzen	+62 285 230 8476	7 Porter Plaza	Haley	Sadd	2G4WD562451338A4	BMW	3	530	76313 Mariners Cove	17543 Bluejay Center	791.63
10	Shannan	Romayne	+86 884 246 7219	6 Express Junction	Haley	Sadd	2G4WD562451338A4	BMW	3	530	1 Del Sol Plaza	723 Barnett Junction	542.36
11	Rab	Piddlehinton	+86 912 665 4744	3459 Morning Trail	Lesya	Bazek	WAUAFAFH3AN5268	GMC	4	Sierra 1500	2876 Warbler Juncti	8 Tony Trail	739.85
12	Loise	Stalte	+30 566 361 8273	39137 Merry Place	Lesya	Bazek	WAUAFAFH3AN5268	GMC	4	Sierra 1500	2 Maywood Hill	2 Bellfuss Circle	559.08
13	Lilli	Antonov	+86 781 545 5684	634 Macpherson Plaz	Lesya	Bazek	WAUAFAFH3AN5268	GMC	4	Sierra 1500	63 Jenna Avenue	538 Forster Plaza	498.36
14	Kaye	Flarity	+7 794 594 7518	2181 Straubel Street	Lesya	Bazek	WAUAFAFH3AN5268	GMC	4	Sierra 1500	5108 Scoville Crossin	79966 Fulton Park	155.69
15	Shena	Hickin	+86 193 627 1642	14961 Twin Pines Pas	Lesya	Bazek	WAUAFAFH3AN5268	GMC	4	Sierra 1500	5 Luster Terrace	0066 Di Loreto Trail	850.82
16	Uri	Pilger	+48 594 747 3310	08 Corry Trail	Meg	Mathiot	1GYS3HEF5CR226430	Mercedes-Benz	4	SL-Class	19331 Jenifer Park	55923 Fisk Hill	623.64
17	Corri	Stirzaker	+86 478 539 2336	49839 Mendota Lane	Meg	Mathiot	1GYS3HEF5CR226430	Mercedes-Benz	4	SL-Class	35463 Lawn Hill	03 Monterey Place	291.40
18	Tamiko	Smith	+30 576 450 5568	065 Haas Alley	Daphne	Charsley	3D7TT2HTXBG91641	Oldsmobile	3	Achieva	0 Sunnyside Drive	0909 Oxford Terrace	192.41
19	Gage	Ciobutaro	+963 384 822 7175	8 Kenwood Junction	Daphne	Charsley	3D7TT2HTXBG91641	Oldsmobile	3	Achieva	41790 Rowland Pass	9726 Iowa Trail	576.21
20	Atalanta	Debold	+62 486 788 8695	48464 Butterfield Wa	Daphne	Charsley	3D7TT2HTXBG91641	Oldsmobile	3	Achieva	5124 Jenifer Parkway	6858 Hoard Road	311.78
21	Lucius	Joinson	+7 621 837 4858	131 Gateway Crossin	Daphne	Charsley	3D7TT2HTXBG91641	Oldsmobile	3	Achieva	6670 Tony Hill	54 Sommers Drive	426.39
22	Flemming	Orth	+57 742 359 4992	16937 Harper Point	Daphne	Charsley	3D7TT2HTXBG91641	Oldsmobile	3	Achieva	8283 International Al	12256 Springs Lane	964.32
23	Eadmund	O'Dowling	+30 644 620 4090	5750 Starling Pass	Daphne	Charsley	3D7TT2HTXBG91641	Oldsmobile	3	Achieva	83150 4th Park	6 Rieder Lane	439.88
24	Marcia	Andrick	+27 410 997 0293	8089 Dennis Park	Idaline	Abden	TRUWX28N21107595	Scion	4	xB	032 Bluestem Avenu	18 Green Ridge Park	581.02
25	Ceciley	Shevlin	+33 274 578 9826	2615 Monument Poi	Idaline	Abden	TRUWX28N21107595	Scion	4	xB	680 Sommers Park	9306 Westerfield Hill	912.01
26	Morten	Rait	+33 913 952 6846	214 Scofield Avenue	Janet	Trickey	1GYFC66848R049740	Dodge	2	Ram 2500	71408 Miller Place	76 Mockingbird Alley	979.64
27	Zorina	Loddon	+7 569 263 1558	2918 Northfield Ave	Janet	Trickey	1GYFC66848R049740	Dodge	2	Ram 2500	31 Mcguire Crossing	41 Weeping Birch La	964.93
28	Keen	Edmondson	+81 851 398 3232	4 Hansons Park	Janet	Trickey	1GYFC66848R049740	Dodge	2	Ram 2500	2255 Portage Plaza	3 Alpine Court	722.30
29	Hart	Malyan	+234 559 388 0107	496 Duke Point	Janet	Trickey	1GYFC66848R049740	Dodge	2	Ram 2500	649 Butterfield Street	333 Hoard Crossing	858.31
