FINAL REPORT

TOPIC: SCHOOL MANAGEMENT SYSTEM

MEMBERS:

Name	Student ID	Role
Lê Thanh	ITITIU17070	Member
Trần Minh Ngọc	ITITIU17068	Member
Trang Thanh Mai Duyên	ITITUN17007	Leader

TABLE OF CONTENTS

1. INTRODUCTION

This project is created for organizing the educating system as well as supporting the students on their studying process.

a. Project

Topic: School Management System (topic 20)

- Github: https://github.com/neonpotts/School-Management-PDM-project-

b. Tasks

- We met and discussed a few things and decided to divide the project into the following tasks:

  • First, we discussed together and came up with ideas about ERD

  • Next, we base on ERD and draw Relational Model

  • Then create the table and insert the information into the tables in the database

  • Finally, we designed the interface to retrieve data from the database and display it in the most user-friendly way

	Duyên	Ngọc	Thanh	Complete(%)
Create table	X			100% (Duyen)
Insert data	X		X	60% (Duyen) - 40% (Thanh)
Draw ERD			X	100% (Thah)
Draw Relational Model			X	100% (Thanh)
Write query retrieving data	X			100% (Duyen)
Design GUI		X		100% (Ngoc)
Code the GUI function		X		100% (Ngoc)
Write proposal	X			100% (Duyen)
Write report	x		X	20% (Duyen) – 80% (Thanh)
Check grammar/edit report	X			100% (Duyen)
Fix bug	X	X		10% (Duyen) – 90% (Ngoc)

2. ENTITY-RELATIONSHIP MODELING

Le Thanh
Trang Thanh Mai Duyen
Tran Minh Ngoc

SCHOOL MANAGEMENT SYSTEM
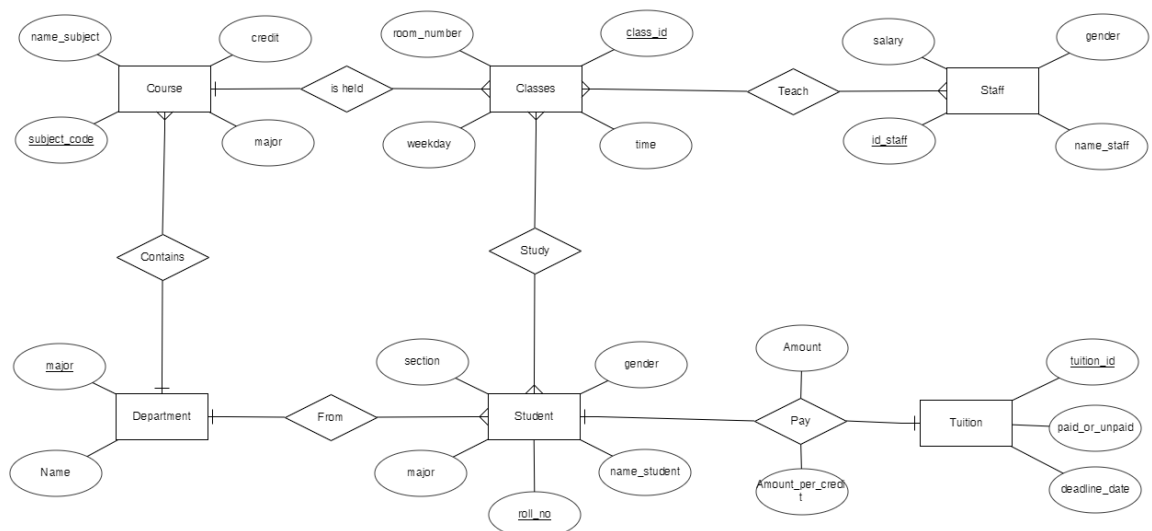
a. Entity and attribute

- **Course:**

  - credit

  - subject_code(PK)

  - name_subject

  - major

- **Classes:**

  - weekday

  - room_number

  - time

  - class_id (PK)

- **Student:**

  - roll_no (PK)

  - section

  - gender

  - major

  - name_student

- **Staff:**

  - id_staff (PK)

  - name_staff

  - gender

  - salary

- **Tuition:**

  - tuition_id (PK)

  - paid_or_unpaid

- • deadline_date
- **Department:**
  - • <u>major</u> (PK)
  - • Name

b. Schema of entities

- Entity course is represented for the subject so it has attributes: subject_code(code of subject), name_subject (name of subject),major and credit
- Entity Classes is represented for the classes of each course (1 course can have many classes in different time or room in the schedule, and it cannot be duplicated) so it has attribute: weekday (day of week), room_number (room number), time
- Entity Student is represented for student and it has attributes: roll_no(id of student), section, gender(male or female), name_student (name of student), major
- Entity Staff is represented for teacher and it have attribute: id_staff (id of staff), name_staff (name of staff), gender (male or female), salary (salary of staff)
- Entity Tuition is represented for the tuition fee that student must pay for school to and it has attributes: paid_or_unpaid(the status of the tuition fee to distinguish that student had paid and not), deadline_date(the deadline date for student to pay the fee), tuition_id (id for the payment)
- Entity Department has 2 attributes: major and Name (full name of major)
- Function of the system:
  - • Get information of staffs, students
  - • Get the information about the courses
  - • Get the information about the tuition of students and salary of staffs
  - • Get the schedule of students
  - • Get the schedule of teachers

- Get the major and number of major that system has

- Allow admin to handle and edit data in 8 tables (except Account and Department)

- Allow Student and Staff can add and drop courses

- Allow Student and Staff can change the account password

- Allow Student and Staff can update and delete SOME data which they have permission to change
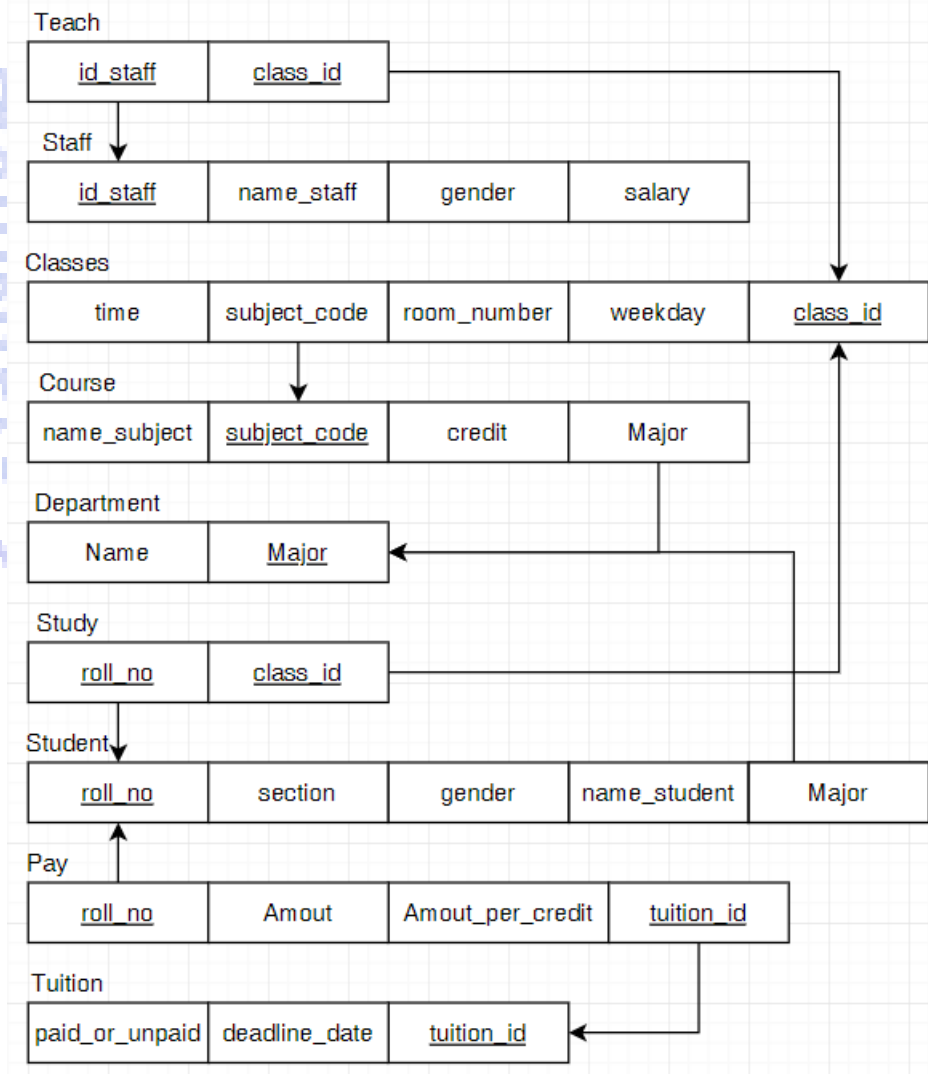
c. Explanation:

In relationship, we have those relation between 2 entities:

- "Locate" between Course and Classes (1 to many)

- "Study" between Classes and Student (many to many)

- "Teach" between Classes and Staff (many to many)

- "Pay" between Tuition and Student (1 to 1)

- "Contains" between Department and Course (1 to many)

- "From" between Department and Student (1 to many)

In the system, a course can be held in many classes, and those classes cannot be duplicated by using primary key for class_id, and UNIQUE (room_number,weekday,time). Next, a student is studying in classes and it has 5 main attributes ,and he/she can attend to many classes and a class can be attended by many students. Also, the students' major and the courses' major has relation references from the major of Department, which has major and name inside. Obviously, each student has his/her own major and a major can have many students in. Besides that, Staff has 4 basic attributes: id_staff,name_staff,gender and salary. In particularly, staff in our system is represented for teachers, he/she is assigned to teach classes which are assigned by admin. And, a staff can teach many classes, but a class can be taught by many teachers. Furthermore, tuition has 3 basic attributes:

tuition_id, paid_or_unpaid, deadline_date. The deadline_date, and paid_or_unpaid, which shows the payment status of a student (use Boolean in Java, CHECK constraint in SQL), are for displaying the student data who had paid or unpaid the tuition fee up to date. This will be helpful on the function that the student cannot see his/her timetable, if he/she had not paid his/her tuition fee before the deadline date. Moreover, the student and tuition are connected with each other (each student has 1 tuition) by Pay that has not only 2 foreign keys from Tuition(tuition_id) and Student(roll_no), but also Amount_per_credit, price per credit, and Amount, the student's tuition fee.

3. RELATIONAL MODEL

Teach

id_staff	class_id

Staff

id_staff	name_staff	gender	salary

Classes

time	subject_code	room_number	weekday	class_id

Course

name_subject	subject_code	credit	Major

Department

Name	Major

Study

roll_no	class_id

Student

roll_no	section	gender	name_student	Major

Pay

roll_no	Amout	Amout_per_credit	tuition_id

Tuition

paid_or_unpaid	deadline_date	tuition_id

- Our goal when creating more tables (Study, Teach, Pay) but not to change the amount of information compared to ERD is to make the data more visible and easier to control

  - Course(subject_codename_subject, credit, major(FK))
  - Classes(time, subject_code(FK), room_number, weekday, class_id)
  - Staff(id_staff,name_staff, gender, salary)
  - Teach([id_staff(FK),class_id(FK)])
  - Study([roll_no(FK),class_id(FK)])
  - Student(roll_no, section, gender, name_student, major(FK))
  - Tuition(fee, paid_or_unpaid, tuition_id)
  - Department(major, Name)

