Deliverable 2 – Design Specification

The report for this deliverable contains the design specification document including descriptions of the architecture and detailed design of the proposed solution as well as an update of the work plan. The key topics that the design specification document should address include:

- A description, rationale, and models describing the architecture of the proposed solution
  - Are architectural patterns applied? Which ones? Why (or why not)?
- A description, rationale, and models of the design of the proposed solution
  - Are design patterns applied? Which ones? Why?

1 Description of Architecture of Proposed Solution Including Block Diagram

The description of the architecture contains one or more block diagrams that show (a) how the complete system is broken down into subsystems and (b) how those subsystems communicate with one another. A brief description of each subsystem explains its role in the system and features a deeper discussion of its communication with the other subsystems. For example: Is it sharing data with other subsystems? Is it accessing functionality in other subsystems? Furthermore, the description should discuss which architectural styles were applied. Why was a style applied? Why were others not applied? Finally, discuss whether the same architecture is used for all three applications (desktop/mobile/web) and, if not, highlight and discuss the differences.

2 Description of Detailed Design of Proposed Solution Including Class Diagram

The description of the detailed design contains class diagrams describing how each subsystem is decomposed into classes (does not need to be 100% complete, but should contain the most important classes). In contrast to the domain model, the class diagrams need to show all operations. However, getters, setters, and all operations generated by Umple do not need to be shown. Furthermore, the class diagrams only need to be done for one of the applications (desktop/mobile/web). Note: if you choose the mobile app, you still have to describe the internal structure of the reused jar file with the Umple domain model, controllers, and persistence layer. Briefly discuss the key classes. What are the key responsibilities of the class? Discuss which design patterns were applied and why.

3 Updated Work Plan

Your updated work plan shows any changes to the previous work plan, i.e., the updated work plan shows the previous entries as well as the updated entries. The work plan must define the completed and remaining iterations of your implementation until the final deliverable at the end of the term. For each completed iteration, indicate which requirements were addressed, report the effort needed to complete the iteration, and the date when the iteration was completed. For each upcoming iteration, indicate which requirements are addressed, provide an estimate for the effort needed to complete the iteration, and the date when the iteration is to be completed.

Submission

The project is to be done in the same teams of FOUR or FIVE students as for the previous deliverable. For Deliverable 2, your team is required to hand in the ***report*** by ***Monday, March 07, 2016 23:30***. The report must be either an MSWord file or a PDF file. If you are using an application other than MSWord, convert your report first to either a PDF file or a DOC(X) file.

Each team member must make contributions to the deliverable. A team member who does not contribute to the deliverable receives a mark of 0 for the deliverable. A team member may optionally email a confidential statement of work to the instructor before the due date of the deliverable. A statement of work first lists in point form the parts of the deliverable to which the team member contributed. In addition, the statement of work also describes whether the work load was distributed fairly evenly among the team members. A statement of work may be used to adjust the mark of a team member who is not contributing sufficiently to the deliverable. It is not necessary to send a statement of work, if a team distributed the work for the deliverable fairly evenly and each team member contributed sufficiently.

Marking Scheme

Part of Assignment	***Marks***
Architecture:	45
Description	15/45
Rationale	15/45
Block Diagram(s)	15/45
Detailed Design:	45
Description	15/45
Rationale	15/45
Class Diagram(s)	15/45
Work plan for completed and remaining iterations	10
Total Marks:	100
The total mark may be adjusted based on the actual contributions of a team member to the deliverable.	