30	Boonie	Philpart	+33 672 761 7449	0718 Buell Plaza	Lorrin	Ouldcott	TRUWT28N03122467	Volkswagen	1	GTI	01880 Hoepker Alley	2595 Briar Crest Driv	350.83
31	Gherardo	Tooke	+55 768 887 5643	3273 Shoshone Junct	Lorrin	Ouldcott	TRUWT28N03122467	Volkswagen	1	GTI	22 Almo Avenue	390 Hayes Lane	375.06
32	Chadd	Longmire	+7 309 543 7324	67747 Sunfield Park	Lorrin	Ouldcott	TRUWT28N03122467	Volkswagen	1	GTI	0288 Pleasure Point	669 Fair Oaks Parkw	138.46
33	Mandie	Skea	+7 818 433 9020	39 Tennyson Avenue	Lorrin	Ouldcott	TRUWT28N03122467	Volkswagen	1	GTI	91323 Laurel Avenue	34421 Algoma Parkw	965.41
34	Roger	Cortnay	+86 229 932 0252	375 Erie Street	Lorrin	Ouldcott	TRUWT28N03122467	Volkswagen	1	GTI	068 Grover Court	30 Debs Place	582.41
35	Lizbeth	McKeevers	+86 116 176 4221	54 School Place	Lorrin	Ouldcott	TRUWT28N03122467	Volkswagen	1	GTI	77718 Fieldstone Pas	3233 Eastlawn Hill	415.03
36	Frederico	Rusling	+62 219 507 8877	729 Clemons Center	Lorrin	Ouldcott	TRUWT28N03122467	Volkswagen	1	GTI	371 Doe Crossing Pla	2696 Division Park	708.45
37	Benny	Gheeorghie	+57 683 828 0563	801 Commercial Cour	Donnajean	Pagett	2HNYD18706H61610	Cadillac	2	CTS-V	6814 Comanche Plac	2 Sloan Junction	722.09
38	Camella	Jan	+86 352 726 8803	1 Colorado Lane	Donnajean	Pagett	2HNYD18706H61610	Cadillac	2	CTS-V	66 Ridge Oak Lane	1 Knutson Terrace	509.32
39	Hyacinthie	Jaslem	+62 435 428 9773	342 Morningstar Alle	Donnajean	Pagett	2HNYD18706H61610	Cadillac	2	CTS-V	93096 Grayhawk Cou	1450 Gale Way	188.21
40	Giselbert	Osboldstone	+374 890 908 9554	01152 Coolidge Road	Donnajean	Pagett	2HNYD18706H61610	Cadillac	2	CTS-V	221 Donald Circle	83 Old Shore Lane	439.63
41	Sheri	Deave	+63 698 746 4650	263 Stoughton Parkw	Donnajean	Pagett	2HNYD18706H61610	Cadillac	2	CTS-V	83120 Marquette Cro	7 La Follette Parkway	828.38
42	Lina	Cammomile	+46 415 125 0272	88040 Thierer Parkw	Iolande	Hillen	JTDBT4K31CL748113	Bentley	2	Mulsanne	982 Forest Run Stree	58533 International	793.57
43	Reinwald	Olivet	+55 832 594 0191	433 Lake View Crossi	Iolande	Hillen	JTDBT4K31CL748113	Bentley	2	Mulsanne	0124 Bay Trail	2604 Magdeline Cent	706.34
44	Robby	Jozefowicz	+33 221 338 2888	972 Moulton Court	Iolande	Hillen	JTDBT4K31CL748113	Bentley	2	Mulsanne	37550 Bultman Terra	332 Dixon Center	315.06
45	Ulrike	Dilworth	+63 456 762 3088	72 Eliot Avenue	Iolande	Hillen	JTDBT4K31CL748113	Bentley	2	Mulsanne	663 Clemons Road	167 Golf View Street	814.83
46	Gates	Piddletown	+86 307 692 4874	23 Graedel Way	Iolande	Hillen	JTDBT4K31CL748113	Bentley	2	Mulsanne	7 Dottie Pass	6624 Grim Plaza	244.61
47	Shea	Leigh	+420 303 969 3101	4932 Harper Hill	Iolande	Hillen	JTDBT4K31CL748113	Bentley	2	Mulsanne	27 Mccormick Circle	90 Mccormick Alley	790.75
48	Alfreda	Stainbridge	+27 105 550 0161	32188 Parkside Trail	Evanne	Pankettman	WBAEP33425P74340	Cadillac	1	Seville	81051 Kingsford Pass	881 Meadow Valley S	655.74
49	Kimmi	Surplice	+66 954 152 7502	71 Bay Trail	Evanne	Pankettman	WBAEP33425P74340	Cadillac	1	Seville	724 Dottie Park	98 Mosinee Avenue	771.93
50	Shanda	Zanutti	+82 222 829 4317	8 Gateway Place	Evanne	Pankettman	WBAEP33425P74340	Cadillac	1	Seville	717 Service Center	784 Division Lane	262.10