-

4. DATABASE DIAGRAM
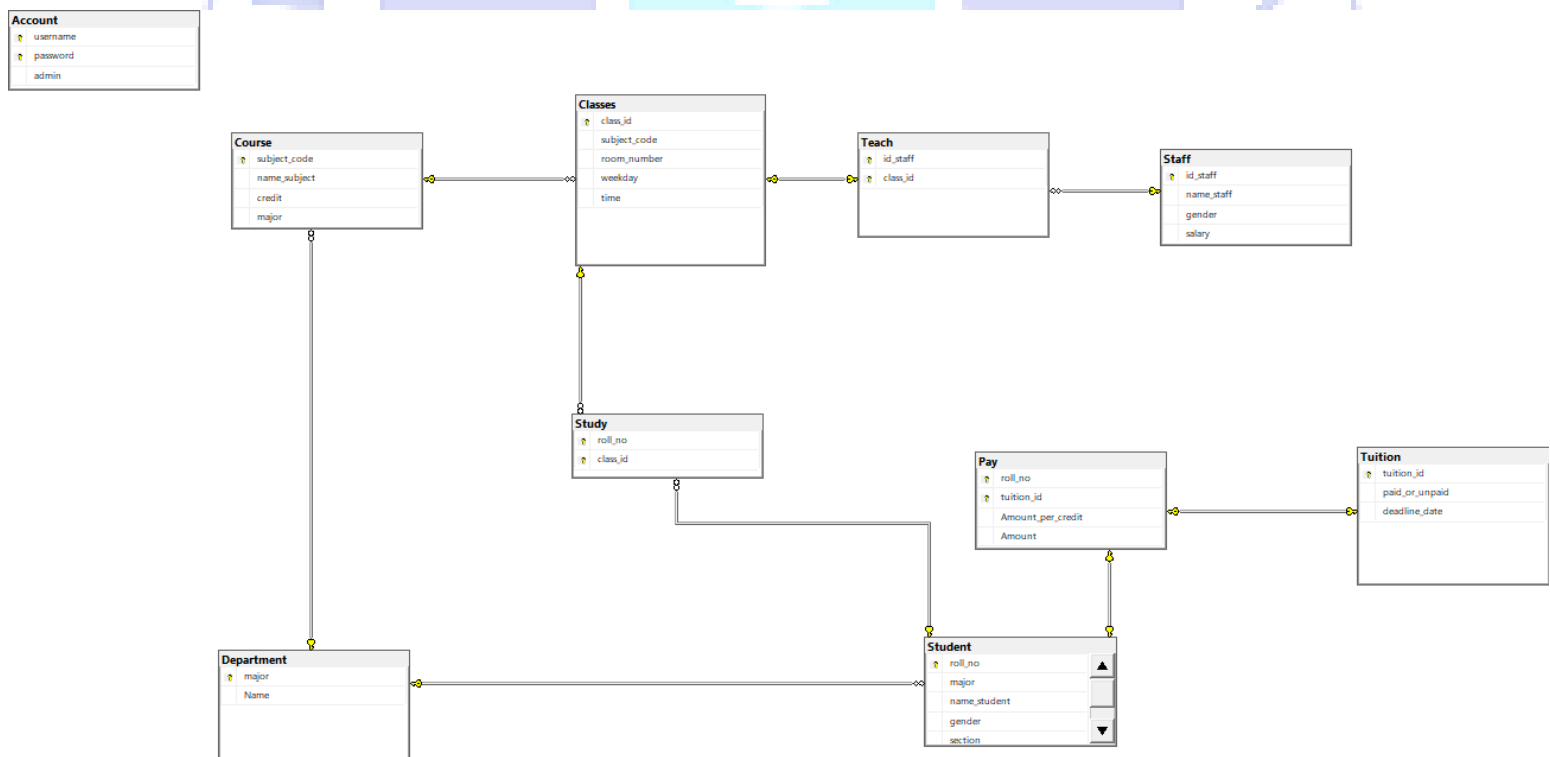
5. DATABASE

Table

- Create new database name "School_Management" in SQL Server

- Create tables and insert data:

  - **Course**

```sql
CREATE TABLE Course(
subject_code VARCHAR(30),
name_subject VARCHAR(50) NOT NULL,
credit INTEGER,
major VARCHAR(5),
PRIMARY KEY(subject_code)
);
SELECT* FROM Course;
```

100 %

Results | Messages

	subject_code	name_subject	credit	major
1	BAIU01	Business Analys	2	BA
2	BAIU02	Human Management	4	BA
3	BTIU01	Medicine	2	BT
4	BTIU02	Device	4	BT
5	CEIU01	Computer Edit	2	CE
6	CEIU02	Teamwork	4	CE
7	EEIU01	Materials	4	EE
8	EEIU02	Achitect	2	EE
9	ISEIU01	Dance	2	ISE
10	ISEIU02	How to represent	4	ISE
11	IT01IU	Principle Database Management	2	IT
12	IT02IU	Principle Database Management LAB	2	IT
13	IT03IU	Web Development	2	IT
14	IT04IU	Web Development LAB	2	IT
15	IT05UN	Skills for Communicating Information	3	IT
16	IT08IU	Computer Architecture	2	IT
17	IT09IU	Computer Architecture LAB	2	IT
18	IT10IU	Introduction to Artificial Intelligence	2	IT
19	IT11IU	Introduction to Artificial Intelligence L...	2	IT
20	MA01IU	Calculus 1	4	MA
21	MA02IU	Calculus 2	4	MA
22	MA03IU	Calculus 3	4	MA
23	PH01IU	Physics 1	2	PH
24	PH03IU	Physics 3	4	PH

```sql
ALTER TABLE Course
ADD CONSTRAINT FK_DepartmentCourse FOREIGN KEY (major) REFERENCES Department(major);
```

- Subject_code and name_subject represented for the id and the name of course in type varchar with maximum size, credit is in integer type
- Set the primary key for subject_code (cannot be duplicated), and it can be used as foreign key in another table that has relationship with this table
- Attribute major is foreign key that get from table "Department"

- **Classes**

```sql
CREATE TABLE Classes(
class_id VARCHAR(30),
subject_code VARCHAR(30),
room_number VARCHAR(10) DEFAULT 'undecided',
weekday VARCHAR(10) DEFAULT 'undecided',
time VARCHAR(10) CHECK(time IN('8 a.m','10 a.m','1 p.m', '3 p.m','none')) DEFAULT 'none',
PRIMARY KEY(class_id),
CONSTRAINT FK_CourseClasses
FOREIGN KEY (subject_code) REFERENCES Course(subject_code) ON UPDATE CASCADE ON DELETE CASCADE,
CONSTRAINT UC_Class UNIQUE(room_number,weekday,time)
);
```

100 %

Results | Messages

	class_id	subject_code	room_number	weekday	time
1	BABA16IU13	BAIU02	A1-304	Tuesday	8 a.m
2	BABA17IU12	BAIU01	A1-206	Monday	8 a.m
3	BTBT17IU14	BTIU01	A1-506	Friday	1 p.m
4	BTBT19IU15	BTIU02	A1-402	Saturday	1 p.m
5	CECE18IU16	CEIU01	A2-302	Monday	8 a.m
6	CECE19IU17	CEIU02	A2-203	Thursday	1 p.m
7	EEEE17IU19	EEIU02	A2-314	Friday	8 a.m
8	EEEE19IU18	EEIU01	A2-206	Wednesday	8 a.m
9	ISEIU18IU20	ISEIU01	A1-307	Thursday	1 p.m
10	ISEIU19IU21	ISEIU02	A2-413	Tuesday	8 a.m
11	ITIT17IU03	IT03IU	A1-404	Wednesday	8 a.m
12	ITIT17IU04	IT04IU	LA1-606	Tuesday	8 a.m
13	ITIT17IU10	IT10IU	A2-301	Sunday	8 a.m
14	ITIT17IU11	IT11IU	LA1-607	Friday	8 a.m
15	ITIT18IU01	IT01IU	A1-202	Friday	1 p.m
16	ITIT18IU02	IT02IU	LA1-605	Monday	8 a.m
17	ITIT18IU03	PH03IU	A1-403	Tuesday	1 p.m
18	ITIT18IU08	IT08IU	B-701	Thursday	1 p.m
19	ITIT18IU09	IT09IU	LA1-607	Wednesday	1 p.m
20	ITIT18UN05	IT05UN	A2-408	Tuesday	1 p.m
21	ITIT19IU01	PH01IU	A2-408	Wednesday	1 p.m
22	MAMA18IU23	MA02IU	A2-303	Wednesday	1 p.m
23	MAMA18IU24	MA03IU	A2-205	Monday	1 p.m
24	MAMA19IU22	MA01IU	A1-403	Tuesday	8 a.m

Query executed successfully.

- In this table, the subject_code has the foreign key from subject_code of table "Course"

- Room_number and weekday are type varchar and set if the user skip input this attribute, it will automatically display "undecided"

- In attribute times, it is static in 4 particular times (8a.m, 10a.m,1p.m,3p.m) and if we don't enter the value in it, it will auto display "none"

- Set attribute weekday and room_number are unique which make the class cannot be duplicated in the same day and room

- Set the primary key for attribute class_id and another table can use it as foreign key if it has relationship with this table

- **Staff**

```
CREATE TABLE Staff(
id_staff VARCHAR(20),
name_staff VARCHAR(50),
gender VARCHAR(20),
salary INTEGER,
PRIMARY KEY(id_staff),
CONSTRAINT CHK_gender_staff CHECK(gender IN('Male','Female'))
);
```

100 %

Results | Messages

	id_staff	name_staff	gender	salary
1	BA1	Bill Gate	male	45000000
2	BT1	Bruce Lee	male	67000000
3	BT2	Yena	female	40000000
4	CE1	Narkoth	male	64000000
5	EE1	Azula	female	47000000
6	EE2	Zuko	male	55000000
7	IE1	Batman	male	66000000
8	ISE1	Mika	female	64000000
9	IT1	Duyen	female	47000000
10	IT2	Ngoc	male	55000000
11	IT3	Thanh	male	60000000
12	MA1	Kuro	male	64000000

- Id_staff, name_staff and gender are in type varchar, and attribute salary in is integer

- Set the primary key for id_staff and other tables can use it as foreign key if it has a relationship with "Staff"

- And the gender must be "Male" or "Female"

• **Tuition**

```sql
CREATE TABLE Tuition(
tuition_id INTEGER IDENTITY(1,1),
paid_or_unpaid INTEGER CHECK (paid_or_unpaid IN (0,1)),
deadline_date DATE,
PRIMARY KEY(tuition_id)
);
```

100 %

⊞ Results 📄 Messages

	tuition_id	paid_or_unpaid	deadline_date
1	1	1	2020-05-30
2	2	1	2020-05-30
3	3	0	2020-05-30
4	4	0	2020-05-30
5	5	1	2020-05-15
6	6	1	2020-05-15
7	7	0	2020-05-15
8	8	0	2020-04-30
9	9	1	2020-04-30
10	10	0	2020-05-15
11	11	0	2020-04-30
12	12	0	2020-04-30

- Tuition_id is declared in type varchar,both fee and paid_or_unpaid in integer and set if it is paid,it will display "1";otherwise, unpaid "0"
- Set the primary key for tuition_id and it can be used as foreign key in another table which has a relationship with "Tuition"

• **Student**

```
CREATE TABLE Student(
roll_no VARCHAR(20),
major VARCHAR(5),
name_Student VARCHAR(50),
gender VARCHAR(20),
section VARCHAR(20),
PRIMARY KEY(roll_no),
CONSTRAINT CHK_gender_Student CHECK(gender IN('Male','Female'))
);
```

100 % ▼ ◀

⊞ Results 📄 Messages

	roll_no	major	name_student	gender	section
1	BABAIU15234	BA	Jackie Chan	Male	k15
2	BABAIU15555	BA	Captain Marvel	Female	k15
3	BTBTIU17562	BT	Kim Jong Un	Male	k17
4	BTBTIU18649	BT	Edogawa Conan	Male	k18
5	CECEIU16542	CE	Iron Man	Male	k16
6	CECEIU17878	CE	Lionel Messi	Male	k17
7	IEIEIU18456	ISE	Hello Kitty	Female	k18
8	IEIEIU19236	ISE	Cristiano Ronaldo	Male	k19
9	ITITIU13232	IT	Donald Trump	Male	k13
10	ITITIU14785	IT	Barack Obama	Male	k14
11	ITITUN17007	IT	Susaka Ishiki	Female	k17
12	ITITUN17008	IT	Sawano Hiroyuki	Male	k17

```
ALTER TABLE Student
ADD CONSTRAINT FK_DepartmentStudent FOREIGN KEY (major) REFERENCES Department(major);
```

- Roll_no, section, name_student, gender are varchar datatypes with different lengths
- Set the primary key for roll_no and it can be used as foreign key in another table which has a relationship with "Student"
- And we set gender must input as "Male" or Female"
- Attribute tuition_id and major are foreign key references from tuititon_id of table "Tuition" and major of "Department", respectively
- • **Teach**

```sql
CREATE TABLE Teach(
id_staff VARCHAR(20),
class_id VARCHAR(30) NOT NULL,
PRIMARY KEY(id_staff,class_id),
CONSTRAINT FK_ClassesTeach
FOREIGN KEY (class_id) REFERENCES Classes(class_id) ON UPDATE CASCADE ON DELETE CASCADE,
CONSTRAINT FK_StaffTeach
FOREIGN KEY (id_staff) REFERENCES Staff(id_staff) ON UPDATE CASCADE ON DELETE CASCADE
);
```

100 %

▦ Results ▤ Messages

	id_staff	class_id
1	BA1	BABA16IU13
2	BA1	BABA17IU12
3	BT1	BTBT19IU15
4	CE1	CECE18IU16
5	CE1	CECE19IU17
6	EE1	EEEE17IU19
7	EE2	EEEE19IU18
8	IE1	ISEIU18IU20
9	ISE1	ISEIU19IU21
10	IT1	ITIT17IU03
11	BT1	ITIT17IU04
12	BA1	ITIT17IU11
13	IT1	ITIT18IU01
14	IT2	ITIT18IU02
15	BA1	ITIT18IU03
16	CE1	ITIT18IU08
17	IT2	ITIT18IU09
18	IE1	ITIT18UN05
19	CE1	ITIT19IU01
20	MA1	MAMA18IU...
21	MA1	MAMA18IU...
22	MA1	MAMA19IU...

