# **CS3425 Final Project**

Fall 2018 100 points, 20% of the overall grade

Report Due date: 11:59pm, Tuesday May 1st.

**Daniel Lambert** 

Website Link: <a href="https://classdb.it.mtu.edu/~djlamber/IceSkatingCamps/home.html">https://classdb.it.mtu.edu/~djlamber/IceSkatingCamps/home.html</a>

# **Project description:**

In this project, you will design and implement a simplified version of online registration system for Ice Skating Camps. The system will be used by the skating camp coordinator, coaches and campers. If there is any ambiguous requirement to you, write down your assumptions in your project report.

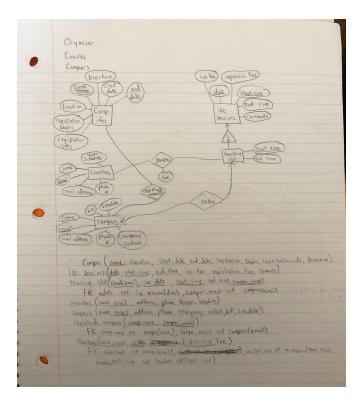
- a) The organizer creates the camp info: camp name, start date, end date, and location. We also need to store a brochure, which is a pdf file about the camp. The organizer will decide when the registration begins and when it ends. The database only need to support one camp for this project.
- b) The organizer decides the registration fee and ice fees per ice session
- c) The organizer creates ice sessions. Each session has a date, start\_time, end time and comments. Each session is general 45 minutes.
- d) The organizer creates teaching slots all sessions. Each session may have multiple slots. Each slot is generally 15 minutes long. We need to record start time, and end time for each slot.
- e) The organizer creates accounts for coaches. The system tracks coach's name, email, mail address, phone number.
- f) The coaches decide how much they charge per 15 minute slot, and pick which time slots they offer lessons.
- g) The campers create their own accounts. The system keeps track of camper's name, email address, mail address, phone number and emergence contact.
- h) The campers register a camp during the registration period, and then pick the

lesson time from coaches. The camper can take lessons with multiple coaches. The lessons are one to one, which means no two campers are allowed to choose the same time slot with the same coach.

- i) The system creates the bill and schedule for each camper.
- j) The system creates the lesson schedule with student name for each coach.

# Your Tasks:

- 1. E-R Model and Relational Schema
  - 1) Construct an E-R diagram representing the conceptual design of the database.
  - 2) Be sure to identify primary keys, relationship, cardinalities, etc.
- 3) Create relational schema from your E-R design, and refine it based on the principles of relational design.



### 2. SQL Schema

Create the tables in Mysql with PK, FK, unique, not null, etc. constraints as appropriate.

create table camps(name varchar(100) primary key, location varchar(100) not null, start\_date date not null, end\_date date not null, registration\_begins date not null, registration\_ends date not null, brochure varchar(100) not null);

Create table ice\_sessions( ice\_date date not null, start\_time time not null, end\_time time not null, ice\_fee double not null, registration\_fee double not null, camp varchar(100) not null, primary key (ice\_date, start\_time, camp), foreign key(camp) references camps(name));

create table campers(name varchar(100) not null, email varchar(100) not null, password varchar(100) not null, address varchar(100) not null, phone varchar(10) not null, emergency\_contact varchar(10) not null, bill double not null, primary key (email));

Create table registered\_campers(camp\_name varchar(100) not null, camper\_email varchar(100) not null, primary key (camp\_name, camper\_email), foreign key (camp\_name) references camps (name), foreign key (camper\_email) references campers (email));

Create table coaches(name varchar(100) not null, email varchar(100) not null, password varchar(100) not null, address varchar(100) not null, phone varchar(10) not null, fee double not null, primary key(email));

Create table teaching\_slot(teaching\_date date not null, ice\_start\_time time not null, slot\_start\_time time not null, end\_time time not null, camp varchar(100) not null, primary key (teaching\_date, ice\_start\_time, slot\_start\_time, camp), foreign key (teaching\_date, ice\_start\_time) references ice\_sessions (ice\_date, start\_time), foreign key(camp) references camps(name));

