CptS 583 Software Quality

Spring 2022

Project Deliverable II (1)

(Due February 18, 2022 on Canvas)

Deliverable Description

Now that you have identified your project with your team and nailed down the requirements of the project, the next step is to conduct the design. Although we don't expect as many design work products as we would expect for a software-engineering course in which a whole-semester project is to focus on requirements analysis and software design, we must follow a principled software process, which demands for a design step. After all, software process quality has a big, immediate impact on software product quality. The central objective of the entire Deliverable II is to produce the software product against which you can measure the product quality and the quality of the process you adopted for producing the product. Since requirements have been modeled in the previous milestone, the first part of this Deliverable would be software design representations.

In particular, for Deliverable II (1), you will need to show your design models that reflect your requirements modeling results (e.g., use-case diagrams as a result of use case modeling). A complete design modeling would include data/class design, architectural design, user-interface design, component-level design, and deployment design. To fit within our schedule and timeline of this SQA-focused course, the required design artifacts are only a subset of those, as detailed below.

Specifically, for this deliverable, your team will need to submit the following items.

What to Submit

- The architectural design, represented by brief component diagrams (a brief component diagram just shows the name of each component and the links between the components); point out the pattern you applied in your architectural design, if you followed any architectural design pattern (e.g., MVC).
- The component-level design, represented by elaborated component diagrams (each elaborated component diagram shows the component name, attributes of the component, operations of the components, and importantly the interfaces exposed by the component that are supposedly to be used by other components).

The diagrams need to be drawn using a UML tool, rather than by hand. Some samples will be provided along with this assignment.

Assessment Criterion

This assignment will mainly be evaluated based the clarify of the design models and their consistency with the requirements models submitted in your previous deliverable. (If you feel your previous requirements should be revised, then state so in this deliverable and include the revised requirements models in this submission as well).

* Please submit your team solution as a single PDF to Canvas.