# **COMP 3311: Database Management Systems**

# **Task 3: Information System Implementation**

Assigned: November 11, 2020 <u>Value</u>: 10% of course grade

<u>Due</u>: 23:00 (11:00 p.m.), December 5, 2020

In this task you are to submit a C# code file that completes an information system for the final year project management system.

## IMPORTANT REMINDER

**This is an individual task.** The C# code file that you submit should be *your own work*. While you may discuss general task issues with other students, you are not allowed to collaborate with others to come up with a common solution, to share solutions or to copy someone else's solution. Copying, sharing and collaborating will be severely penalized. All those involved in a copying/sharing/collaborating case will automatically receive a grade of 0 and may be reported for further disciplinary action.

### INFORMATION SYSTEM IMPLEMENTATION

The information system implementation for the requirements listed below are provided to you as a Visual Studio website. Your task is to write the SQL statements that will populate the web pages with the required data from the Oracle database for the final year project management system.

#### For the FYP Coordinator

- 1. Assign readers to FYPs.
- 2. Display the readers assigned to FYPs.

# For faculty

- 1. Create an FYP.
- 2. Display the FYPs of a faculty.
- 3. Edit FYP information.
- 4. Assign groups to FYPs.
- 5. Assign grades to students.

### For students

- 1. Display FYPs for which a group can indicate an interest.
- 2. Display the FYPs for which a group has indicated an interest.
- 3. Create and manage a project group.
- 4. View a student's grades.

# HOW TO GET AND USE THE WEBSITE

Download the folder Task3.zip from the Task 3 Setup entry of the Lab Schedule course web page and unzip it. Inside the Task3 folder you will find two items.

- 1. The sql script file Task3DB.sql, which contains the schema and a sample database to be used for constructing and testing your Task 3 SQL statements. You should execute this file in SQL Developer.
- 2. The **Visual Studio** website FYPMSWebsite, which contains the web forms and the FYPMSDBAccess.cs C# code file containing 40 TODOs.

To use the website with your Oracle account you need to do the following after opening the website in Visual Studio.

- 1. From the **Solution Explorer**, open the Web.config file.
- 2. Find the line <add name="FYPMSConnectionString ...".

3. On the above line, find

 $ID = comp3311stuXXX; Password = XXXXXXXX\\ and replace$ 

comp3311stuXXX with your Oracle user name XXXXXXXX with your Oracle password

4. Save and close the Web.config file and run the website.

#### **WHAT TO SUBMIT**

Submit the FYPMSDBAccess.cs file inside the App\_Code folder containing your SQL statements that populate the web pages with the required data from the Oracle database. Be sure that you have included your name and student number in the comment at the top of the file.

**Note:** There will be a 5% marks deduction if your submission is missing your name and student number!

#### HOW TO SUBMIT YOUR FYPMSDBACCESS.CS FILE

By 11:00 p.m. on Saturday, December 5, upload your FYPMSDBAccess.cs file to Canvas by clicking on *Task 3* in the Assignments section of Canvas, and then selecting the **Submit Assignment** button.

#### **GRADING**

Your FYPMSDBAccess.cs file will be tested in Visual Studio using the FYPMSWebsite.

\*\*\* Your SQL statements will only be evaluated on a pass/fail basis. \*\*\*

That is, for each TODO, your SQL statement(s) either returns the correct result or performs the correct action via the website or it fails to do so. Your SQL statements <u>will not</u> be evaluated as to "how close" they are to a correct solution. Therefore, you need to ensure that you have tested your SQL statements using the website and not only in SQL Developer.

### CLARIFICATION AND AMENDMENT OF PROJECT/TASK REQUIREMENTS

You can ask clarification questions regarding the requirements for Task 3. All questions should be submitted to the teaching team by email at 3311rep@cse.ust.hk. The submitted questions and their replies will be posted on the Project Q&A course web page for Task 3, which can be accessed from the Task Q&A section of the Project Information course web page. You should check this web page on a regular basis for further clarification and amendment of project requirements. Any requirements added or amended in a Project Q&A web page will become part of the project requirements.