Create table teaches(coach\_email varchar(100), teaches\_teaching\_date date not null, teaches\_ice\_start\_time time not null, teaches\_slot\_time time not null, fee double, camp varchar(100) not null, primary key(coach\_email, teaches\_teaching\_date, teaches\_ice\_start\_time, teaches\_slot\_time, camp), foreign key(coach\_email) references coaches(email), foreign key (teaches\_teaching\_date, teaches\_ice\_start\_time, teaches\_slot\_time) references teaching\_slot(teaching\_date, ice\_start\_time, slot\_start\_time), foreign key(camp) references camps(name));

Create table takes(camper\_email varchar(100), takes\_teaching\_date date not null, takes\_ice\_start\_time time not null, takes\_slot\_start\_time time not null, camp varchar(100) not null, primary key(camper\_email, takes\_teaching\_date, takes\_ice\_start\_time, takes\_slot\_start\_time, camp), foreign key(camper\_email) references campers(email), foreign key (takes\_teaching\_date, takes\_ice\_start\_time, takes\_slot\_start\_time) references teaching\_slot(teaching\_date, ice\_start\_time, slot\_start\_time), foreign key(camp) references camps(name));

3. You shall design and implement the following functions for the instructor and the students.

# 1) Organizer

i. Create camps: name, date, registration fee, ice fee per session, etc.

Create procedure newCamp(name varchar(30), location varchar(30), start\_date date, end\_date date, registration\_begins date, registration\_ends date, brochure varchar(100))

Begin

Insert into camps values(name, location, start\_date, end\_date, registration\_begins, registration\_ends, brochure);

End //

Grant execute on procedure newCamp to 'cs3425gr'@'%'//

ii. Create sessions and slots

Create procedure newIceSession(ice\_date date, start\_time time, end\_time time, ice\_fee double, registration\_fee double, camp varchar(100))

Begin

Insert into ice\_sessions values(ice\_date, start\_time, end\_time, ice\_fee, registration\_fee, camp);

End //

Grant execute on procedure newIceSession to 'cs3425gr'@'%'//

Create procedure newTeachingSlot(teaching\_date date, ice\_start\_time time, slot\_start\_time time, end\_time time, camp varchar(100))

Begin

Insert into teaching\_slot values(teaching\_date, ice\_start\_time, slot\_start\_time, end\_time, camp);

End //

Grant execute on procedure newTeachingSlot to 'cs3425gr'@'%'//

iii. Create coaches with initial password, information and lesson fee

Create procedure newCoach(name varchar(30), email varchar(30), password varchar(30), address varchar(30), phone varchar(10), fee double)

Begin

Insert into coaches values(name, email, md5(password), address, phone, fee);

End //

Grant execute on procedure newCoach to 'cs3425gr'@'%'//

#### 2) Coaches

- i. Login to the system
- ii. Pick slots to offer lesson
- iii. Display the current lesson schedule
- iv. Display the charges to each student

# 3) Campers

- i. Register and login to the system
- ii. Choose a camp, choose coaches and lesson slots.
- iii. Display the lesson schedule
- iv. Display the bill (registration fee, ice fee, lesson fee per coach)

### What to turn in to canvas:

To speed up the grading, please submit two files.

- 1. FinalReport.pdf. Put all the following contents into a pdf file FinalReport.pdf
  - 1) E-R diagram and relational schema, plus any explanatory notes if you will.
  - 2) SQL schema script. That is the create table statement.
- 3) Do the following three things for each tasks(total 5) below as user cs3425gr, not your account, which means you need to grant permission to cs3425gr appropriately.
  - A.The detailed instruction of how to perform the following task
  - B. The output of each task (if GUI, please attach screen shot),
- C. Show the related data inside the database before and after the operation to proof that it works correctly
- i. Create two coach user Alice and Joe