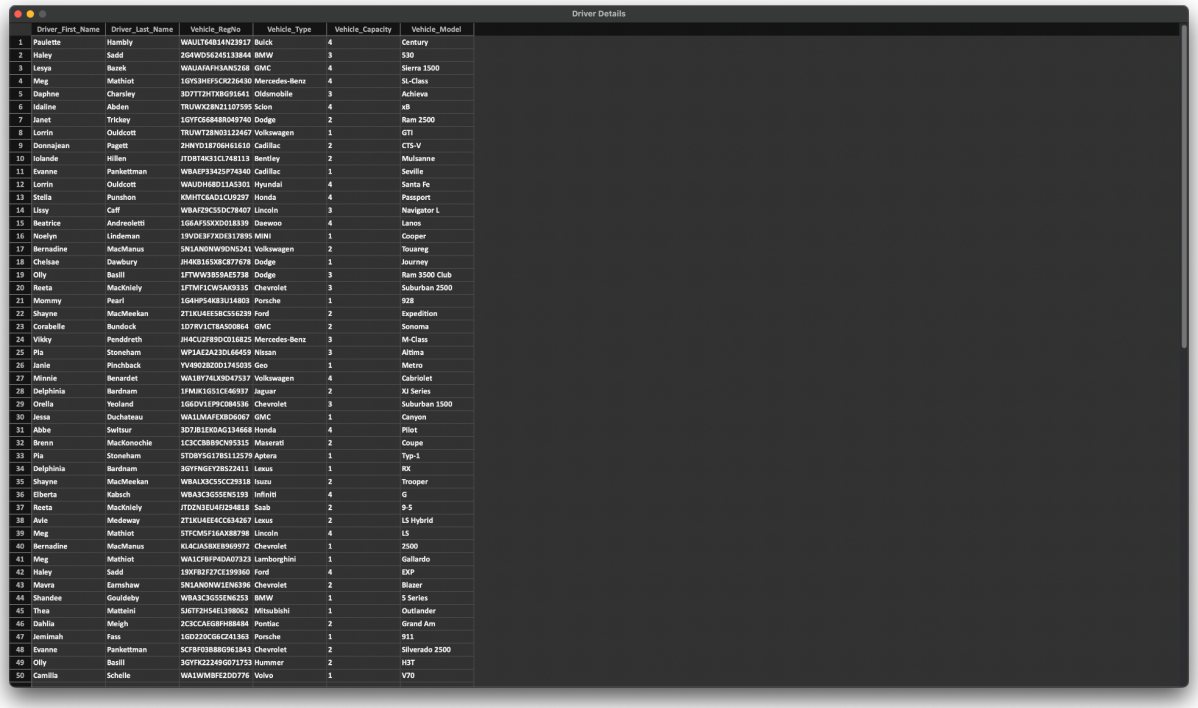
Ride Details Page:



