## **Project Task 4: Milestone 2(Application Implementation)**

Due: Friday Dec 4<sup>th</sup>, 2020 @ 11:59 PM

## **Assignment purpose:**

The purpose of this assignment is to develop a working relational database application using Java for a real-world application. In this project, you will be able to learn database design methodology for relational database and create a database which can store data efficiency and retrieve information effectively.

## **Skills:**

- Simulate how the traditional applications using Java can access and use data from a database
- Practice how to use JDBC API to connect to a database
- Create a complete Java application that can access MYSQL Database and retrieve some queries
- Practice OO skill in implementing a large project with multiple tasks
- Build presentation skills with a clear explanation and demonstration of your work
- Experience working as part of a team

## **Introduction:**

By now you should have your Application Design and some data samples to use for testing. For milestone 2 of the project, you as a team are requested to implement a Java application for the chosen project idea. You will need to connect your database with Java and create a Java application.

Please note: Java GUI is not required, Console is sufficient.

#### Tasks:

For this Assignment, you need to address all the items listed below.

#### 1. Item 1: Java Application Implementation

Please check Canvas → Modules → Project Java Application Teams Tasks. For the complete scenarios and the query sets that are required by your team.

#### 2. Item 2: Video presentation (10-15 min maximum

• Record a video and upload it to YouTube to demonstrate your project implementation tasks as a team. The video recording has to be completed by all the team members. Please make sure everyone is presenting their tasks.

#### 3. Item 3: Self reflection

Every team member should fill out and submit their self-reflection progress report template.

### What to submit

# • Part 1: Only one submission per team for the following:

- 1. The Java source code for your application.
- 2. The URL for the YouTube video that demonstrates your project execution and code implementation. Please record the video as a team and make sure everyone is presenting.

# • Part 2: Individual submission under self-reflection project task 4 submission on Canvas:

1. Submit the filled self-reflection progress report template by every team member to reflect on the individual tasks and the teamwork experience during this task as a team.

# **Teamwork resources and recommendations:**

- 1. Choose a team leader to be responsible with submissions and team management
- 2. Choose the most suitable communication method (e.g. email, chat, Teams, Discord, Canvas)
- 3. Choose a document sharing software such as Google drive, Canvas, GitHub etc.
- 4. Choose a platform for code sharing and code merge.
- 5. Arrange a regular meeting time for team discussion and progress check-ups
- 6. Consider using some of the team management software. There are many online software tools that can be used to help teamwork. Tools are useful to allow remote team communication. Check some of them below
  - a. Trello
  - b. Asana
  - c. Zenhub

# Grading

To receive a full grade on your submission, you **must** submit all required files for task 1 and 2 to canvas, and the individual submission for task 3. If the individual member has no progress report refection submission, it will result in a **zero grade** for the grading criteria. Individual grading will be based off the rubric below.

#### Here is the Rubric I will use:

Project Milestone 2- evaluation rubric		<b>1</b>
Criteria	Ratings	Pts
Demo- video presentation  The presentation should demonstrate all the requested tasks and each individual is presenting his/her tasks	This area will be used by the	50
The video recording shows a demo run for each scenario each team member speaks to explain his/her or own code contribution  Video length is no longer than 15 min per team	assessor to leave comments related to this criterion.	50 pts
Implementation/Complete features	This are all the second based or	
All the requested queries and the application requested details have been completed and function correctly	This area will be used by the assessor to leave comments related to this criterion.	70 pts
Code Quality		
The Java application shows a good use of OO structure and code documentation	This area will be used by the	
The project is organized in multiple classes and not all written in one java class.	assessor to leave comments related to this criterion.	50 pts
Appropriate documentation is in place Documentation for each class and main methods in each class		
Individual Progress Report Reflection		
1. The progress report is filled and submitted by the individual team member.		
2. The progress report indicates the indviduals tasks and reflects on the workload between the team members and the communication method for the team during the task period.	This area will be used by the assessor to leave comments related to this criterion.	15 pts
3.The progress report addresses the individual contribution to team communication and final tasks		
Individual grade: Contribution to team communication and final tasks		
$1. \   \text{The progress report for each individual team member shows how they communicate openly and treat one another with respect.}$		
2. Team member time management: The team member contribution reflects that they are self-motivated to complete work assignments and share his/her work and response time gives ample space for peer discussion, follow-ups, and retorts.  Member feels responsible for helping lead.	This area will be used by the assessor to leave comments related to this criterion.	15 pts
3. All tasks have been completed with high quality and submitted on time.		
	Total Poi	ints: 200