call newCoach('Alice', 'alice@mail.com', 'password', '1234 Ruby Street', '3334446666', 10); call newCoach('Joe', 'joe@mail.com', 'password', '1883 Emerald Road', '5557772222', 15);

```
mysql> select * from coaches;
Empty set (0.00 sec)
mysql> call newCoach('Alice', 'alice@mail.com', 'password', '1234 Ruby Street', '3334446666', 0);
Query OK, 1 row affected (0.00 sec)
mysql> call newCoach('Joe', 'joe@mail.com', 'password', '1883 Emerald Road', '5557772222', 0);
Query OK, 1 row affected (0.00 sec)
ysql> select * from coaches;
 name
         email
                          password
                                                              address
                                                                                  phone
                                                                                              fee
 Alice
         alice@mail.com
                          5f4dcc3b5aa765d61d8327deb882cf99
                                                              1234 Ruby Street
                                                                                  3334446666
                                                                                                  0
         joe@mail.com
                                                                                  5557772222
                           5f4dcc3b5aa765d61d8327deb882cf99
                                                              1883 Emerald Road
                                                                                                  0
 Joe
```

# ii. Create a new camp Summer18

call newCamp('Summer18', 'Ice Court', '2018-05-07', '2018-5-14', '2018-3-30', '2018-4-30', 'CampBrochure.pdf');

# iii. Create 2 days 12 sessions, 36 slots

```
call newIceSession('2018-05-07', '10:00:00', '10:45:00', 4.5, 10, 'Summer18'); call newIceSession('2018-05-07', '10:45:00', '11:30:00', 4.5, 10, 'Summer18'); call newIceSession('2018-05-07', '11:30:00', '12:15:00', 4.5, 10, 'Summer18'); call newIceSession('2018-05-07', '12:45:00', '13:30:00', 4.5, 10, 'Summer18'); call newIceSession('2018-05-07', '13:30:00', '14:15:00', 4.5, 10, 'Summer18'); call newIceSession('2018-05-07', '14:15:00', '15:00:00', 4.5, 10, 'Summer18');
```

call newIceSession('2018-05-08', '10:00:00', '10:45:00', 4.5, 10, 'Summer18'); call newIceSession('2018-05-08', '10:45:00', '11:30:00', 4.5, 10, 'Summer18'); call newIceSession('2018-05-08', '11:30:00', '12:15:00', 4.5, 10, 'Summer18'); call newIceSession('2018-05-08', '12:45:00', '13:30:00', 4.5, 10, 'Summer18'); call newIceSession('2018-05-08', '13:30:00', '14:15:00', 4.5, 10, 'Summer18');

```
call newTeachingSlot('2018-05-07', '10:00:00', '10:00:00', '10:15:00', 'Summer18');
call newTeachingSlot('2018-05-07', '10:00:00', '10:15:00', '10:30:00', 'Summer18');
call newTeachingSlot('2018-05-07', '10:00:00', '10:30:00', '10:45:00', 'Summer18');
call newTeachingSlot('2018-05-07', '10:45:00', '10:45:00', '11:00:00', 'Summer18');
call newTeachingSlot('2018-05-07', '10:45:00', '11:00:00', '11:15:00', 'Summer18');
call newTeachingSlot('2018-05-07', '10:45:00', '11:15:00', '11:30:00', 'Summer18');
call newTeachingSlot('2018-05-07', '11:30:00', '11:30:00', '11:45:00', 'Summer18');
call newTeachingSlot('2018-05-07', '11:30:00', '11:45:00', '12:00:00', 'Summer18');
call newTeachingSlot('2018-05-07', '11:30:00', '12:00:00', '12:15:00', 'Summer18');
call newTeachingSlot('2018-05-07', '12:45:00', '12:45:00', '13:00:00', 'Summer18');
call newTeachingSlot('2018-05-07', '12:45:00', '13:00:00', '13:15:00', 'Summer18');
call newTeachingSlot('2018-05-07', '12:45:00', '13:15:00', '13:30:00', 'Summer18');
call newTeachingSlot('2018-05-07', '13:30:00', '13:30:00', '13:45:00', 'Summer18');
call newTeachingSlot('2018-05-07', '13:30:00', '13:45:00', '14:00:00', 'Summer18');
call newTeachingSlot('2018-05-07', '13:30:00', '14:00:00', '14:15:00', 'Summer18');
call newTeachingSlot('2018-05-07', '14:15:00', '14:15:00', '14:30:00', 'Summer18');
call newTeachingSlot('2018-05-07', '14:15:00', '14:30:00', '14:45:00', 'Summer18');
call newTeachingSlot('2018-05-07', '14:15:00', '14:45:00', '15:00:00', 'Summer18');
call newTeachingSlot('2018-05-08', '10:00:00', '10:00:00', '10:15:00', 'Summer18');
call newTeachingSlot('2018-05-08', '10:00:00', '10:15:00', '10:30:00', 'Summer18');
call newTeachingSlot('2018-05-08', '10:00:00', '10:30:00', '10:45:00', 'Summer18');
call newTeachingSlot('2018-05-08', '10:45:00', '10:45:00', '11:00:00', 'Summer18');
call newTeachingSlot('2018-05-08', '10:45:00', '11:00:00', '11:15:00', 'Summer18');
call newTeachingSlot('2018-05-08', '10:45:00', '11:15:00', '11:30:00', 'Summer18');
call newTeachingSlot('2018-05-08', '11:30:00', '11:30:00', '11:45:00', 'Summer18');
call newTeachingSlot('2018-05-08', '11:30:00', '11:45:00', '12:00:00', 'Summer18');
```