Ride Details

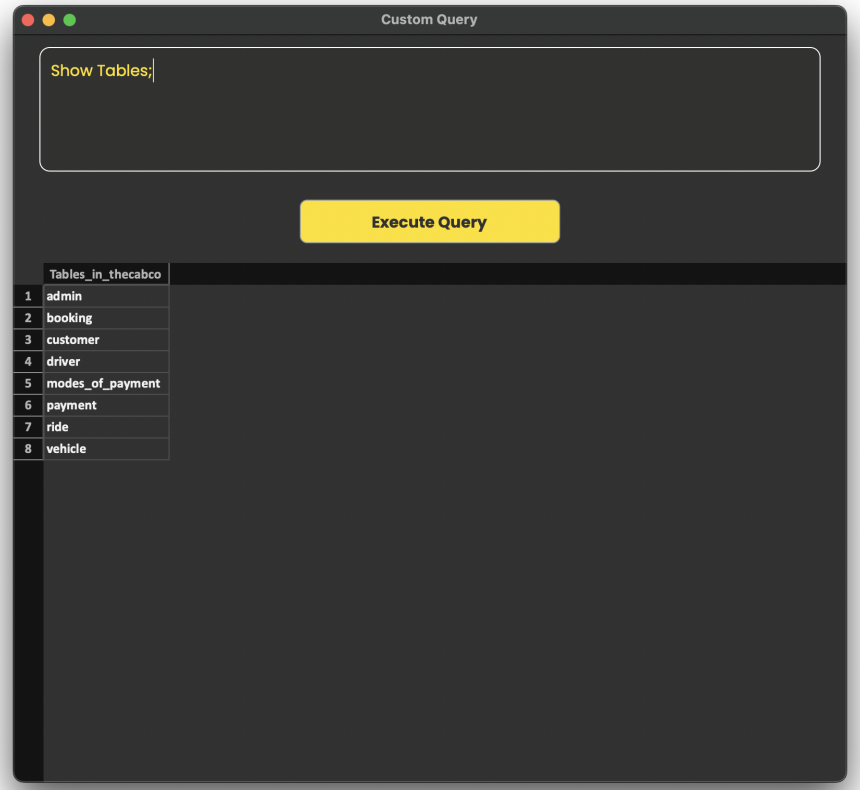
	Ride_ID	Start_Time	End_Time	Distance	Rating	Pickup_Location	Destination_Location	Customer_First_Nam	Customer_Last_Nam	Driver_First_Name	Driver_Last_Name
1	1	2023-01-31 23:50:06	11:15:32	34.00	3	25 Helena Junction	4 American Drive	Othilie	Adamovsky	Gusta	Dinsell
2	2	2022-12-23 21:25:59	4:34:09	33.00	2	5 Pearson Way	325 Mcbride Crossin	Waldemar	Iaduccelli	Agace	Brigden
3	3	2022-06-22 06:46:21	7:33:48	73.00	5	7 Melby Center	28 Esker Point	Tamarah	Pittem	Glenn	Bolin
4	4	2022-03-28 09:28:51	14:58:37	11.00	5	649 Butterfield Stree	333 Hoard Crossing	Tully	Shaxby	Ruthann	Pozer
5	5	2022-01-27 09:12:03	8:11:02	16.00	4	09 Donald Park	57449 Merrick Terrac	Natty	Handford	Harmonie	Berrill
6	6	2022-05-31 12:41:48	1:05:08	12.00	4	7 Crownhardt Drive	2084 Shasta Parkway	Reade	Kirkebye	Jemimah	Fass
7	7	2022-12-27 20:28:02	5:39:14	15.00	1	724 Dottie Park	98 Mosinee Avenue	Waldemar	Iaduccelli	Gerty	Brunone
8	8	2022-06-05 03:40:57	21:37:48	14.00	1	3 Thackeray Street	0697 Spenser Parkwa	Abbey	Rusk	Amity	Bunclark
9	9	2022-05-11 22:36:24	0:00:12	26.00	1	07621 Surrey Trail	98 Golden Leaf Alley	Erick	Meadowcroft	Averil	Renac
10	10	2023-02-24 04:35:12	3:26:00	99.00	4	2 Pennsylvania Way	700 Maywood Avenu	Francklin	Francklin	Guenevere	Stanbrooke
11	11	2022-03-08 06:42:21	1:30:37	23.00	5	36 Maple Wood Park	737 Ludington Place	Jannel	Bealton	Vickie	Markos
12	12	2022-03-05 20:08:06	23:29:09	21.00	2	87 Logan Avenue	0489 Tennessee Cent	Zelda	Aleksic	Jonine	Fruchter
13	13	2022-03-05 05:48:49	17:12:29	49.00	1	9543 Redwing Juncti	3 Harbort Drive	Benita	Breach	Lorrin	Ouldcott
14	14	2022-05-02 07:35:28	0:23:12	41.00	1	703 Kropf Road	4 Onsgard Terrace	Erick	Meadowcroft	Irina	Babbs
15	15	2023-01-12 02:58:43	22:55:29	72.00	4	71686 Everett Juncti	219 Farmco Park	Wade	Harrild	Ada	Brocklehurst
