CS5551 Advanced Software Engineering

Project Plan

Due Date: Feb. 11 (W) 2014, Midnight

The class project is to be based on *Agile* development techniques. In the first stage, each group has proposed a rough idea of the project they will work on this semester. This will be refined throughout the semester. For each increment hereafter, each group will deliver a set of outcomes related to their project.

The tentative schedule for project development is as follows:

- Proposal: January 28 (W)
- First Increment: Feb. 25 (W)
- Second Increment: March 18 (W)
- Third Increment: April 8 (W)
- Fourth Increment: April 29 (W)
- Project (Poster) Presentation: May 7 (Th)
- Final Project Report: May 8 (F)

Each project group (PGroup) submits their project proposal to the turnitin of the blackboard system before the submission deadline. Note that plagiarism is strongly prohibited. Check Originality Report for your submission.

This project guideline includes two parts:

- 1) Revised Project Proposal: Each group revise the proposal narrative following this guideline. This guideline provides the basic proposal sections.
- 2) Project plan. The groups should feel free to include additional sections as appropriate to their topic. The project package including proposal narrative and plan should be posted to the blackboard and also be posted to your project Info Google Sheet before the deadline.

Some part of the specification should be done by using a UML tool (e.g., Visio) and the work plan and report should be generated/published project management tools such as (Scrumdo, GitHub). Each group must submit their project description to the blackboard system before the submission deadline.

- I. Introduction
- II. Project Goal and Objectives (revised)
 - Overall goal
 - Specific objectives (problem statement)
 - Significance
- III. Project Background and Related Work

Work done by others (include the URLs in Bibliography): elaborate the similarities and differences between what you propose and each of the related project

- IV. Proposed System
 - 1) Requirement Specification
 - Functional, Non-functional, Technical/business Requirements (prioritized)
 - Business Process/Workflow analysis (UML Activity Diagram)
 - Technological and Architectural requirements
 - 2) Framework Specification: Build an overall system model

- Assumptions and Principles
- Methodologies and Algorithms (if any)
- Design Pattern (if any)
- System Architecture Diagram
- 3) System Specification: Identify Primary Services
 - Existing Services: Name, Description, URL
 - New Services to be built:

For each service, specify the followings:

- Class diagram
- Sequence diagram
- Service Specification
 - Operational description
 - Input/output for services
 - Constraints/exceptions
 - Service flow/alternative flow
 - o Priorities (degree of importance, difficulty, etc.)
- Design of Mobile Client
 - o Features, Styles, Technologies
- V. Plan by Services (using ScrumDo) include screenshots to your report
 - a. Schedule for the four different increments (for each increment, do the following tasks)
 - o Stories (features): Scenario & Use case specification template
 - o Design by service (detailed service design, unit test design)
 - o Build by service (implementation and testing)
 - b. Project Timelines, Members, Task Responsibility
- VI. Risk management
 - Technological and Architectural Requirements
- VII. Posting the class google site:

 $\frac{https://docs.google.com/spreadsheets/d/1QtbhKeCep4SvzP5gCYs1iGPyKQ-xhooCoG-qLR5uYl8/edit\#gid=2115159985}{}$

Post Project Plan document to GitHub and post its URL to the google Spreadsheet (above)

VIII. Bibliography

Late Policy

No late submission will be accepted. Due to business trip or unforeseen medical, legal, family or other emergency, due date extension is warranted. But a valid formal document is required.