call newTeachingSlot('2018-05-08', '11:30:00', '12:00:00', '12:15:00', 'Summer18'); call newTeachingSlot('2018-05-08', '12:45:00', '13:00:00', '13:00:00', 'Summer18'); call newTeachingSlot('2018-05-08', '12:45:00', '13:00:00', '13:15:00', 'Summer18'); call newTeachingSlot('2018-05-08', '12:45:00', '13:15:00', '13:30:00', 'Summer18'); call newTeachingSlot('2018-05-08', '13:30:00', '13:30:00', '13:45:00', 'Summer18'); call newTeachingSlot('2018-05-08', '13:30:00', '13:45:00', '14:00:00', 'Summer18'); call newTeachingSlot('2018-05-08', '13:30:00', '14:00:00', '14:15:00', 'Summer18'); call newTeachingSlot('2018-05-08', '14:15:00', '14:15:00', '14:30:00', 'Summer18'); call newTeachingSlot('2018-05-08', '14:15:00', '14:30:00', '14:45:00', 'Summer18'); call newTeachingSlot('2018-05-08', '14:15:00', '14:30:00', '14:45:00', 'Summer18'); call newTeachingSlot('2018-05-08', '14:15:00', '14:45:00', '15:00:00', 'Summer18');

```
mysql> select * from ice sessions;
Empty set (0.00 sec)
mysql> select * from teaching_slot;
Empty set (0.00 sec)
mysql> call newIceSession('2018-05-07', '10:00:00', '10:45:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.02 sec)
mysql> call newIceSession('2018-05-07', '10:45:00', '11:30:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.01 sec)
mysql> call newIceSession('2018-05-07', '11:30:00', '12:15:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-07', '12:45:00', '13:30:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-07', '13:30:00', '14:15:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-07', '14:15:00', '15:00:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql>
mysql> call newIceSession('2018-05-08', '10:00:00', '10:45:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-08', '10:45:00', '11:30:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-08', '11:30:00', '12:15:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-08', '12:45:00', '13:30:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-08', '13:30:00', '14:15:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
```

```
Query OK, 1 row affected (0.00 sec)
mysql>
nysql> call newIceSession('2018-05-08', '10:00:00', '10:45:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-08', '10:45:00', '11:30:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-08', '11:30:00', '12:15:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-08', '12:45:00', '13:30:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-08', '13:30:00', '14:15:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newIceSession('2018-05-08', '14:15:00', '15:00:00', 4.5, 10, 'Summer18');
Query OK, 1 row affected (0.01 sec)
mysql> select * from ice_sessions;
 ice_date | start_time | end_time | ice_fee | registration_fee | camp
 2018-05-07 | 10:00:00
2018-05-07 | 10:45:00
                         10:45:00
                                                             10 | Summer18
                                         4.5
                         11:30:00
                                         4.5 I
                                                             10 | Summer18
 2018-05-07 | 11:30:00
                         12:15:00
                                         4.5
                                                             10 | Summer18
                         13:30:00
                                         4.5
                                                             10 | Summer18
 2018-05-07 | 12:45:00
                                         4.5
                                                             10 | Summer18
 2018-05-07 | 13:30:00
                         14:15:00
                                         4.5
 2018-05-07 | 14:15:00
                         15:00:00
                                                             10 | Summer18
                                         4.5
                                                             10 | Summer18
 2018-05-08 | 10:00:00
                         10:45:00
                                         4.5
                                                             10 | Summer18
 2018-05-08 | 10:45:00
                         11:30:00
                                         4.5
 2018-05-08 | 11:30:00
                         12:15:00
                                                             10 | Summer18
 2018-05-08 | 12:45:00
                                         4.5
                                                             10 | Summer18
                         13:30:00
 2018-05-08 | 13:30:00
                         14:15:00
                                         4.5
                                                             10 | Summer18
 2018-05-08 | 14:15:00
                         15:00:00
                                          4.5
                                                             10 | Summer18
12 rows in set (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '10:00:00', '10:00:00', '10:15:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07' ,'10:00:00', '10:15:00', '10:30:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
```