- Attribute class_id is foreign key from class_id of table "Classes"

- Attribute id_staff is foreign key from id_staff of table "Staff"

  • **Study**

```sql
CREATE TABLE Study(
    roll_no VARCHAR(20) NOT NULL,
    class_id VARCHAR(30) NOT NULL,
    PRIMARY KEY(roll_no,class_id),
    CONSTRAINT FK_ClassesStudy
    FOREIGN KEY (class_id) REFERENCES Classes(class_id) ON UPDATE CASCADE ON DELETE CASCADE,
    CONSTRAINT FK_StudentStudy
    FOREIGN KEY (roll_no) REFERENCES Student(roll_no) ON UPDATE CASCADE ON DELETE CASCADE
);
```

100 %

☰ Results   ▤ Messages

	roll_no	class_id
1	BABAIU15234	ITIT18IU01
2	BABAIU15234	ITIT18IU02
3	BABAIU15234	ITIT18UN05
4	BABAIU15555	ITIT17IU04
5	BABAIU15555	ITIT18IU03
6	BABAIU15555	ITIT18IU08
7	BABAIU15555	ITIT18IU09
8	BTBTIU17562	ITIT17IU03
9	BTBTIU17562	ITIT17IU04
10	BTBTIU17562	ITIT18IU08
11	BTBTIU17562	ITIT18IU09
12	BTBTIU18649	ITIT17IU04
13	BTBTIU18649	ITIT17IU11
14	BTBTIU18649	ITIT18IU02
15	BTBTIU18649	ITIT18IU09
16	CECEIU16542	ITIT18IU02
17	CECEIU16542	ITIT18IU03
18	CECEIU17878	ITIT17IU04
19	CECEIU17878	ITIT17IU11
20	CECEIU17878	ITIT18UN05
21	IEIEIU18456	ITIT17IU04
22	IEIEIU18456	ITIT18IU02
23	IEIEIU19236	ITIT17IU11
24	IEIEIU19236	ITIT18IU03
25	IEIEIU19236	ITIT18IU08
26	IEIEIU19236	ITIT18IU09
27	ITITIU13232	ITIT17IU03

✔ Query executed successfully.

- Attribute roll_no is subset of roll_no from table "Student"
- Attribute class_id is subset of class_id from table "Classes"
  - **Pay**

```
CREATE TABLE Pay(
    roll_no VARCHAR(20),
    tuition_id INTEGER,
    Amount_per_credit INTEGER,
    Amount INTEGER,
    PRIMARY KEY (roll_no,tuition_id),
    CONSTRAINT FK_StudentPay FOREIGN KEY (roll_no) REFERENCES Student(roll_no) ON UPDATE CASCADE ON DELETE CASCADE,
    CONSTRAINT FK_TuitionPay FOREIGN KEY (tuition_id) REFERENCES Tuition(tuition_id) ON UPDATE CASCADE ON DELETE CASCADE
);
```

100 % ▼ ◀

☷ Results | �ᴇ Messages

	roll_no	tuition_id	Amount_per_credit	Amount
1	BABAIU15234	1	5000000	35000000
2	BABAIU15555	2	1000000	10000000
3	BTBTIU17562	3	1000000	8000000
4	BTBTIU18649	4	3000000	24000000
5	CECEIU16542	5	2000000	12000000
6	CECEIU17878	6	1000000	7000000
7	IEIEIU18456	7	1000000	6000000
8	IEIEIU19236	8	1000000	10000000
9	ITITIU13232	9	1000000	13000000
10	ITITIU14785	10	1000000	10000000
11	ITITUN17007	11	6000000	0
12	ITITUN17008	12	6000000	12000000

- Attribute roll_no is subset of roll_no from table "Student"

- Attribute tuition_id is subset of tuition_id from table from table "Tuition"

- We declared Amount_per_credit, which is the price of one credit, and Amount, tuition

  fee, in type integer

- roll_no,tuition_id is the Primary key

- **Department**

```
CREATE TABLE Department (
    major VARCHAR(5),
    Name VARCHAR(50),
    PRIMARY KEY(major)
);
```

100 % ▼ ◀

☷ Results | 📅 Messages

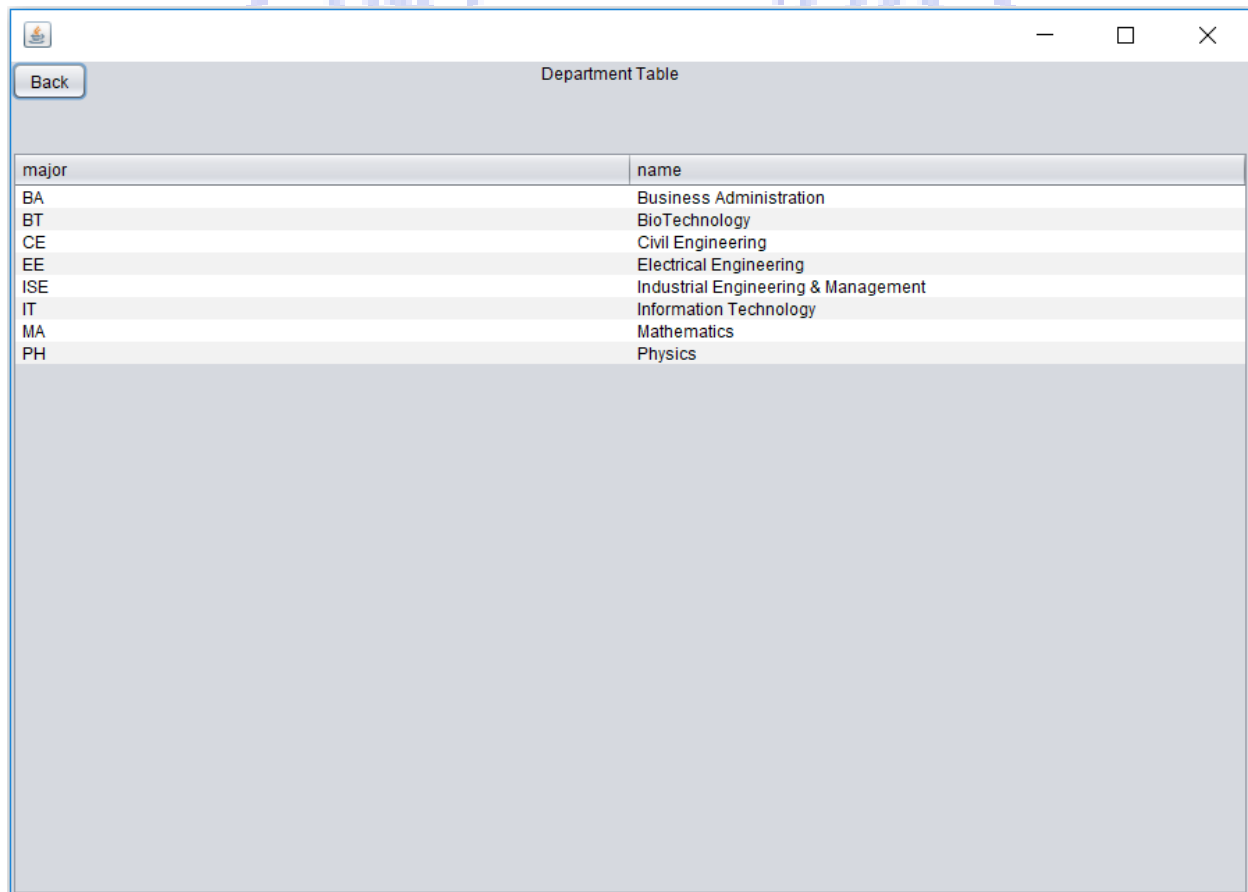|	major	Name
1	BA	Business Administration
2	BT	BioTechnology
3	CE	Civil Engineering
4	EE	Electrical Engineering
5	ISE	Industrial Engineering & Management
6	IT	Information Technology
7	MA	Mathematics
8	PH	Physics

- Attribute major, Name are in type varchar

- Set the primary key for major and it can be used as foreign key in other tables which is relation to "Department"

6. GUI

- First, the user can access to the system, they will be required to log in with 2 roles (student/teacher or admin), (run file ChooseRole.java)
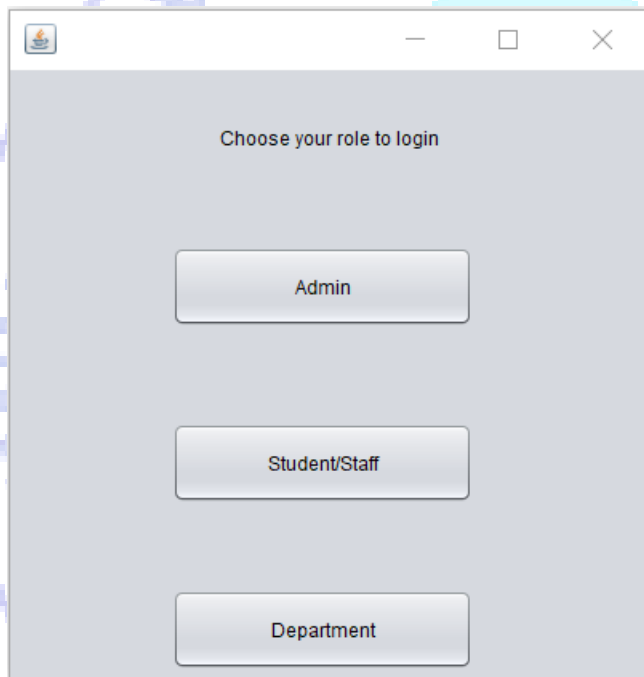
- Starting with button "Department". It is not required to log in and it shows all the majors that the school has
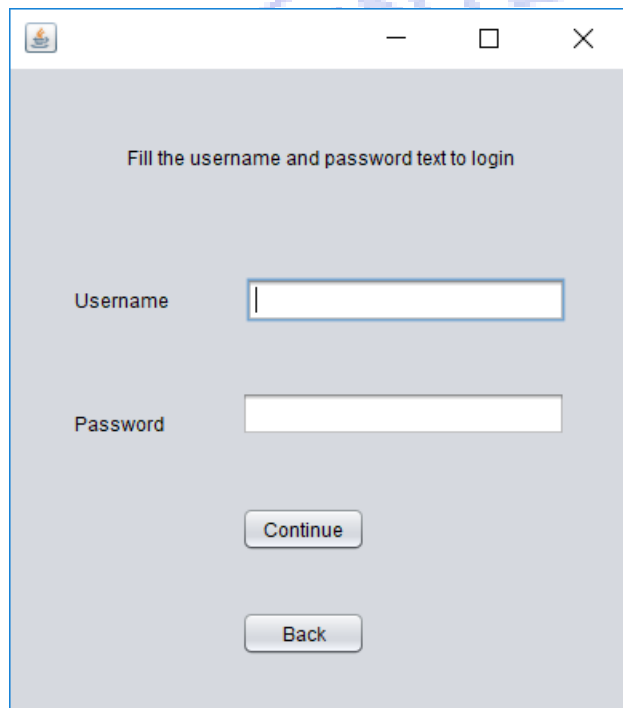
major	name
BA	Business Administration
BT	BioTechnology
CE	Civil Engineering
EE	Electrical Engineering
ISE	Industrial Engineering & Management
IT	Information Technology
MA	Mathematics
PH	Physics

Department Table

Back

a. Student/Staff login

- Next, clicking the Student/Staff button, it will display the login form, where the user has to input username and password to access into the system

