

PROJECT ASSIGNMENT 3 (PA3)

CS300 – CTT502 – Introduction to Software Engineering

Fall 2019

Due Date:

Total score: 60 points

Each team needs to perform required tasks to produce and submit the following documents.

a – Use-case specification – 2nd submission (5 points)

In PA2, your team drafted the first version of the use-case specification document. In this PA3, you need to revise the use-case model and specifications according to the feedback from TA's, new information and/or changes to the requirements. The model and specifications at this stage of the project should be more complete (more details and use cases) and consistent than the previous versions.

Your team needs to log the changes made to the document using the Revision History section at the beginning of the document.

b – Define software architecture (20 points)

Your team is asked to draft the software architecture document (SAD), filling the required sections in the document using the template provided with this assignment. The document needs to provide and explain key components and the organization of these components to form the architecture. For this PA, the goal is to form an architecture following a certain styles like MVC, n-tier, and microservices. You should divide the system into components, connect them, and describe each component in detail in the Logical View section of the SAD document. For each component, you need to describe its responsibility and how it is connected with other components in Section 4.x. If you know what languages are used to implement each component, the mention them. Otherwise, it is fine.

b – Class diagrams (30 points)

Model class diagrams for each of the key components defined in the architecture. Update Section 4.x of the Software Architecture document with diagrams and descriptions of key classes.

Class diagrams should include classes, their main attributes, operations and relationships among them. Try to detail the class diagram with all available information you have. You are not required to imagine unrealistic attributes, operations, and relationships that may not be needed in the future. Basically, go as far as you know.

d – Weekly report (5 points)

Prepare weekly reports for the weeks starting from the last reported week until the time of submission.

Fill out the template with all information required.

Submission Rules

You must copy all documents to the directory named **PA3-Group[GroupId]** and compress the whole directory to the zip/rar file named PA3-Group[GroupId].zip/.rar.

For example: **PA3-Group01.zip**

Grading Criteria

The assignment will be graded according to how well your team prepares the required documents using the information your team has at this time. Criteria include:

- English writing: easy to understand, few errors.
- Well formatted texts, diagrams, charts.
- Level of completeness of the documents, based on the information available at this time.
- Each use-case must have a main flow.
- Use-case diagrams must include key use-cases that match the functional requirements documented in the vision document.
- The software architecture must capture key components necessary for the system. It should be based on one well-known style.
- Class diagrams must include key classes, attributes, operations, and relationships.