

CptS 583 Software Quality

Spring 2022

Project Deliverable 1-2

(Due February 8th, 2022 on Canvas)

Deliverable Description

This is the actual technical part of Deliverable 1, since part 1 was only about team information. In software practice today, a software project with reasonably good quality management would always start with quality planning as part of the holistic project planning activity (one of the framework activities in software process framework). This deliverable is essentially focused on quality planning, as well as project planning.

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

What to Submit

- Elaborate the **requirements** of the software based on the initial requirements for the chosen topic given by the instructor (or by yourself if your team has chosen a project topic other than the suggested ones, including at least
 - Scenario-based models of the requirements with UML use case diagrams (optionally along with detailed tabular description of each use case)
 - Class-based models of the requirements with UML class diagrams, with class relationships explicitly indicated.
- Clearly define the **quality plan** of the chosen project according to the requirements elaborated:
 - Outline the *quality goals* of the project, and describe the strategies for realizing the goals
 - Clearly define the *quality metrics* and describe how the metrics will be used to measure the quality of the software and how they are related to the quality goals.
 - Give the estimated *costs of the quality* targeted for the chosen project according to the economic assessment of the software quality development and maintenance processes, using the techniques for trading off among possibly conflicting quality factors.

Assessment Criterion

This assignment will mainly be evaluated based on the scope clarity and the level of depth of the quality assurance plan, the completeness and clarity of the defined goals, the choice of quality measures and their justification (with appropriate references), the strategies that will be used to assure that the quality goals are met as well as the

justification for choosing those strategies. The assignment will be further evaluated according to whether the quality metrics selected are reasonable with respect to the quality goals, and whether and how well the cost estimation is justified.

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