- Use the accounts that are stored in database (table "Account") in order to login into the system. There are 2 possible cases that can be happened: login successfully and login failed
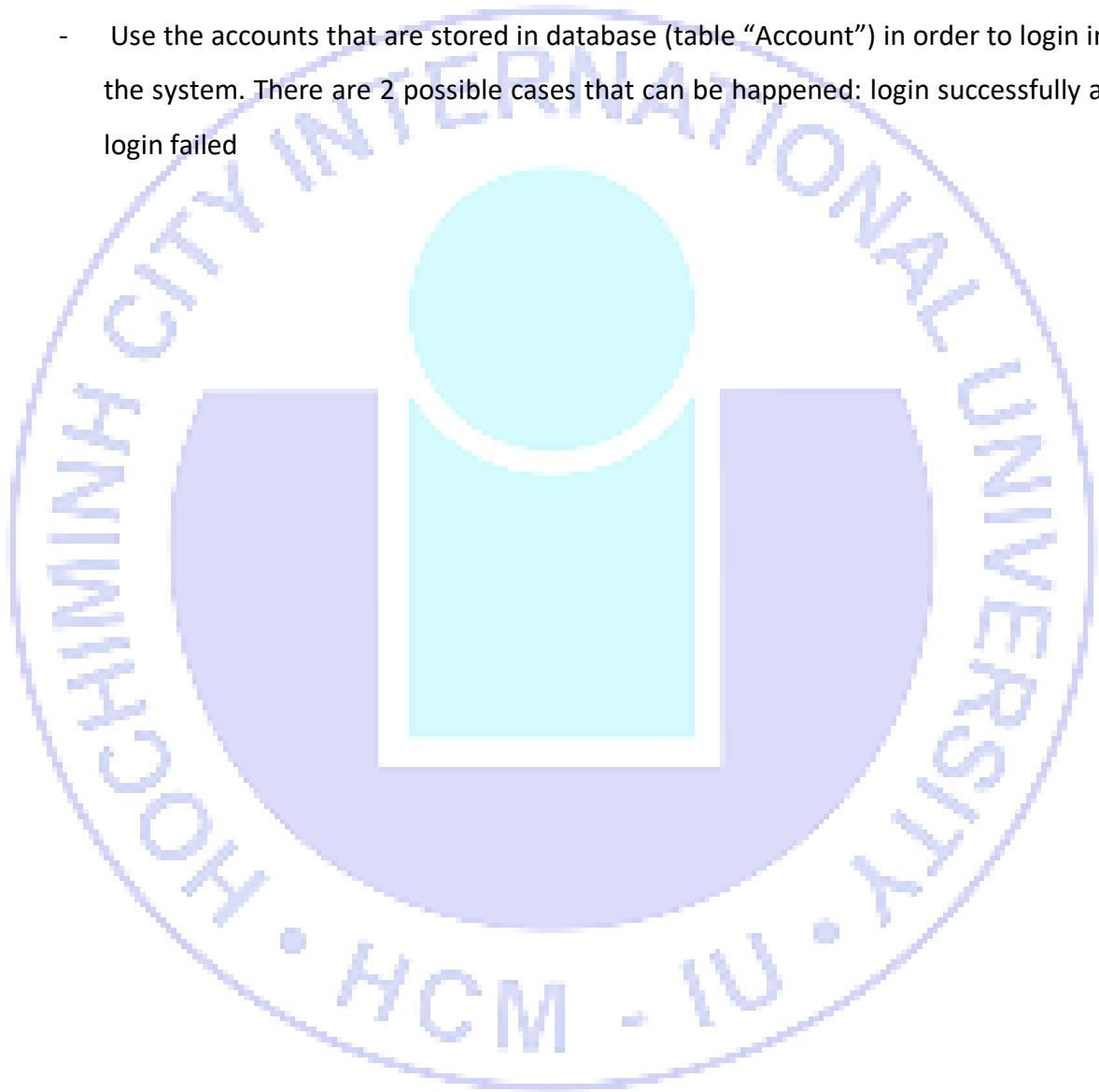
Fill the username and password text to login

Username   BABAIU15234

Password   **********

[Continue]

[Back]

Message   ✕

ℹ   Username and Password Does Not Match

[OK]

Fill the username and password text to login

Username   BABAIU15234

Password   *********

[Continue]

[Back]

Message   ✕

ℹ   Username and Password Matched

[OK]

- When the user access successfully, this table will display. In here, the interface has 5 tabs: Search, Time table, Your info, Add/Drop Subject, Query

- Access "Your info" tab to see the information of student who just logged in

- Moving back to the Search type, there are the textField where to search of filter the data we want to display in the table below. When the user want to search for students' information of others, he/she can input the keyword of the name into the

textField , then click search button. It will search for the data with the keyword name he/she just input. If the textField is empty, it will automatically display all students in table.

- 4 checkboxes below the name textfield represent for 4 attributes of a student that the user want to search (the system can know at least 1 and max 4 to search, example the user want to search all student that are male)

Roll no	Name Student	Major	Gender	Section
BABAIU15234	k15	Jackie Chan	Male	k15
BTBTIU17562	k17	Kim Jong Un	Male	k17
BTBTIU18649	k18	Edogawa Conan	Male	k18
CECEIU16542	k16	Iron Man	Male	k16
CECEIU17878	k17	Lionel Messi	Male	k17
IEIEIU19236	k19	Cristiano Ronaldo	Male	k19
ITITIU13232	k13	Donald Trump	Male	k13
ITITIU14785	k14	Barack Obama	Male	k14
ITITUN17008	k17	Sawano Hiroyuki	Male	k17

Search | Time table | Your info | Add/Drop Subject | Query

Name

Clear | Search

Student | Male | None | None

BABAIU15555 | Select

Schedule | Salary | Tuition

- Select button will help the system to lock the student that the user wants to see this student's schedule (if paid) or tuition fee
- After clicking select button, if the user wants to see the tuition of his/her, he/she just click the "Tuition" button

Search	Time table	Your info	Add/Drop Subject	Query

Name

Clear Search

Student ▼   None ▼   None ▼   None ▼

Roll no	Name Student	Major	Gender	Section
BABAIU15234	k15	Jackie Chan	Male	k15
BABAIU15555	k15	Captain Marvel	Female	k15
BTBTIU17562	k17	Kim Jong Un	Male	k17
BTBTIU18649	k18	Edogawa Conan	Male	k18
CECEIU16542	k16	Iron Man	Male	k16
CECEIU17878	k17	Lionel Messi	Male	k17
IEIEIU18456	k18	Hello Kitty	Female	k18
IEIEIU19236	k19	Cristiano Ronaldo	Male	k19
ITITIU13232	k13	Donald Trump	Male	k13
ITITIU14785	k14	Barack Obama	Male	k14
ITITUN17007	k17	Susaka Ishiki	Female	k17
ITITUN17008	k17	Sawano Hiroyuki	Male	k17

Message ✕

ID : BABAIU15555
Name : Captain Marvel
Fee : 10000000 VND
Deadline : 2020-05-30
Status : Paid

OK

BABAIU15555   Select

Schedule   Salary   Tuition

- If user wants to see the schedule of this student, user must check if his/her has already paid or not, if not the system don't allow user to see the schedule

| Search | Time table | Your info | Add/Drop Subject | Query |

Name

Clear   Search

| Student ▼ | Male ▼ | None ▼ | None ▼ |

Roll no	Name Student	Major	Gender	Section
BABAIU15234	k15	Jackie Chan	Male	k15
BTBTIU17562	k17	Kim Jong Un	Male	k17
BTBTIU18649	k18	Edogawa Conan	Male	k18
CECEIU16542	k16	Iron Man	Male	k16
CECEIU17878	k17	Lionel Messi	Male	k17
IEIEIU19236	k19	Cristiano Ronaldo	Male	k19
ITITIU13232	k13	Donald Trump	Male	k13
ITITIU14785	k14			k14
ITITUN17008	k17			k17

Message ✕

ℹ Please pay your tuition fee to get more information

OK

ITITUN17008

Select

| Schedule | Salary | Tuition |

- And if he/she paid we click the schedule button. And going to the next "Time table" tab, it will display his/her information and schedule

- In case that student used his/her account to log in and paid fee, just click the button "Schedule" then move to the "Time table" tab to see the schedule

- The user also can know more information about the course by double click in the course inside the schedule

- Tab "query" is for displaying the query for all the actions that the user did, such as clicking buttons, each button has its own query so this tab will print it out into to screen to give us more comfortable to handle
- Example, when user choose 'male', this means he/she wants use search button to search all the student that is male
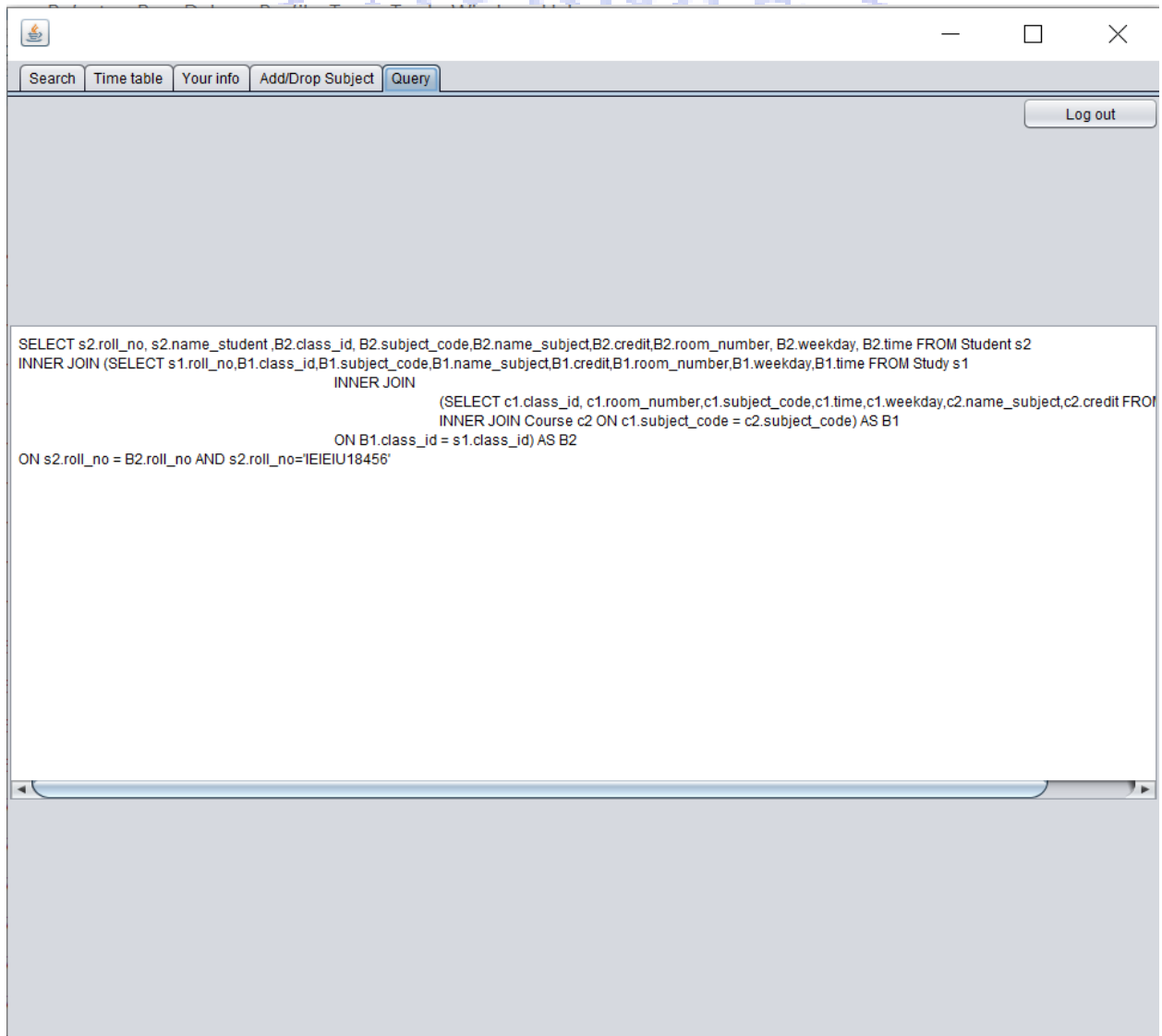
- In tab "Add/Drop Subject" allow students to add and drop their classes

Class ID	Subject Code	Name Subject	Credit	Weekday	Time	Room	Staff name

List of your classes

Add   Drop

Class ID	Subject Code	Name Subject	Credit
ITIT18IU01	IT01IU	Principle Database Management	2
ITIT18IU02	IT02IU	Principle Database Management LAB	2
ITIT18UN05	IT05UN	Skills for Communicating Information	3

