Software Engineering

Term Project Description

Overview
During the module of this semester, students will undertake a term project in teams of 2 or 3 students. The term project will consist of proposing a topic for investigation, writing a proposal, writing requirement specification, developing UML diagrams for requirements and design, submitting the documents for requirement specification and design, and giving a presentation during class.

Aim and Objectives of Term Project
The aim of term project is to help students get a feel for real-world software development. The objectives of term project are as follows:
- Apply problem definition techniques
    - Learn to elicit and specify requirements
    - Learn to use object-oriented analysis techniques
- Create solution systematically
    - Learn to create design models
- Learn teamwork
    - Task distribution, communication and coordination
    - Learn to break down tasks and define responsibilities

Team Formation
Before the 5th week, form a team of two or three students to collaborate on the term project. A team of three students is strongly encouraged.
One member of the team must e-mail the instructor with the names of the team members. (Optionally, include a team name.) Project presentations will be scheduled in the reverse order of team formation; that is, the first team to form will be the last team to present (and the earlier you form your team, the longer you will have to prepare your presentation).
Students that fail to form a team will be randomly formed into teams.

Proposal
By the 5th week, propose a topic for investigation.
A team should select a topic by oneself. The topic should be a problem to develop an information system.
In the proposal, the followings should be included:
- the necessity of the term project
- the goal of the term project
- problem description on your topic
- main functions of the information system
- work breakdown structure for performing the term project
- schedule for the term project
- the role of each team member

Write the proposal for your project.
Submit the proposal, in PDF format to the following email address by the due date: jihjim@gmail.com .

Interim Report
By the 7th week, complete the interim report for your project and submit it to the instructor.

In the interim report, the followings must be included:
- problem description
- functional requirement specification
- nonfunctional requirement specification
- domain specification
- scenarios
- UML for requirement analysis

Final Report
By the 14th week, complete the final report for your project and submit it to the instructor.
Throughout the module, your team should make steady progress on your project. You will describe requirements of your topic in detail and develop UML models for developing the information system which is suggested by your team.
You should complete requirement specification and design specification using UML and IEEE standard.
The UML diagrams should be drawn using the STARUML which is a freeware CASE tool.
The report should include the following information:
- A title
- Your names, e-mail addresses, and affiliations
- The role of each member
- An abstract (a one or two paragraph summary of the report)
- A description of the problem, including background and related work
- Requirement specification
- Design specification
- Reference

The report must be typed, single-spaced, 12pt font, 1in margins, and between 50 and 150 pages in length (including figures, tables, and so on). The report must be in clear English prose, utilizing proper spelling and grammar.
Submit the report, in PDF format, to the following email address by the due date: jihjim@gmail.com .

Presentation
During the last week, give a presentation. The presentation should be a brief synopsis of the information in the report. The presentation should be prepared electronically using PowerPoint.
Each team should expect approximately 15 minutes for the presentation.
Each team member should present for approximately the same amount of time.
Submit the presentation materials to the following email address by the due date: jihjim@gmail.com .

Term Project Grading Scheme
The percentage of the term project is 40% for module assessment.
Grades for the project will be assigned based on the final report(30%) and presentation(10%).
Final Report will be evaluated in terms of the following criteria.
- Level of project complexity (10%)
- Level of project originality (10%)
- Level of quality of the final report (10%)

All members of a team will receive the same grade for all components of the project.

Penalty
There are some penalties if students submit the final report after the due date. The penalty is 1 point per day.

Presentation Grading Scheme

Presentation accounts for 25% of your term project grade. Presentation will be evaluated in terms of the following criteria.

- Overall Impression (2%)
- Fluency and Correctness (2%)
- Confidence (1%)
- Presentation material (2%)
- Length of presentation (1%)
- Q & A (1%)

Important Dates

The 5th week: Project team formation due and proposal due
The 7th week: Project interim report due
The 14th week: Project final report and presentation materials due, and Project presentations