16	16	2022-09-01 00:17:30	5:17:05	77.00	5	342 Granby Alley	4 Summerview Place	Victoria	Farnshaw	Moria	Gledhill
17	17	2023-02-18 13:44:59	7:35:07	61.00	1	2876 Warbler Juncti	8 Tony Trail	Aristotle	Moreman	Joby	Polgreen
18	18	2022-06-29 14:18:23	1:23:28	27.00	1	18 Comanche Avenu	65 Portage Street	Hyacinthie	Jaslem	Vickie	Markos
19	19	2022-07-11 18:08:32	21:52:20	71.00	5	651 Lyons Trail	67298 Coolidge Drive	Floria	Mulhall	Olly	Basill
20	20	2022-05-25 07:18:32	5:40:52	94.00	5	2873 Kennedy Drive	297 Starling Way	Othilie	Adamovsky	Olly	Basill
21	21	2022-12-18 14:37:13	8:55:04	78.00	2	661 Namekagon Stre	76477 Mesta Lane	Lynda	Aspinell	Elberta	Kabsch
22	22	2022-08-01 08:06:50	11:10:14	85.00	1	38162 Dexter Road	7680 Hauk Parkway	Zelda	Aleksic	Orelia	Quittonden
23	23	2022-05-24 16:59:29	19:57:28	67.00	4	982 Forest Run Stree	58533 International	Cathlene	Mumberson	Gladys	Wabey
24	24	2022-04-02 10:49:28	0:18:52	34.00	4	2 Haas Lane	8 Longview Hill	Gusti	Dearnaly	Deloris	Kenan
25	25	2022-11-20 15:15:05	0:34:36	78.00	2	26867 Corscot Parkw	5049 Raven Alley	Dickie	Osburn	Haley	Sadd
26	26	2022-09-08 04:13:38	1:39:45	67.00	3	2876 Warbler Juncti	8 Tony Trail	Tudor	Munnion	Doralia	Greenfield
27	27	2022-04-06 22:27:42	5:24:57	23.00	1	01 Montana Alley	07073 Lunder Way	Teodoro	Darragon	Bettye	Hamshar
28	28	2022-11-27 20:57:46	22:56:11	21.00	5	992 Loeprich Park	941 Fair Oaks Pass	Tierney	Geindre	Dalenna	Winchurch
29	29	2023-02-14 10:00:07	5:34:49	97.00	1	9 5th Street	395 Towne Court	Sebastien	Oman	Jessa	Ducharteau
30	30	2023-01-15 06:14:57	10:34:03	47.00	2	0379 Sachtjen Lane	9 Schmedeman Park	Inesita	Blunt	Olly	Basill
31	31	2022-09-16 07:45:56	18:00:39	75.00	2	01 Montana Alley	07073 Lunder Way	Waldemar	Iaduccelli	Carlita	Fishby
32	32	2022-10-05 04:00:59	8:23:20	88.00	5	53847 Monterey Ave	0 Annamark Plaza	Cad	Occleshaw	Livvy	Giraudel
33	33	2022-06-03 04:40:30	15:21:21	43.00	4	7 Montana Hill	3944 Jackson Center	Yolanda	Bewshea	Renata	Sager