Search | **Time table** | **Your info** | **Add/Drop Subject** | **Query**

Name subject

Name major   None ▼

Filter

Clear

- Input the keyword into the textField Name subject or choose Name major, then click "Filter" button. It will search for the data. If the textField id empty, it will automatically display all the classes, which already inserted in the SQL, in table.

| Search | Time table | Your info | Add/Drop Subject | Query |

Name subject [   ]   [Filter]

Name major   [None   ▼]   [Clear]

Class ID	Subject Code	Name Subject	Credit	Weekday	Time	Room	Staff name
BABA16IU13	BAIU02	Human Managem...	4	Tuesday	8 a.m	A1-304	Bill Gate
BABA17IU12	BAIU01	Business Analys	2	Monday	8 a.m	A1-206	Bill Gate
ITIT17IU11	IT11IU	Introduction to Artif...	2	Friday	8 a.m	LA1-607	Bill Gate
ITIT18IU03	PH03IU	Physics 3	4	Tuesday	1 p.m	A1-403	Bill Gate
BTBT19IU15	BTIU02	Device	4	Saturday	1 p.m	A1-402	Bruce Lee
ITIT17IU04	IT04IU	Web Development...	2	Tuesday	8 a.m	LA1-606	Bruce Lee
CECE18IU16	CEIU01	Computer Edit	2	Monday	8 a.m	A2-302	Narkoth
CECE19IU17	CEIU02	Teamwork	4	Thursday	1 p.m	A2-203	Narkoth
ITIT18IU08	IT08IU	Computer Architec...	2	Thursday	1 p.m	B-701	Narkoth
ITIT19IU01	PH01IU	Physics 1	2	Wednesday	1 p.m	A2-408	Narkoth
EEEE17IU19	EEIU02	Achitect	2	Friday	8 a.m	A2-314	Azula
EEEE19IU18	EEIU01	Materials	4	Wednesday	8 a.m	A2-206	Zuko
ISEIU18IU20	ISEIU01	Dance	2	Thursday	1 p.m	A1-307	Batman
ITIT18UN05	IT05UN	Skills for Commu...	3	Tuesday	1 p.m	A2-408	Batman
ISEIU19IU21	ISEIU02	How to represent	4	Tuesday	8 a.m	A2-413	Mika
ITIT17IU03	IT03IU	Web Development	2	Wednesday	8 a.m	A1-404	Duyen
ITIT18IU01	IT01IU	Principle Databas...	2	Friday	1 p.m	A1-202	Duyen
ITIT18IU02	IT02IU	Principle Databas...	2	Monday	8 a.m	LA1-605	Ngoc
ITIT18IU09	IT09IU	Computer Architec...	2	Wednesday	1 p.m	LA1-607	Ngoc
MAMA18IU23	MA02IU	Calculus 2	4	Wednesday	1 p.m	A2-303	Kuro
MAMA18IU24	MA03IU	Calculus 3	4	Monday	1 p.m	A2-205	Kuro
MAMA19IU22	MA01IU	Calculus 1	4	Tuesday	8 a.m	A1-403	Kuro

List of your classes   [Add] [Drop]

Class ID	Subject Code	Name Subject	Credit
ITIT18IU01	IT01IU	Principle Database Management	2
ITIT18IU02	IT02IU	Principle Database Management LAB	2
ITIT18UN05	IT05UN	Skills for Communicating Information	3

- When adding a class, it will auto update the tuition fee in the Amount of Pay

Search | Time table | Your info | Add/Drop Subject | Query

Name subject [_____] [Filter]

Name major [None ▼] [Clear]

Class ID	Subject Code	Name Subject	Credit	Weekday	Time	Room	Staff name
BABA16IU13	BAIU02	Human Managem...	4	Tuesday	8 a.m	A1-304	Bill Gate
BABA17IU12	BAIU01	Business Analys	2	Monday	8 a.m	A1-206	Bill Gate
ITIT17IU11	IT11IU	Introduction to Artif...	2	Friday	8 a.m	LA1-607	Bill Gate
ITIT18IU03	PH03IU	Physics 3	4	Tuesday	1 p.m	A1-403	Bill Gate
BTBT19IU15	BTIU02	Device	4	Saturday	1 p.m	A1-402	Bruce Lee
ITIT17IU04	IT04IU	Web Development...	2	Tuesday	8 a.m	LA1-606	Bruce Lee
CECE18IU16	CEIU01	Computer Edit	4	Monday	8 a.m	A2-302	Narkoth
CECE19IU17	CEIU02	Teamwork	2	Thursday	1 p.m	A2-203	Narkoth
ITIT18IU08	IT08IU	Computer Architec...	2	Thursday	1 p.m	B-701	Narkoth
ITIT19IU01	PH01IU	Physics 1	2	Wednesday	1 p.m	A2-408	Narkoth
EEEE17IU19	EEIU02	Achitect	2	Friday	8 a.m	A2-314	Azula
EEEE19IU18	EEIU01	Materials	4			A2-206	Zuko
ISEIU18IU20	ISEIU01	Dance	2			A1-307	Batman
ITIT18UN05	IT05UN	Skills for Commu...	3			A2-408	Batman
ISEIU19IU21	ISEIU02	How to represent	4			A2-413	Mika
ITIT17IU03	IT03IU	Web Development	2			A1-404	Duyen
ITIT18IU01	IT01IU	Principle Databas...	2			A1-202	Duyen
ITIT18IU02	IT02IU	Principle Databas...	2			LA1-605	Ngoc
ITIT18IU09	IT09IU	Computer Architec...	2			LA1-607	Ngoc
MAMA18IU23	MA02IU	Calculus 2	4			A2-303	Kuro
MAMA18IU24	MA03IU	Calculus 3	4	Monday	1 p.m	A2-205	Kuro
MAMA19IU22	MA01IU	Calculus 1	4	Tuesday	8 a.m	A1-403	Kuro

Message ✕

ℹ Data Insert Successfully

[OK]

List of your classes

[Add] [Drop]

Class ID	Subject Code	Name Subject	Credit

- When dropping classes, it will also automatically update the tuition fee in the Amount of Pay

Name subject [ ] Filter

Name major [None ▼] Clear

Class ID	Subject Code	Name Subject	Credit	Weekday	Time	Room	Staff name
BABA16IU13	BAIU02	Human Managem...	4	Tuesday	8 a.m	A1-304	Bill Gate
BABA17IU12	BAIU01	Business Analys	2	Monday	8 a.m	A1-206	Bill Gate
ITIT17IU11	IT11IU	Introduction to Artif...	2	Friday	8 a.m	LA1-607	Bill Gate
ITIT18IU03	PH03IU	Physics 3	4	Tuesday	1 p.m	A1-403	Bill Gate
BTBT19IU15	BTIU02	Device	4	Saturday	1 p.m	A1-402	Bruce Lee
ITIT17IU04	IT04IU	Web Development...	2	Tuesday	8 a.m	LA1-606	Bruce Lee
CECE18IU16	CEIU01	Computer Edit	2	Monday	8 a.m	A2-302	Narkoth
CECE19IU17	CEIU02	Teamwork	2	Thursday	1 p.m	A2-203	Narkoth
ITIT18IU08	IT08IU	Computer Architec...	2	Thursday	1 p.m	B-701	Narkoth
ITIT19IU01	PH01IU	Physics 1	2	Wednesday	1 p.m	A2-408	Narkoth
EEEE17IU19	EEIU02	Achitect	2	Friday	8 a.m	A2-314	Azula
EEEE19IU18	EEIU01	Materials	4			A2-206	Zuko
ISEIU18IU20	ISEIU01	Dance	2			A1-307	Batman
ITIT18UN05	IT05UN	Skills for Commu...	3			A2-408	Batman
ISEIU19IU21	ISEIU02	How to represent	4			A2-413	Mika
ITIT17IU03	IT03IU	Web Development	2			A1-404	Duyen
ITIT18IU01	IT01IU	Principle Databas...	2			A1-202	Duyen
ITIT18IU02	IT02IU	Principle Databas...	2			LA1-605	Ngoc
ITIT18IU09	IT09IU	Computer Architec...	2			LA1-607	Ngoc
MAMA18IU23	MA02IU	Calculus 2	4			A2-303	Kuro
MAMA18IU24	MA03IU	Calculus 3	4	Monday	1 p.m	A2-205	Kuro
MAMA19IU22	MA01IU	Calculus 1	4	Tuesday	8 a.m	A1-403	Kuro

Message ×

ⓘ Data Delete Successfully

[OK]

List of your classes

[Add] [Drop]

Class ID	Subject Code	Name Subject	Credit

Class ID	Subject Code	Name Subject	Credit	Weekday	Time	Room	Staff name
BABA16IU13	BAIU02	Human Managem...	4	Tuesday	8 a.m	A1-304	Bill Gate
BABA17IU12	BAIU01	Business Analys	2	Monday	8 a.m	A1-206	Bill Gate
ITIT17IU11	IT11IU	Introduction to Artif...	2	Friday	8 a.m	LA1-607	Bill Gate
ITIT18IU03	PH03IU	Physics 3	4	Tuesday	1 p.m	A1-403	Bill Gate
BTBT19IU15	BTIU02	Device	4	Saturday	1 p.m	A1-402	Bruce Lee
ITIT17IU04	IT04IU	Web Development...	2	Tuesday	8 a.m	LA1-606	Bruce Lee
CECE18IU16	CEIU01	Computer Edit	2	Monday	8 a.m	A2-302	Narkoth
CECE19IU17	CEIU02	Teamwork	4	Thursday	1 p.m	A2-203	Narkoth
ITIT18IU08	IT08IU	Computer Architec...	2	Thursday	1 p.m	B-701	Narkoth
ITIT19IU01	PH01IU	Physics 1	2	Wednesday	1 p.m	A2-408	Narkoth
EEEE17IU19	EEIU02	Achitect	2	Friday	8 a.m	A2-314	Azula
EEEE19IU18	EEIU01	Materials	4	Wednesday	8 a.m	A2-206	Zuko
ISEIU18IU20	ISEIU01	Dance	2	Thursday	1 p.m	A1-307	Batman
ITIT18UN05	IT05UN	Skills for Commu...	3	Tuesday	1 p.m	A2-408	Batman
ISEIU19IU21	ISEIU02	How to represent	4	Tuesday	8 a.m	A2-413	Mika
ITIT17IU03	IT03IU	Web Development	2	Wednesday	8 a.m	A1-404	Duyen
ITIT18IU01	IT01IU	Principle Databas...	2	Friday	1 p.m	A1-202	Duyen
ITIT18IU02	IT02IU	Principle Databas...	2	Monday	8 a.m	LA1-605	Ngoc
ITIT18IU09	IT09IU	Computer Architec...	2	Wednesday	1 p.m	LA1-607	Ngoc
MAMA18IU23	MA02IU	Calculus 2	4	Wednesday	1 p.m	A2-303	Kuro
MAMA18IU24	MA03IU	Calculus 3	4	Monday	1 p.m	A2-205	Kuro
MAMA19IU22	MA01IU	Calculus 1	4	Tuesday	8 a.m	A1-403	Kuro

List of your classes

Class ID	Subject Code	Name Subject	Credit
ITIT18IU01	IT01IU	Principle Database Management	2
ITIT18IU02	IT02IU	Principle Database Management LAB	2
ITIT18UN05	IT05UN	Skills for Communicating Information	3

b. **Admin**

- When the user accesses the system by login with the role Admin

- Use the accounts that are stored in database (table "Account") to login into the system. There are 2 possible cases can be happened: login successfully or fail