nysql> call newIceSession('2018-05-07', '14:15:00', '15:00:00', 4.5, 10, 'Summer18');

```
mysql> call newTeachingSlot('2018-05-07', '10:00:00', '10:30:00', '10:45:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '10:45:00', '10:45:00', '11:00:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '10:45:00', '11:00:00', '11:15:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '10:45:00', '11:15:00', '11:30:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '11:30:00', '11:30:00', '11:45:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '11:30:00', '11:45:00', '12:00:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '11:30:00', '12:00:00', '12:15:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '12:45:00', '12:45:00', '13:00:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '12:45:00', '13:00:00', '13:15:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '12:45:00', '13:15:00', '13:30:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '13:30:00', '13:30:00', '13:45:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '13:30:00', '13:45:00', '14:00:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '13:30:00', '14:00:00', '14:15:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '14:15:00', '14:15:00', '14:30:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-07', '14:15:00', '14:30:00', '14:45:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> call newTeachingSlot('2018-05-08', '10:00:00', '10:00:00', '10:15:00', 'Summer18');
Ouery OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '10:00:00', '10:15:00', '10:30:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '10:00:00', '10:30:00', '10:45:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '10:45:00', '10:45:00', '11:00:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '10:45:00', '11:00:00', '11:15:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '10:45:00', '11:15:00', '11:30:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '11:30:00', '11:30:00', '11:45:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '11:30:00', '11:45:00', '12:00:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '11:30:00', '12:00:00', '12:15:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '12:45:00', '12:45:00', '13:00:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '12:45:00', '13:00:00', '13:15:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '12:45:00', '13:15:00', '13:30:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '13:30:00', '13:30:00', '13:45:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '13:30:00', '13:45:00', '14:00:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '13:30:00', '14:00:00', '14:15:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
mysql> call newTeachingSlot('2018-05-08', '14:15:00', '14:15:00', '14:30:00', 'Summer18');
Query OK, 1 row affected (0.00 sec)
```

