Project Part 2: Specification

Tuesday October 19, 2021

Due: Tuesday November 2, 2021

Weight: 13% of course grade

File naming convention: P2_Txx, where Txx is your team #

Deliverables of Part 2 of the Project

Note: In the following **<T4>** denotes a team of four students and **<T5>** denotes a team of five.

For Part 2 of the project you should provide a *Software Requirements Specification (SRS)* document with the following sections and subsections:

0. **Cover Page:** Should contain the following items:

    o Department, university
    o Project title
    o Team number [also, optional, Team name]
    o Team members
    o Instructors
    o External advisor(s)
    o Date

1. **Table of contents**

2. **Introduction**: a general description of 200 to 500 words. You can reuse *some* text from the Project Concept (P#1) but try as much as possible to refine and enhance it. Describe the more significant changes to the project, if any (compared to the previous project part). Explain why these changes were needed.

3. **Summary of stakeholders' interviews**: Prepare at least 10 **<T4>** or 13 **<T5>** questions and interview at least 3 project stakeholders (external advisors, users, at most one member of your team). Indicate the persons interviewed, why you chose them for the interview, include the questions asked, and *summarize* the answers received. If you are working on a company sponsored project try to interview as many project stakeholders from the company as possible.

4. **Technical Requirements specification**: *functional requirements,* prioritized on 3 levels*,* and *non-functional requirements* (optionally prioritized on 3 levels), as complete as possible. **Level 1** should include requirements that you plan to implement by the end of this semester (Fall 2021), **Level 2** should include additional requirements that you plan to implement by the end of next semester (Spring 2022),

and **Level 3** should include requirements that would be useful and/or nice to have, but most likely will not be implemented by the end of the next semester (Spring 2022). **NOTE: for projects with hardware components,** you should include in this section requirements pertaining to both software and hardware.

5. **Use case modeling:**
   - Use case diagram: at least 12 use cases **<T4>** and at least 15 use cases **<T5>.**
   - Detailed use cases: concise text descriptions (2-4 lines each) for all the above use cases.
   - Detailed templates for 4 use cases **<T4>** or for 5 use cases **<T5>**. Note: for detailed use case templates (tables) see PowerPoint slides based on [Arlow & Neustadt 2005] presented in class on October 26, 2021 (date to be confirmed, so please check Canvas schedule).

6. **Requirement traceability matrix:** Provide in this matrix (table) the mapping between use cases and functional requirements.

7. **Initial snapshots** of the system's potential user interface: at least 5 snapshots **<T4>** and at least 6 snapshots **<T5>**, with brief descriptions. Note: do not include at this time more than 10 snapshots as detailed GUI design will be part of Project Part 3.

8. **Glossary** of terms, at least 16 terms **<T4>** or 20 terms **<T5>** related to your project's problem domain.

9. **List of references**: a related "problem domain book", at least 4 **<T4>** or 5 **<T5>** reference articles (journal, conference or web scientific publications), and at least 2 project related websites with useful resources, all with brief descriptions (40 to 100 words each).

10. **Contributions of team members**. Provide an estimate on how much time each team member worked on this project part (P#2), and on what specific activities.   For estimated time use multiple of 0.5 hour for each team member (e.g., 4.5 hours, 5.0 hours, etc.).

Grading of Project Part II: Specification

1. Overall presentation of the SRS, and sections 0, 1, and 2	10 points
2. Stakeholders' Input & Requirements (sections 3 and 4)	30 points
3. Use case Modeling and Requirements Matrix (sections 5 and 6)	30 points
4. Sections 7, 8, 9, 10	30 points
Total	**100 points**