Fill the username and password text to login

Admin name   admin

Admin password   ***

Continue

Back

Message

Username and Password Does Not Match

OK

Fill the username and password text to login

Admin name   admin

Admin password   ****

Continue

Back

Message

Username and Password Matched

OK
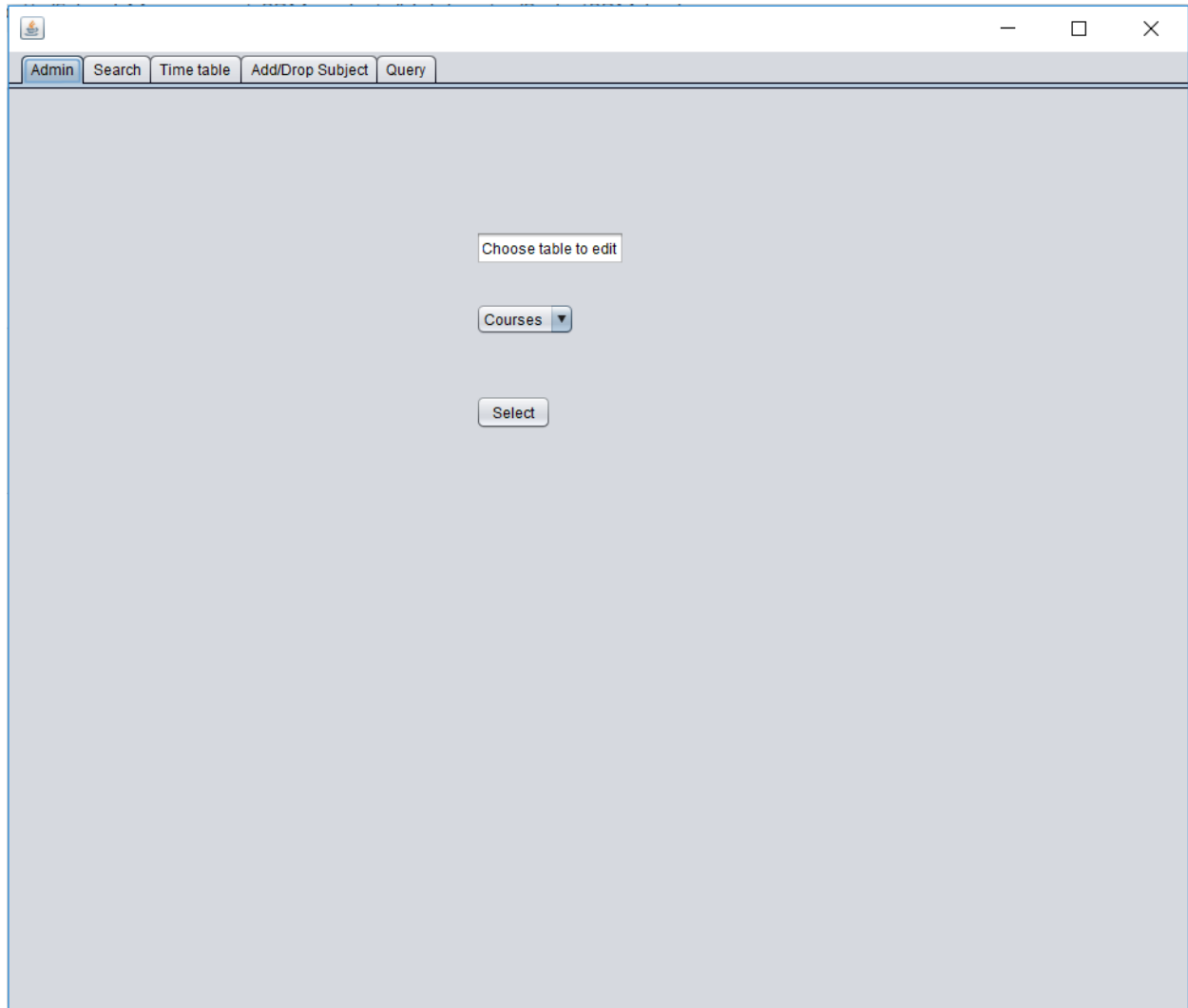
- This interface has 5 tabs: Admin, Search, Time table, Add/Drop Subject Query
- In Tab "Admin" user is allowed to edit and handle all tables and data in database by entry to each table

- Choose which table he/she wants to entry
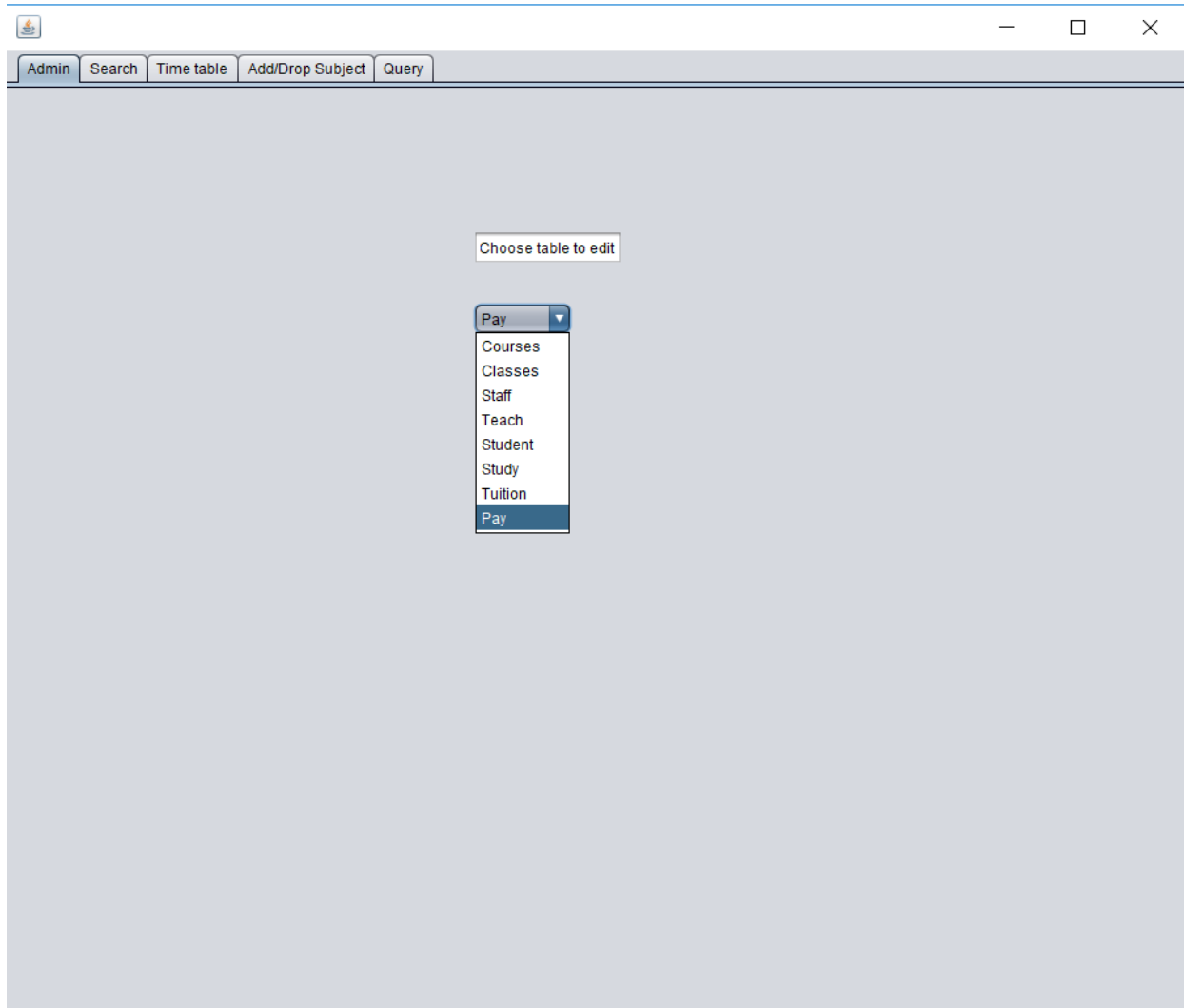
- And then click the select button to go into the jframe that contains table in database
- The system has 8 tables: Courses, Classes, Staff, Teach, Student, Study, Tuition, Pay rely on the SQL that are already created

- First starting with the table Classes

- There are 5 buttons here: Home(return to previous), Select, Insert, Update, Delete
- When user click "Select" it will display all database of the classes

- Click the button "Delete" it will delete this class data

Classes table

Subject_code   PH01IU   [Select]   [Delete]

Room_number   A2-408   [Home]

Weekday   Wednesday   [Update]   [Insert]

Time   1 p.m

Class_ID   ITIT19IU01

class_id	subject_code	room_number	weekday	time
ITIT17IU03	IT03IU	A1-404	Wednesday	8 a.m
ITIT17IU04	IT04IU	LA1-606	Tuesday	8 a.m
ITIT17IU10	IT10IU	A2-301	Sunday	8 a.m
ITIT17IU11	IT11IU	LA1-607	Friday	8 a.m
ITIT18IU01	IT01IU	A1-202	Friday	1 p.m
ITIT18IU02	IT02IU	LA1-605	Monday	8 a.m
ITIT18IU03	PH03IU	A1-403	Tuesday	1 p.m
ITIT18IU08	IT08IU	B-701	Thursday	1 p.m
ITIT18IU09	IT09IU	LA1-607	Wednesday	1 p.m
ITIT18UN05	IT05UN	A2-408	Tuesday	1 p.m

- Delete the class with class_id = ITIT19IU01 then fill the information of this class in textfield and click the "Insert" button to insert it to database again

- If the class is already existed, it will display the error message "This class_id has exist already, fill a new class_id"

- Or if the user not fill anything in text field but click the "Insert" button the system will display error message "Please fill al"

- Next, the "Update" button is easy to use, just click to the class user that the user wants to choose and edit the information in textfield and click button
- In the case, user wants to update the information and the room time and weekday is duplicated with another class time or room the system will display the error message "This schedule has exist already, please fix your room or your time"

- Then move to the the the Jframe Courses

- There are 5 buttons, similarly to Classes: Home(return home), Select, Delete, Insert, Update
- Click the Select button it will show all the courses

- When the user choose course to delete

Courses table

Subject_code   PH03IU   Select   Delete

                                              Home
Name_subject   Physics 3
                                Update   Insert

Credit   4

Major   PH

subject_code	name_s		major
IT01IU	Principle		IT
IT02IU	Principle		IT
IT03IU	Web De		IT
IT04IU	Web De		IT
IT05UN	Skills fo		IT
IT08IU	Comput		IT
IT09IU	Comput		IT
IT10IU	Introduc		IT
IT11IU	Introduction to Artificial Intelligence...	2	IT
PH01IU	Physics 1	2	PH
PH03IU	Physics 3	4	PH

Message

Data Delete Successfully

OK

Courses table

Subject_code	PH03IU	Select · · · · Delete
		Home
Name_subject	Physics 3	Update · · · · Insert
Credit	4	
Major	PH	

subject_code	name_subject	credit	major
IT01IU	Principle Database Management	2	IT
IT02IU	Principle Database Management L...	2	IT
IT03IU	Web Development	2	IT
IT04IU	Web Development LAB	2	IT
IT05UN	Skills for Communicating Informati...	3	IT
IT08IU	Computer Architecture	2	IT
IT09IU	Computer Architecture LAB	2	IT
IT10IU	Introduction to Artificial Intelligence	2	IT
IT11IU	Introduction to Artificial Intelligence...	2	IT
PH01IU	Physics 1	2	PH

- User inserts the course that he/she deleted it before

Courses table

Subject_code   PH03IU   [Select]   [Delete]

                                                [Home]
Name_subject   Physics 3
                                [Update]   [Insert]

Credit   4

Major   PH

subject_code	name_s		major
IT01IU	Principle		IT
IT02IU	Principle		IT
IT03IU	Web De		IT
IT04IU	Web De		IT
IT05UN	Skills fo		IT
IT08IU	Comput		IT
IT09IU	Comput		IT
IT10IU	Introduc		IT
IT11IU	Introduction to Artificial Intelligence...	2	IT
PH01IU	Physics 1	2	PH

Message

(i) Data Insert Successfully

[OK]

Courses table

| Subject_code | PH03IU | Select | | Delete |

Name_subject | Physics 3 | | Home |

Update | Insert |

Credit | 4 |

Major | PH |

subject_code	name_subject	credit	major
IT01IU	Principle Database Management	2	IT
IT02IU	Principle Database Management L...	2	IT
IT03IU	Web Development	2	IT
IT04IU	Web Development LAB	2	IT
IT05UN	Skills for Communicating Informati...	3	IT
IT08IU	Computer Architecture	2	IT
IT09IU	Computer Architecture LAB	2	IT
IT10IU	Introduction to Artificial Intelligence	2	IT
IT11IU	Introduction to Artificial Intelligence...	2	IT
PH01IU	Physics 1	2	PH
PH03IU	Physics 3	4	PH

- In case the user inserts the course that already in the data table, it will print out error "This class_id has exists already, fill a new clas_id"

- Update button is also simple, just choose course and edit the information in text field then click update
- For example, change the credit for Physics 3 from 4 to 2

