CS 3398 – Software Engineering

Project Assignment 2

Software Design Document

Assigned: Friday, 10/1/21

Due: Friday, 10/29/21 at 11:55 PM

The second project consists of producing the Software Design Document (SDD) for the software product assigned to your team in Project 1. The SDD for your project must be a new document, separate from the SRS. I have attached to this assignment an **example SDD** to give you a model to follow; use this example SDD to organize your document (see sections to omit below). Please familiarize yourselves with it; we will review it in class to answer any questions.

Rubric

Each item below will be worth 20% of the total grade.

- Overall document organization and flow (Introduction and Glossary),
- Use cases and use case diagrams,
- User interfaces: this is section 4.3.1.1 in the **example SDD** (see examples also in section 3.1.1 of the **example SRS** file from Project 1),
- Design overview description with the architectural diagram (showing the main system components/objects and their relationships); if your diagram in Project 1 had no corrections to be made, you may just include it here as is,
- Object descriptions (with class descriptions (attributes & methods) and object relationships (see '7 Object Collaboration')). **Note:** You *do not need* to include the '<u>Program Description Language</u>' parts for attributes & methods (this is to save you some detailed work).

The following sections from the example SDD are NOT required, <u>you may **omit** or leave them out</u>:

- System Object Model (this is the example's section 5, omit it)
- Data Design (this is the example's section 8, omit it)
- Dynamic Model (this is the example's section 9, omit it)
- Non-functional Requirements (this is the example's section 10, omit it)
- Supplementary Documentation (this is the example's section 11, omit it)

Metrics

The following are appropriate numbers for these elements of your SDD:

- 3 – 4 use case diagrams
- 10 – 12 use cases (in tabular form)
- 5 - 7 user interface mockups/examples
- 1 architectural diagram
- 5 - 7 object class descriptions
- 1 object collaboration diagram
- 20 - 25 pages for the document length

Tools

Note the following diagramming and modeling tools, which are available online:

- http://staruml.io/
- https://app.diagrams.net/
- http://live.gnome.org/Dia
- https://inkscape.org/
- https://mockflow.com/
- https://lucid.app
- https://online.visual-paradigm.com