**Course Project**

**Project Overview:**

In this course project, you will have the opportunity to apply your Java programming skills to develop a software system that adheres to the Object-Oriented Programming (OOP) paradigm. This project can be undertaken individually or in teams, with the understanding that the size of your team will affect the workload and presentation time. Team members must collaboratively determine individual workloads, which will impact the distribution of overall marks. Therefore, it is crucial to carefully select your team members and actively contribute to the project.

**Project Presentation Guidelines:**

Your project presentation should encompass the following key elements:

* System Requirement Analysis: You must begin by conducting a thorough analysis of the system requirements that define the scope, functionalities, and features of your software.
* Uniqueness: Explain why your system is unique or innovative compared to existing solutions or similar projects. Highlight any novel concepts, approaches, or technologies.
* Introduction to Functionality: Provide an introduction to the core functionality of your software system. Describe what it does, how it works, and what problems it solves.
* Demonstration: Present a live demonstration of your software system. Showcase its key features and functionalities to give the audience a clear understanding of its capabilities.
* Implementation Details: Provide an overview of the code-level implementation of your project. Explain the key Java programming techniques and concepts you utilized.
* OOP Principles: Discuss the importance of OOP in your project and how OOP principles were applied. Explain how OOP helps in designing and maintaining your software.

**Evaluation:**

Your project will be evaluated based on the following criteria:

* Innovation: The uniqueness and innovation demonstrated in your project.
* Design: The quality of your design to fulfill the need of the project.
* OOP Understanding: The appropriate use of OOP in the project.
* Code Quality: The quality and efficiency of your Java code.
* Presentation Skills: The clarity, organization, and effectiveness of your presentation.

**Project Presentation Options:**

* Option 1: Recording Presentation: Submit an 8-minute recording (multiplied by the number of team members) video presentation recording, presentation slides, and the source code of your project.
* Option 2: Offline Presentation: Physically present your project in an 8-minute (multiplied by the number of team members) presentation. Submit a project report document (less than 20 pages), presentation slides, and the source code of your project.

**Important Dates:**

* Deadline for choosing team members and presentation options: **5PM, January 30th**

Please register your team information on following link:

<https://docs.google.com/spreadsheets/d/1jzXF85NV9MT3X05ocNy2uw6fFfV2TXhSYgsl9fqYW7A>

* Deadline for submitting your project files: **5PM, April 10th**

Submission should be made on moodle