CptS 322 Software Engineering Principles I

Spring 2023

Project Milestone 4

(Due April 11th, 2023 on Canvas)

Milestone Description:

Propose a high-level architecture for your project, identifying key components and the connections among them. This milestone focuses on architectural design as part of design modeling. Your team will, based on the nature of the chosen project topic and the requirements models developed this far, identify the architecture genre and style, consider the architectural contexts (i.e., super systems, sub systems, and peer systems), and then develop the architecture of the software (i.e., identify components consisting of the software, and the relationship/interaction among the components).

In previous milestones we have not focused on developing flow-oriented model elements such as data-flow diagrams (DFDs). Now for architectural design purposes, you may develop DFDs to supplement your requirements model first, and then derive architecture from DFDs using the techniques we have studied. This is optional, though, and depends on whether flow modeling is necessary for your project. If you do not use DFD, then just follow the common architecture design steps we talked about in class (i.e., deriving architecture from class/data design models).

What to submit:

A single PDF, where you:

1. Draw the architectural context diagram to represent the architectural context of your software, which is part of architectural design.
2. Draw component diagrams to represent the components of your software and their relationships, which is the core of architectural design. (These components along with their relationship are the architecture of your software.) – here only **brief** component diagrams are needed.

(Tips: regularly use your project repository, not only for maintaining code but also these milestone work products.)

Submission note:

- Only one submission is required for each team. The contact person may be in charge of submitting it to Canvas.
- Use UML tools to draw the diagrams. No hand-drawings are accepted. As usual, submit the entire work as a single PDF.