mysql> select * † +	from teaching_slot	t; 	+	+
teaching_date	ice_start_time	slot_start_time	end_time	camp +
2018-05-07	10:00:00	10:00:00	10:15:00	Summer18
2018-05-07	10:00:00	10:15:00	10:30:00	Summer18
2018-05-07	10:00:00	10:30:00	10:45:00	Summer18
2018-05-07	10:45:00	10:45:00	11:00:00	Summer18
2018-05-07	10:45:00	11:00:00	11:15:00	Summer18
2018-05-07	10:45:00	11:15:00	11:30:00	Summer18
2018-05-07	11:30:00	11:30:00	11:45:00	Summer18
2018-05-07	11:30:00	11:45:00	12:00:00	Summer18
2018-05-07	11:30:00	12:00:00	12:15:00	Summer18
2018-05-07	12:45:00	12:45:00	13:00:00	Summer18
2018-05-07	12:45:00	13:00:00	13:15:00	Summer18
2018-05-07	12:45:00	13:15:00	13:30:00	Summer18
2018-05-07	13:30:00	13:30:00	13:45:00	Summer18
2018-05-07	13:30:00	13:45:00	14:00:00	Summer18
2018-05-07	13:30:00	14:00:00	14:15:00	Summer18
2018-05-07	14:15:00	14:15:00	14:30:00	Summer18
2018-05-07	14:15:00	14:30:00	14:45:00	Summer18
2018-05-07	14:15:00	14:45:00	15:00:00	Summer18
2018-05-08	10:00:00	10:00:00	10:15:00	Summer18
2018-05-08	10:00:00	10:15:00	10:30:00	Summer18
2018-05-08	10:00:00	10:30:00	10:45:00	Summer18
2018-05-08	10:45:00	10:45:00	11:00:00	Summer18
2018-05-08	10:45:00	11:00:00	11:15:00	Summer18
2018-05-08	10:45:00	11:15:00	11:30:00	Summer18
2018-05-08	11:30:00	11:30:00	11:45:00	Summer18
2018-05-08	11:30:00	11:45:00	12:00:00	Summer18
2018-05-08	11:30:00	12:00:00	12:15:00	Summer18
2018-05-08	12:45:00	12:45:00	13:00:00	Summer18
2018-05-08	12:45:00	13:00:00	13:15:00	Summer18
2018-05-08	12:45:00	13:15:00	13:30:00	Summer18
2018-05-08	13:30:00	13:30:00	13:45:00	Summer18
2018-05-08	13:30:00	13:45:00	14:00:00	Summer18
2018-05-08	13:30:00	14:00:00	14:15:00	Summer18
2018-05-08	14:15:00	14:15:00	14:30:00	Summer18
2018-05-08	14:15:00	14:30:00	14:45:00	Summer18
2018-05-08	14:15:00	14:45:00	15:00:00	Summer18
+	+			

36 rows in set (0.00 sec)

iv. Have Alice login to the system with password



v. Take the Summer18 Camp, show the ice slots and decide if he/she will offer lesson in that slot.

#### Summer18 schedule Back to Homepage Open teaching slots for Summer18 Date Start Time End Time Teach 2018-05-07 10:00:00 10:15:00 teach 2018-05-07 10:15:00 10:30:00 2018-05-07 10:30:00 10:45:00 2018-05-07 10:45:00 11:00:00 2018-05-07 11:00:00 11:15:00 teach 2018-05-07 11:15:00 11:30:00 2018-05-07 11:30:00 11:45:00 2018-05-07 11:45:00 12:00:00 teach 2018-05-07 12:00:00 12:15:00 2018-05-07 12:45:00 13:00:00 2018-05-07 13:00:00 13:15:00 2018-05-07 13:15:00 13:30:00 2018-05-07 13:30:00 13:45:00 2018-05-07 13:45:00 2018-05-07 14:00:00 14:15:00 teach 2018-05-07 14:15:00 14:30:00 2018-05-07 14:30:00 14:45:00 2018-05-07 14:45:00 15:00:00 teach 2018-05-08 10:00:00 10:15:00 2018-05-08 10:15:00 10:30:00 teach 2018-05-08 10:30:00 10:45:00 teach

vi. Do the same for coach Joe

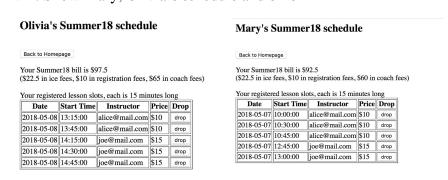
2018-05-08 10:45:00 11:00:00 teach

vii. Have two campers Mary and Olivia to register and choose 5 lessons from Alice and Joe

