CS4366: Senior Capstone Project
Fall 2020

Project #3: Software Design Specification (SDS)

- Release date: Sept 23rd, 2020 (Wednesday)
- Due dates: **Oct 6th, 2020 (Tuesday) before 5:00 PM (FIRM DEADLINE)**
  - **Project report** [20 pts]
  - **Presentation slide and recorded presentation** [20 pts]
    - Submit report (e.g., Word), presentation slide (e.g., PowerPoint), and recorded presentation (e.g., mp4) files (per team) through the Blackboard
    - The file names should include project number and team name, "proj#_project_name". For example, proj3_MyProj.doc, proj3_MyProj.ppt, and proj3_MyProj.mp4
- Total 40 pts
- Type your all team members' FULL name in the cover pages of project report and presentation slide.

Description

(i) First, analyze your system and decompose it into a set of modules (objects or subsystems). Use UML diagrams to represent the modules and their relationships. In the UML diagrams, in order to better understand your system, provide (a) class diagram(s), (b) use case diagram(s), and (c) sequence diagram(s). (ii) Second, explain the class/object/modules for each diagram. (iii) Finally, think about how your system's interface might look. Design an initial version of user interface using any tool or even your hand-drawing would be o.k. – low fidelity prototype. Include several screen shots in your report with functionalities.

The overall project schedule is given below, and it may change anytime.

- Project #1: Project Plan (PP)
- Project #2: Software Requirements Specification (SRS)
- **Project #3: Software Design Specification (SDS)**
- Project #4: Implementation and Partial Demo (IMP)
- Project #5: Validation and Full Demo (VD)

Deliverables

In this project, you should

- Submit a report (letter size; 11 font size; single-space) including,
  - Project description (1 or 2 paragraphs) – remind me
  - System analysis and decomposition
    - UML diagrams – class, use case, and sequence diagrams
  - Low-fidelity prototype
  - Implementation plan (at least half page) including testbed, programming language, any device, etc.
- Prepare a **15 minutes** presentation slide accordingly, and present your system and receive feedback from instructor and other classmates during the class, starting from **Oct 19th, Monday**. The presentation schedule will be announced later.

Grading policy

Your project report and presentation slide should look professional in the sense of completeness, clarity, consistency, and labeling. You may use pictures, graphs, and tables if they can help. You will be evaluated based on the followings:

- Clarity of UML, class, use case, and sequence diagrams
- Clarity of low-fidelity prototype
- Quality of project report
- Quality of presentation slide and recorded presentation (**15 minutes**)