CMP SCI 4012/5012 – Project 1

Creating a Course Scheduling Program:

User Interface

- Design of the UI is up to you. Basic requirement is it supports all the required features and is mobile responsive.

Features

- There are 2 main pages to this experience
  - Course Schedule Page
    - This is the page where the user can (in some way) input his course schedule.
    - There needs to be a calendar display to show the current schedule and it updated as the user adds courses to this schedule.
    - Once user input is finished there needs to be a way to submit the schedule to the server.
  - Confirmation Page
    - This is the page where the finalized schedule is shown and confirmed for the user.

Database

- Exact database implementation is up to each individual. Since we have not covered Hibernate yet, please use JDBC for a database connection to MySQL. I do have some high level suggestions for the database.
- Create MySQL database called “enterprise”
- Create STUDENT table
  - STUDENT_ID column, number
  - FIRSTNAME column, varchar(whatever size you wish)
  - LASTNAME column, varchar(whatever size you wish)
- Create COURSE table
  - COURSE_ID column, auto increment
  - COURSENAME column, varchar(whatever size you wish)
  - COURSENUMBER column, varchar(whatever size you wish)
  - COURSEDAYS column, varchar(whatever size you wish)
  - COURSETIMES column, varchar(whatever size you wish)
- Create SCHEDULE table
  - SCHEDULE_ID column, auto increment
  - SCHEDULENAME column, varchar(whatever size you wish)
  - STUDENT_ID column, foreign key to the STUDENT table
  - COURSE_ID column, foreign key to the COURSE table

JDBC Information

<!-- https://mvnrepository.com/artifact/mysql/mysql-connector-java -->

<dependency>

  <groupId>mysql</groupId>

  <artifactId>mysql-connector-java</artifactId>

  <version>5.1.6</version>

</dependency>

https://www.tutorialspoint.com/jdbc/jdbc-quick-guide.htm

```
/**
 * @see Servlet#init(ServletConfig)
 */
public void init(ServletConfig config) throws
ServletException {
   // Define connection to database
   try {
      Class.forName("com.mysql.jdbc.Driver");
   } catch (ClassNotFoundException e) {
      // TODO Auto-generated catch block
      e.printStackTrace();
   }
   try {
      this.connection = DriverManager.getConnection(
            "jdbc:mysql://localhost:3306/enterprise",
"root", "");
   } catch (SQLException e) {
      // TODO Auto-generated catch block
      e.printStackTrace();
   }
   super.init(config);
}
```