Courses table

Subject_code	PH03IU	Select	Delete
			Home
Name_subject	Physics 3	Update	Insert
Credit	2		
Major	PH		

subject_code	name_subject	credit	major
IT01IU	Principle Database Management	2	IT
IT02IU	Principle Database Management L...	2	IT
IT03IU	Web Development	2	IT
IT04IU	Web Development LAB	2	IT
IT05UN	Skills for Communicating Informati...	3	IT
IT08IU	Computer Architecture	2	IT
IT09IU	Computer Architecture LAB	2	IT
IT10IU	Introduction to Artificial Intelligence	2	IT
IT11IU	Introduction to Artificial Intelligence...	2	IT
PH01IU	Physics 1	2	PH
PH03IU	Physics 3	2	PH

- Then move to the other Jframes: Staff, Teach, Student, Study, Tuition, Pay

- These table are similarly, they have the same function and buttons with Course and Classes

Staff table

Id_staff [   ]   Select   Delete

Name_staff [   ]   Home

Gender [   ]   Update   Insert

Salary [   ]

id_staff	name_staff	gender	salary
BA1	Bill Gate	male	45000000
BT1	Bruce Lee	male	67000000
BT2	Yena	female	40000000
CE1	Narkoth	male	64000000
IE1	Batman	male	66000000
IT1	Duyen	female	47000000
IT2	Ngoc	male	55000000
IT3	Thanh	male	60000000

Student table

roll_no [_____]

major [_____]

name_student [_____]

gender [_____]

section [_____]

Select   Delete

Home

Update   Insert

[_____]

roll_no	major	name_student	gender	section
BABAIU15234	k15	Jackie Chan	Male	k15
BABAIU15555	k15	Captain Marvel	Female	k15
BTBTIU17562	k17	Kim Jong Un	Male	k17
BTBTIU18649	k18	Edogawa Conan	Male	k18
CECEIU16542	k16	Iron Man	Male	k16
CECEIU17878	k17	Lionel Messi	Male	k17
IEIEIU18456	k18	Hello Kitty	Female	k18
IEIEIU19236	k19	Cristiano Ronaldo	Male	k19
ITITIU13232	k13	Donald Trump	Male	k13
ITITIU14785	k14	Barack Obama	Male	k14
ITITUN17007	k17	Susaka Ishiki	Female	k17
ITITUN17008	k17	Sawano Hiroyuki	Male	k17

Study table

Roll_no [   ]   [Select]   [Delete]

                                        [Home]

Class_ID [   ]   [Update]   [Insert]

roll_no	class_id
BABAIU15234	ITIT18IU01
BABAIU15234	ITIT18IU02
BABAIU15234	ITIT18UN05
BABAIU15555	ITIT17IU04
BABAIU15555	ITIT18IU08
BABAIU15555	ITIT18IU09
BTBTIU17562	ITIT17IU03
BTBTIU17562	ITIT17IU04
BTBTIU17562	ITIT18IU08
BTBTIU17562	ITIT18IU09
BTBTIU18649	ITIT17IU04
BTBTIU18649	ITIT17IU11
BTBTIU18649	ITIT18IU02
CECEIU16542	ITIT18IU02
CECEIU17878	ITIT17IU04
CECEIU17878	ITIT17IU11
CECEIU17878	ITIT18UN05
IEIEIU18456	ITIT17IU04
IEIEIU18456	ITIT18IU02
IEIEIU19236	ITIT17IU11
IEIEIU19236	ITIT18IU08
IEIEIU19236	ITIT18IU09
ITITIU13232	ITIT17IU03
ITITIU13232	ITIT17IU04
ITITIU13232	ITIT18IU01

Teach table

Id_staff   [_____]   [Select]   [Delete]

                                    [Home]

Class_ID   [_____]   [Update]   [Insert]

id_staff	class_id
IT1	ITIT17IU03
BT1	ITIT17IU04
BA1	ITIT17IU11
IT1	ITIT18IU01
IT2	ITIT18IU02
CE1	ITIT18IU08
IT2	ITIT18IU09
IE1	ITIT18UN05
CE1	ITIT19IU01

Pay Table

Roll_no			Select

Tuition_id

Home

Amount per Credit

Amount

roll_no	tuition_id	amount_per_credit	amount
BABAIU15234	1	5000000	55000000
BABAIU15555	2	1000000	10000000
BTBTIU17562	3	1000000	8000000
BTBTIU18649	4	3000000	18000000
CECEIU16542	5	2000000	18000000
CECEIU17878	6	1000000	7000000
IEIEIU18456	7	1000000	6000000
IEIEIU19236	8	1000000	10000000
ITITIU13232	9	1000000	13000000
ITITIU14785	10	1000000	10000000
ITITUN17007	11	6000000	0
ITITUN17008	12	6000000	0

Tuition table

Tuition_id [   ]   Select   Delete

                                              Home

Paid_or_Unpaid [   ]   Update   Insert

Deadline_Date [   ]

tuition_id	paid_or_unpaid	deadline_date
1	1	2020-05-30
2	1	2020-05-30
3	0	2020-05-30
4	0	2020-05-30
5	1	2020-05-15
6	1	2020-05-15
7	0	2020-05-15
8	0	2020-04-30
9	1	2020-04-30
10	0	2020-05-15
11	0	2020-04-30
12	0	2020-04-30

Return to home and move to the next tab "Search"

Click the "Search" button to see the list of student and teacher(choose Student/Staff with checkbox)

In the student role the salary button below is disable, tuition is enabled to click because student just has tuition fee

In contrast, when the user in the staff role, the button Tuition below is disable, Salary button is enabled to click because staff only has salary

To see student's tuition fee and schedule:

First use the mouse click to the student which we want to see

Then click the "select" button to lock he/she

Then click the "Tuition" button to see tuition fee of his/ her

When we want to see Schedule, make sure that the student which we selected has already paid the tuition fee, if not it will show the message "Please pay your tuition fee to get more information"

Otherwise, if the student already paid the fee, the user can see by clicking the "Schedule" button and move to the tab "Time table" to see that student's schedule

Admin | Search | Time table | Add/Drop Subject | Query

Name [   ] Clear Search

[Student ▼]   [None ▼]   [None ▼]   [None ▼]

Roll no	Name Student	Major	Gender	Section
BABAIU15234	k15	Jackie Chan	Male	k15
BABAIU15555	k15	Captain Marvel	Female	k15
BTBTIU17562	k17	Kim Jong Un	Male	k17
BTBTIU18649	k18	Edogawa Conan	Male	k18
CECEIU16542	k16	Iron Man	Male	k16
CECEIU17878	k17			k17
IEIEIU18456	k18			k18
IEIEIU19236	k19			k19
ITITIU13232	k13			k13
ITITIU14785	k14			k14
ITITUN17007	k17			k17
ITITUN17008	k17			k17

Message ✕

ⓘ ID : BABAIU15555
    Name : Captain Marvel
    Fee : 10000000 VND
    Deadline : 2020-05-30
    Status : Paid

    OK

[BABAIU15555   ] Select

Schedule   Salary   Tuition

Admin | Search | Time table | Add/Drop Subject | Query

Role: | Student

ID: | BABAIU15555

Name: | Captain Marvel

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	Web Development LAB					
	Web Development LAB					
	Web Development LAB					
	Physics 3	Computer Architectur...	Computer Architecture			
	Physics 3	Computer Architectur...	Computer Architecture			
	Physics 3	Computer Architectur...	Computer Architecture			

Especially, user can click to the course to see this information

Salary and Schedule of Staff is similar to Student

Admin	Search	Time table	Add/Drop Subject	Query		

Role: Teacher

ID: BA1

Name: Bill Gate

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Business Analys	Human Management			Introduction to Artifici...		
Business Analys	Human Management			Introduction to Artifici...		
Business Analys	Human Management			Introduction to Artifici...		
	Physics 3					
	Physics 3					
	Physics 3					

| Admin | Search | Time table | Add/Drop Subject | Query |

Role: Teacher

ID: BA1

Name: Bill Gate

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Business Analys	Human Management			Introduction to Artifici...		
Business Analys	Human Management			Introduction to Artifici...		
Business Analys	Human Management			Introduction to Artifici...		
	Physics 3					
	Physics 3					
	Physics 3					

Message ✕

ℹ ID subject: IT11IU
Name subject: Introduction to Artificial Intelligence LAB
Credit: 2
Room: LA1-607
Day: Friday
Time: 8 a.m

OK

Tab query is for displaying the query for each button that the user click and the system run this query

For example, click the "Tuition" button to see the tuition fee of student
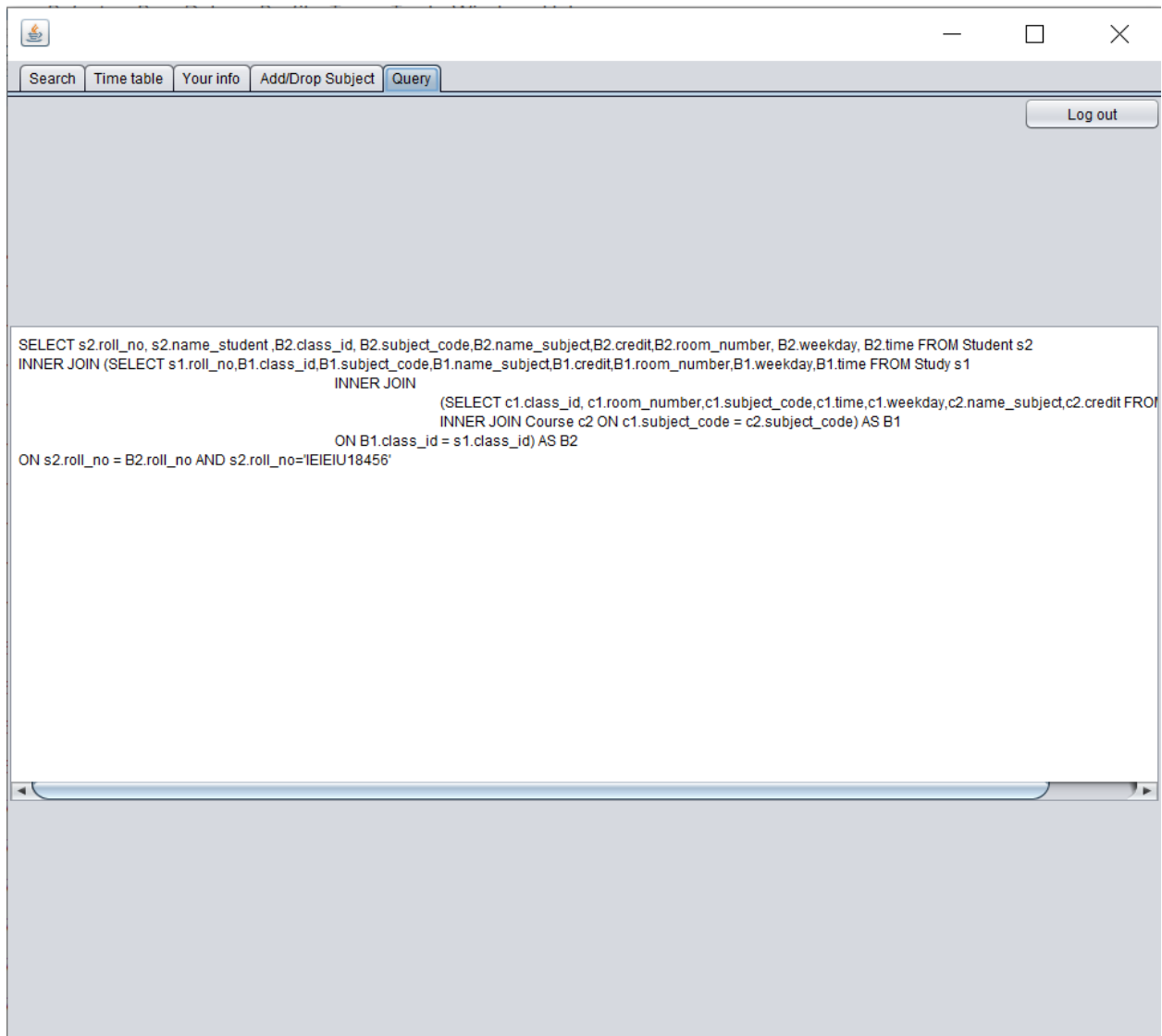
In tab "Add/Drop Subject, the system allow admin to add or drop subject of student/staff

Input the keyword into the textField Name subject or choose Name major, then click "Filter" button. It will search for the data. If the textField is emptied, it will automatically display all classes in table.