34	34	2022-06-09 23:33:07	7:10:33	44.00	4	7 Hintze Point	6671 Morrow Pass	Thedrick	Sauven	Paloma	Friskey
35	35	2023-02-25 21:55:15	19:54:11	32.00	1	97824 Elmside Road	114 Larry Point	Matt	Morch	Vikky	Penddreth
36	36	2022-09-06 19:06:09	3:34:09	50.00	1	476 Arizona Terrace	7362 Mifflin Place	Martguerita	Loyns	Shayne	MacMeekan
37	37	2022-10-30 05:26:41	22:57:33	96.00	3	68 Montana Alley	90 Pankratz Trail	Nate	Lellevre	Gusta	Dinsell
38	38	2022-04-30 20:25:27	21:34:00	79.00	1	14877 Calypso Crossi	00 Merrick Place	Joyous	Jollands	Judy	Merdew
39	39	2022-12-28 21:14:46	23:09:56	86.00	2	9 Talmadge Street	51 Maryland Avenue	Martguerita	Loyns	Mavra	Earnshaw
40	40	2022-02-02 15:54:19	1:44:36	26.00	2	9 Lighthouse Bay Stre	67 Summit Pass	Jonas	Twomey	Allene	Harlock
41	41	2022-08-29 12:28:42	5:23:50	79.00	3	84 Bowman Circle	4734 Di Loreto Pass	Inesita	Blunt	Jesselyn	Golston
42	42	2022-05-22 18:48:02	9:52:15	31.00	4	2 Hermina Drive	2 Lukken Parkway	Nero	Lyne	Beatrice	Andreoletti
43	43	2023-02-27 23:23:38	6:11:26	86.00	4	469 Pond Avenue	2169 Lakewood Gard	Francklin	Francklin	Idaline	Abden
44	44	2022-10-25 05:52:46	4:03:25	40.00	2	0196 Anhalt Alley	10 Sullivan Way	Benedict	Kadwallider	Bryana	Reignould
45	45	2022-02-28 11:29:01	22:03:11	27.00	1	01181 Troy Avenue	6327 Maple Parkway	Elia	Hilliam	Tammy	Hanscomb
46	46	2022-11-06 22:26:51	9:10:12	34.00	2	78 Mitchell Hill	644 Rusk Street	Gusti	Dearnaly	Dalenna	Winchurch
47	47	2022-05-22 13:44:05	17:42:29	16.00	2	7453 Dorton Junction	008 Buena Vista Trail	Beniamino	Renowden	Dorolice	Rois
48	48	2022-07-21 10:55:33	13:06:18	59.00	5	97824 Elmside Road	114 Larry Point	Emmerich	Labroue	Alison	Clavering
49	49	2022-04-01 02:54:59	2:49:15	65.00	2	2 Maywood Hill	2 Bellfuss Circle	Tamarah	Pittem	Ruthann	Pozer
50	50	2022-07-22 14:17:57	16:00:26	76.00	4	9 Chive Circle	154 Menomonie Park	Lynda	Aspinell	Avie	Medeway