Summer18 schedule

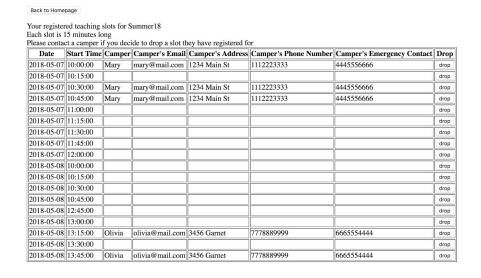
Registration Form	Registration Forn		epage ng slots for S	ummer18	
registration rorm		Date	Start Time	End Time	Teach
	email:	2018-05-07		10:15:00	teach
email:	olivia@mail.com	2018-05-07		10:30:00	teach
mary@mail.com	password:	2018-05-07		11:00:00	teach
	pussword.	2018-05-07	11:00:00	11:15:00	teach
password:	•••••	2018-05-07	11:15:00	11:30:00	teach
•••••	name:	2018-05-07		11:45:00	teach
name:	Olivia	2018-05-07		12:00:00	teach
name.	Olivia	2018-05-07		12:15:00	teach
Mary	address:	2018-05-07		13:00:00	teach
address:	3456 Garnet	2018-05-07		13:15:00	teach
1234 Main St	phone number:	2018-05-07		13:45:00	teach
MANAGE SEC. AND DESCRIPTION OF THE PROPERTY OF	phone number.	2018-05-07	13:45:00	14:00:00	teach
phone number:	7778889999	2018-05-07	14:00:00	14:15:00	teach
1112223333	emergency contact:	2018-05-07	14:15:00	14:30:00	teach
emergency contact:		2018-05-07	14:30:00	14:45:00	teach
emergency contact.	6665554444	2018-05-07	14:45:00	15:00:00	teach
4445556666	Submit	2018-05-08		10:15:00	teach
Submit	Subilit	2018-05-08		10:30:00	teach
Submit		2018-05-08		10:45:00	teach

viii. Show Mary, Olivia's schedule and bills



ix. Show Alice and Joe's lesson schedule and charges to each student

#### Alice's Summer18 schedule



### Joe's Summer18 schedule

Back to Homepage

Your registered teaching slots for Summer18
Each slot is 15 minutes long
Please contact a camper if you decide to drop a slot they have registered for

I reade come	rease contact a camper in you decide to drop a sict dieg nave registered for									
Date	Start Time	Camper	Camper's Email	Camper's Address	Camper's Phone Number	Camper's Emergency Contact	Drop			
2018-05-07	12:45:00	Mary	mary@mail.com	1234 Main St	1112223333	4445556666	drop			
2018-05-07	13:00:00	Mary	mary@mail.com	1234 Main St	1112223333	4445556666	drop			
2018-05-07	13:15:00						drop			
2018-05-07	13:30:00						drop			
2018-05-07	13:45:00						drop			
2018-05-07	14:00:00						drop			
2018-05-07	14:15:00						drop			
2018-05-07	14:30:00						drop			
2018-05-07	14:45:00						drop			
2018-05-08	11:00:00						drop			
2018-05-08	11:15:00						drop			
2018-05-08	11:30:00						drop			
2018-05-08	11:45:00						drop			
2018-05-08	12:00:00						drop			
2018-05-08	14:00:00						drop			
2018-05-08	14:15:00	Olivia	olivia@mail.com	3456 Garnet	7778889999	6665554444	drop			
2018-05-08	14:30:00	Olivia	olivia@mail.com	3456 Garnet	7778889999	6665554444	drop			
2018-05-08	14:45:00	Olivia	olivia@mail.com	3456 Garnet	7778889999	6665554444	drop			