CptS 583 Software Quality

Spring 2022

Project Deliverable II (3)
(Due March 25, 2022 on Canvas)

Deliverable Description

After the first two parts of Deliverable II, you should have had a working product (albeit probably just a first prototype). Recall that in Deliverable I, you have conducted quality planning for your project, and have defined quality goals and metrics. Now, the next step is to check whether and how well your analysis, design, and implementation (the code) conform to your quality plan, through quality assurance (primarily, software testing) techniques.

In particular, for Deliverable II (3), you will need to
- verify your software product against quality goals and metrics
- improve your product and process quality using the initial/previous testing (verification and validation) results---you may do this iteratively until the quality plan is met
- Summarize *final* verification and validation results as a project *quality report*.

What to Submit

a. The testing code, including unit/integration test cases and test scripts, used for testing your product resulted from Deliverable II (2), and the fixed/improved code, that are both committed to your project code repository.

b. The fixed/improved analysis and design, if any (i.e., any of the four diagrams you initially had for Deliverable II (1)).

c. The project quality report, where you summarize the final verification and validation results, including results of quality metrics, which quality goals are satisfied and which are not, and how quality has been improved iteratively using verification and validation results during the whole quality measurement process.

* Submit (b) and (c) together <u>as a single PDF to Canvas</u>.

Assessment Criterion

This assignment will mainly be evaluated based on the quality of the tests, clarify of the quality report and the completeness of this report (e.g., objectively describing whether or not the quality goals are met).

Further, this part of the deliverable will be evaluated based on the quality improvements that the team performed and better quality (as per the metrics used) the improvements led to. The improvements include but are not limited to clarification and/or elaboration of the quality goals, the selection of *alternative/additional* quality measures, the selections of different techniques/tools to collect data, the selection of alternative/additional quality assurance strategies.