| Admin | Search | Time table | Add/Drop Subject | Query |

Name subject [   ]   [Filter]

Name major   [None   ▼]   [Clear]

Class ID	Subject Code	Name Subject	Credit	Weekday	Time	Room	Staff name
BABA16IU13	BAIU02	Human Managem...	4	Tuesday	8 a.m	A1-304	Bill Gate
BABA17IU12	BAIU01	Business Analys	2	Monday	8 a.m	A1-206	Bill Gate
ITIT17IU11	IT11IU	Introduction to Artif...	2	Friday	8 a.m	LA1-607	Bill Gate
ITIT18IU03	PH03IU	Physics 3	4	Tuesday	1 p.m	A1-403	Bill Gate
BTBT19IU15	BTIU02	Device	4	Saturday	1 p.m	A1-402	Bruce Lee
ITIT17IU04	IT04IU	Web Development...	2	Tuesday	8 a.m	LA1-606	Bruce Lee
CECE18IU16	CEIU01	Computer Edit	2	Monday	8 a.m	A2-302	Narkoth
CECE19IU17	CEIU02	Teamwork	4	Thursday	1 p.m	A2-203	Narkoth
ITIT18IU08	IT08IU	Computer Architec...	2	Thursday	1 p.m	B-701	Narkoth
ITIT19IU01	PH01IU	Physics 1	2	Wednesday	1 p.m	A2-408	Narkoth
EEEE17IU19	EEIU02	Achitect	2	Friday	8 a.m	A2-314	Azula
EEEE19IU18	EEIU01	Materials	4	Wednesday	8 a.m	A2-206	Zuko
ISEIU18IU20	ISEIU01	Dance	2	Thursday	1 p.m	A1-307	Batman
ITIT18UN05	IT05UN	Skills for Commu...	3	Tuesday	1 p.m	A2-408	Batman
ISEIU19IU21	ISEIU02	How to represent	4	Tuesday	8 a.m	A2-413	Mika
ITIT17IU03	IT03IU	Web Development	2	Wednesday	8 a.m	A1-404	Duyen
ITIT18IU01	IT01IU	Principle Databas...	2	Friday	1 p.m	A1-202	Duyen
ITIT18IU02	IT02IU	Principle Databas...	2	Monday	8 a.m	LA1-605	Ngoc
ITIT18IU09	IT09IU	Computer Architec...	2	Wednesday	1 p.m	LA1-607	Ngoc
MAMA18IU23	MA02IU	Calculus 2	4	Wednesday	1 p.m	A2-303	Kuro
MAMA18IU24	MA03IU	Calculus 3	4	Monday	1 p.m	A2-205	Kuro
MAMA19IU22	MA01IU	Calculus 1	4	Tuesday	8 a.m	A1-403	Kuro

List of your classes   [Add] [Drop]

Class ID	Subject Code	Name Subject	Credit
ITIT18IU02	IT02IU	Principle Database Management LAB	2
ITIT18IU03	PH03IU	Physics 3	4

Admin is allowed to add and drop if the class schedule is not be duplicated

Add

Admin	Search	Time table	Add/Drop Subject	Query

Name subject _____ [Filter]

Name major [None ▼] [Clear]

Class ID	Subject Code	Name Subject	Credit	Weekday	Time	Room	Staff name
BABA16IU13	BAIU02	Human Managem...	4	Tuesday	8 a.m	A1-304	Bill Gate
BABA17IU12	BAIU01	Business Analys	2	Monday	8 a.m	A1-206	Bill Gate
ITIT17IU11	IT11IU	Introduction to Artif...	2	Friday	8 a.m	LA1-607	Bill Gate
ITIT18IU03	PH03IU	Physics 3	4	Tuesday	1 p.m	A1-403	Bill Gate
BTBT19IU15	BTIU02	Device	4	Saturday	1 p.m	A1-402	Bruce Lee
ITIT17IU04	IT04IU	Web Development...	2	Tuesday	8 a.m	LA1-606	Bruce Lee
CECE18IU16	CEIU01	Computer Edit	2	Monday	8 a.m	A2-302	Narkoth
CECE19IU17	CEIU02	Teamwork	4	Thursday	1 p.m	A2-203	Narkoth
ITIT18IU08	IT08IU	Computer Architec...	2	Thursday	1 p.m	B-701	Narkoth
ITIT19IU01	PH01IU	Physics 1	2	Wednesday	1 p.m	A2-408	Narkoth
EEEE17IU19	EEIU02	Achitect	2	Friday	8 a.m	A2-314	Azula
EEEE19IU18	EEIU01	Materials	4	Wednesday	8 a.m	A2-206	Zuko
ISEIU18IU20	ISEIU01	Dance			1 p.m	A1-307	Batman
ITIT18UN05	IT05UN	Skills for Com			1 p.m	A2-408	Batman
ISEIU19IU21	ISEIU02	How to repres			8 a.m	A2-413	Mika
ITIT17IU03	IT03IU	Web Develop			8 a.m	A1-404	Duyen
ITIT18IU01	IT01IU	Principle Data			1 p.m	A1-202	Duyen
ITIT18IU02	IT02IU	Principle Data			8 a.m	LA1-605	Ngoc
ITIT18IU09	IT09IU	Computer Arc			1 p.m	LA1-607	Ngoc
MAMA18IU23	MA02IU	Calculus 2			1 p.m	A2-303	Kuro
MAMA18IU24	MA03IU	Calculus 3			1 p.m	A2-205	Kuro
MAMA19IU22	MA01IU	Calculus 1	4	Tuesday	8 a.m	A1-403	Kuro

Message ✕

ⓘ Data Insert Successfully

[OK]

List of your classes   [Add] [Drop]

Class ID	Subject Code	Name Subject	Credit

	Admin	Search	Time table	Add/Drop Subject	Query

Name subject [   ]   [Filter]

Name major [None ▼]   [Clear]

Class ID	Subject Code	Name Subject	Credit	Weekday	Time	Room	Staff name
BABA16IU13	BAIU02	Human Managem...	4	Tuesday	8 a.m	A1-304	Bill Gate
BABA17IU12	BAIU01	Business Analys	2	Monday	8 a.m	A1-206	Bill Gate
ITIT17IU11	IT11IU	Introduction to Artif...	2	Friday	8 a.m	LA1-607	Bill Gate
ITIT18IU03	PH03IU	Physics 3	4	Tuesday	1 p.m	A1-403	Bill Gate
BTBT19IU15	BTIU02	Device	4	Saturday	1 p.m	A1-402	Bruce Lee
ITIT17IU04	IT04IU	Web Development...	2	Tuesday	8 a.m	LA1-606	Bruce Lee
CECE18IU16	CEIU01	Computer Edit	2	Monday	8 a.m	A2-302	Narkoth
CECE19IU17	CEIU02	Teamwork	4	Thursday	1 p.m	A2-203	Narkoth
ITIT18IU08	IT08IU	Computer Architec...	2	Thursday	1 p.m	B-701	Narkoth
ITIT19IU01	PH01IU	Physics 1	2	Wednesday	1 p.m	A2-408	Narkoth
EEEE17IU19	EEIU02	Achitect	2	Friday	8 a.m	A2-314	Azula
EEEE19IU18	EEIU01	Materials	4	Wednesday	8 a.m	A2-206	Zuko
ISEIU18IU20	ISEIU01	Dance	2	Thursday	1 p.m	A1-307	Batman
ITIT18UN05	IT05UN	Skills for Commu...	3	Tuesday	1 p.m	A2-408	Batman
ISEIU19IU21	ISEIU02	How to represent	4	Tuesday	8 a.m	A2-413	Mika
ITIT17IU03	IT03IU	Web Development	2	Wednesday	8 a.m	A1-404	Duyen
ITIT18IU01	IT01IU	Principle Databas...	2	Friday	1 p.m	A1-202	Duyen
ITIT18IU02	IT02IU	Principle Databas...	2	Monday	8 a.m	LA1-605	Ngoc
ITIT18IU09	IT09IU	Computer Architec...	2	Wednesday	1 p.m	LA1-607	Ngoc
MAMA18IU23	MA02IU	Calculus 2	4	Wednesday	1 p.m	A2-303	Kuro
MAMA18IU24	MA03IU	Calculus 3	4	Monday	1 p.m	A2-205	Kuro
MAMA19IU22	MA01IU	Calculus 1	4	Tuesday	8 a.m	A1-403	Kuro

List of your classes

[Add]   [Drop]

Class ID	Subject Code	Name Subject	Credit
ITIT18IU01	IT01IU	Principle Database Management	2
ITIT18IU02	IT02IU	Principle Database Management LAB	2
ITIT18IU03	PH03IU	Physics 3	4

- Drop

| | Admin | Search | Time table | Add/Drop Subject | Query |

Name subject [   ] [Filter]

Name major [None   ▼] [Clear]

Class ID	Subject Code	Name Subject	Credit	Weekday	Time	Room	Staff name
BABA16IU13	BAIU02	Human Managem...	4	Tuesday	8 a.m	A1-304	Bill Gate
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ITIT18IU03	PH03IU	Physics 3	4	Tuesday	1 p.m	A1-403	Bill Gate
BTBT19IU15	BTIU02	Device	4	Saturday	1 p.m	A1-402	Bruce Lee
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CECE19IU17	CEIU02	Teamwork	4	Thursday	1 p.m	A2-203	Narkoth
ITIT18IU08	IT08IU	Computer Architec...	2	Thursday	1 p.m	B-701	Narkoth
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EEEE19IU18	EEIU01	Materials	4	Wednesday	8 a.m	A2-206	Zuko
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ITIT18UN05	IT05UN	Skills for Com			1 p.m	A2-408	Batman
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ITIT17IU03	IT03IU	Web Develop			8 a.m	A1-404	Duyen
ITIT18IU01	IT01IU	Principle Data			1 p.m	A1-202	Duyen
ITIT18IU02	IT02IU	Principle Data			8 a.m	LA1-605	Ngoc
ITIT18IU09	IT09IU	Computer Arc			1 p.m	LA1-607	Ngoc
MAMA18IU23	MA02IU	Calculus 2			1 p.m	A2-303	Kuro
MAMA18IU24	MA03IU	Calculus 3			1 p.m	A2-205	Kuro
MAMA19IU22	MA01IU	Calculus 1	4	Tuesday	8 a.m	A1-403	Kuro

Message ✕

ℹ Data Delete Successfully

[OK]

List of your classes   [Add] [Drop]

Class ID	Subject Code	Name Subject	Credit

Admin | Search | Time table | Add/Drop Subject | Query

Name subject [   ]   Filter

Name major [None   ▼]   Clear

Class ID	Subject Code	Name Subject	Credit	Weekday	Time	Room	Staff name
BABA16IU13	BAIU02	Human Managem...	4	Tuesday	8 a.m	A1-304	Bill Gate
BABA17IU12	BAIU01	Business Analys	2	Monday	8 a.m	A1-206	Bill Gate
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ISEIU18IU20	ISEIU01	Dance	2	Thursday	1 p.m	A1-307	Batman
ITIT18UN05	IT05UN	Skills for Commu...	3	Tuesday	1 p.m	A2-408	Batman
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ITIT18IU09	IT09IU	Computer Architec...	2	Wednesday	1 p.m	LA1-607	Ngoc
MAMA18IU23	MA02IU	Calculus 2	4	Wednesday	1 p.m	A2-303	Kuro
MAMA18IU24	MA03IU	Calculus 3	4	Monday	1 p.m	A2-205	Kuro
MAMA19IU22	MA01IU	Calculus 1	4	Tuesday	8 a.m	A1-403	Kuro

List of your classes   Add   Drop

Class ID	Subject Code	Name Subject	Credit
ITIT18IU02	IT02IU	Principle Database Management LAB	2
ITIT18IU03	PH03IU	Physics 3	4

7. Conclusions

This project provides a useful tool for school or university in order to organize their students and staffs. In particularly, they can insert, delete and update their students' and staffs' information. The students and teachers are finding more comfortable and convenient by using the system during their studying or teaching process. Accordingly, students can be easy to register or unregister in courses, and check their school timetables and information around the

study programs through the system. Also, staff has a tool to keep track with their working schedule.

REFERENCES

- SQL:
    - https://www.w3schools.com/sql/
- GUI (java swing):
    - https://www.javatpoint.com/java-joptionpane
    - https://www.youtube.com/watch?v=QKsfHqu4Pps
    - https://www.youtube.com/watch?v=WIMojkwMTa0