# **CS5551 Advanced Software Engineering**

# **Second Increment**

Due Date: Oct. 14 (F) 2016, 11:59PM

The class project is to be based on *Agile* development techniques. In the first stage, each project group has proposed a rough idea of the project they will work on this semester. This can 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: Sep. 2(F)
- Plan & First Increment: Sep. 23 (F)
- Second Increment: Oct. 14 (F) This Deadline
- Third Increment: Nov. 4 (F)
- Fourth Increment: Dec. 2 (F)
- Project Video: Dec. 5 (M)
- Project Presentation/Demo: Dec. 6 (T) & Dec. 8(Th)
- Project Submission: Dec. 9 (F)

Each project group submits their project second increment report to the turnitin of the blackboard system before the submission deadline. Note that plagiarism is strongly prohibited. Check Originality Report for your submission.

Some part of the specification should be done by using some tools (e.g., Visio, Adobe Brackets, Android Studio) and the work plan and report should be generated/published project management tools. Each group must submit their project description to the blackboard system before the submission deadline.

## **Second Increment Report**

All the features we have developed for this increment, write a documentation describing the design, implementation, testing, and deployment (including the precise descriptions and screenshots).

- Introduction
- Objectives
- Features
- Existing Services/API
  - o Report all existing services, widget, API or source code you used in your project.
- Detail Design of Features (using tools)
  - WireFrames and Mockups
  - o Architecture diagram/Sequence diagram/Class diagram/Activity diagram
  - Write User Stories /Use Case/Service description
- Testing
  - Unit testing
  - o Performance testing
- Implementation (using Android/Angular.js/Bootstrap)
  - o Mobile Client Implementation: Implementation of Mobile Apps
  - o Server Implementation:
    - Database

Service composition

#### Deployment

- o Deploy your mobile app to smartphones and describe it including the screenshots
- o Deploy your web application to the Web site
- Post your second increment report and source code to your GitHub site and include the URL to the report.
- o Submit your report to the blackboard project second increment submission site.
- o Post your report to the Github Wiki
- Submit the google form for your 2<sup>nd</sup> increment project through https://goo.gl/forms/7LBf0UyTtG98cdMH3
- **Project Management**: describe it in terms of the second increment (with ZenHub)
  - 1) Project Timelines, Members, Task Responsibility
    - Work completed:
      - o Description
        - Stories (Issues): Scenario & Use case specification
        - Service Design (detailed service design, unit test design)
        - Service Implementation (implementation and testing)
      - o Responsibility (Task, Person)
      - o Time taken (#hours)
      - o Contributions (members/percentage)
    - Work to be completed
      - o Description
      - o Responsibility (Task, Person)
      - o Time to be taken (estimated #hours)
  - 2) Issues/Concerns
  - 3) Burndown Chart

### • Bibliography

#### **Late Policy**

The late policy on assignments is 10% off the grade if late within one day, 20% off the grade for two days late, 30% off the grade for three days late. **Assignments that are submitted more than three days late will no longer 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.