Driver Details Page:



	Driver_First_Name	Driver_Last_Name	Vehicle_RegNo	Vehicle_Type	Vehicle_Capacity	Vehicle_Model
1	Paulette	Hambly	WAULT64B14N23917	Buick	4	Century
2	Haley	Sadd	2G4WD562451138444	BMW	3	530
3	Lesya	Bazek	WAUAFAFH3AN5268	GMC	4	Sierra 1500
4	Meg	Mathiot	1GYS3HEF5CR226430	Mercedes-Benz	4	SL-Class
5	Daphne	Charsley	3D7TT2HTXBG91641	Oldsmobile	3	Achieva
6	Idaline	Abden	TRUWX28N211107595	Scion	4	xB
7	Janet	Trickey	1GYFC66848R049740	Dodge	2	Ram 2500
8	Lorrin	Ouldcott	TRUWT28N0312467	Volkswagen	1	GTI
9	Donnajean	Pagett	2HNYD18706H61610	Cadillac	2	CTS-V
10	Iolande	Hillen	JTDBT4K31CL748113	Bentley	2	Mulsanne
11	Evanne	Pankettman	WBAEP33425P74340	Cadillac	1	Seville
12	Lorrin	Ouldcott	WAUDH68D11A5301	Hyundai	4	Santa Fe
13	Stella	Punshon	KMHTC6AD1CU9297	Honda	4	Passport
14	Lissy	Caff	WBAFZ9C55DC78407	Lincoln	3	Navigator L
15	Beatrice	Andreoletti	1G6AF5SXXD018339	Daewoo	4	Lanos
16	Noelyn	Lindeman	19VDE3F7XDE317895	MINI	1	Cooper
17	Bernadine	MacManus	5N1AN0NW9DN5241	Volkswagen	2	Touareg
18	Chelsae	Dawbury	JH4KB165X8C877678	Dodge	1	Journey
19	Olly	Basill	1FTWW3B59AE5738	Dodge	3	Ram 3500 Club
20	Reeta	MacKniely	1FTMF1CW5AK9335	Chevrolet	3	Suburban 2500
21	Mommy	Pearl	1G4HP54K83U141803	Porsche	1	928
22	Shayne	MacMeekan	2T1KU4EE5BC556239	Ford	2	Expedition
23	Corabelle	Bundock	1D7RV1CT8AS00864	GMC	2	Sonoma
24	Vikky	Penddreth	JH4CU2F89DC016825	Mercedes-Benz	3	M-Class
25	Pia	Stoneham	WP1AE2A23DL66459	Nissan	3	Altima
26	Janie	Pinchback	YV4902BZ0D1745035	Geo	1	Metro
27	Minnie	Benardet	WA1BY74LX9D47537	Volkswagen	4	Cabriolet
28	Delphinia	Bardnam	1FMJK1G51CE46937	Jaguar	2	XJ Series
29	Orella	Yeoland	1G6DV1EP9C0845136	Chevrolet	3	Suburban 1500
30	Jessa	Duchateau	WA1LMAFEXBD6067	GMC	1	Canyon
31	Abbe	Swltsur	3D7JB1EK0AG134668	Honda	4	Pilot
32	Brenn	MacKonochie	1C3CCBBB9CN95315	Maserati	2	Coupe
33	Pia	Stoneham	5TDBY5G17BS112579	Aptera	1	Typ-1
34	Delphinia	Bardnam	3GYFNGEY2BS72411	Lexus	1	RX
35	Shayne	MacMeekan	WBALX3C55CE29318	Isuzu	2	Trooper
36	Elberta	Kabsch	WBA3C3G55EN5193	Infiniti	4	G
37	Reeta	MacKniely	JTDZN3EU4FJ294818	Saab	2	9-5
38	Avie	Medeway	2T1KU4EE4CC634267	Lexus	2	LS Hybrid
39	Meg	Mathiot	5TFCM5F16AX88798	Lincoln	4	LS
40	Bernadine	MacManus	KL4CJASBXEB969972	Chevrolet	1	2500
41	Meg	Mathiot	WA1CFBFP4DA07323	Lamborghini	1	Gallardo
42	Haley	Sadd	19XFB2F27CE199360	Ford	4	EXP
43	Mavra	Earnshaw	5N1AN0NW1EN6396	Chevrolet	2	Blazer
44	Shandee	Gouldeby	WBA3C3G55EN6253	BMW	1	5 Series
45	Thea	Matteini	SJ6TF2H54EL398062	Mitsubishi	1	Outlander
46	Dahlia	Meigh	2C5CCAEG8FH88484	Pontiac	2	Grand Am
47	Jemimah	Fass	1GD220CG5CZ41363	Porsche	1	911
48	Evanne	Punkettman	SCFBF03B88G961843	Chevrolet	2	Silverado 2500
49	Olly	Basill	3GYFK22249G071753	Hummer	2	H3T
50	Camilla	Scheile	WA1WMBFE2DD776	Volvo	1	V70

Custom Queries Page:



	Tables_in_thecabco
1	admin
2	booking
3	customer
4	driver
5	modes_of_payment
6	payment
7	ride
8	vehicle

Deadline-6

Transaction 1:

User A books a ride from Pickup_Location A to Destination_Location B.
User A selects Netbanking as the mode of payment.
The fare for the ride is calculated and displayed to User A.
User A confirms the booking.
Transaction 2:

Driver X accepts the booking made by User A.
Driver X starts the ride from Pickup_Location A to Destination_Location B.
Driver X completes the ride and marks it as finished.
The fare is deducted from User A's bank account and added to Driver X's earnings.
Conflict serializable schedule:
In a conflict serializable schedule, the order of execution of the transactions can be rearranged without affecting the final outcome of the system. Here's an example of a conflict serializable schedule:

T1: 1, 2, 3, 4
T2: 1, 2, 3, 4

Both transactions execute in the same order and there are no conflicts between them. This schedule is conflict serializable.

Non-conflict serializable schedule:
In a non-conflict serializable schedule, the order of execution of the transactions cannot be rearranged without affecting the final outcome of the system. Here's an example of a non-conflict serializable schedule:

T1: 1, 2, 3
T2: 1, 2, 3, 4

In this schedule, T1 and T2 both access the same data (the fare for the ride) but in different order. If T2 completes before T1, the fare for the ride will be deducted from User A's bank account before it is displayed to them, which could lead to confusion. This schedule is therefore non-conflict serializable.