



Assignment Deadline: Tuesday 20/2/2024 (23:59)

Assignment Type: Individual Effort and Individual Submission. This assignment is intended to be completed individually, despite being part of a team that has already chosen an application for development. The results of this individual assignment (Assignment 1) will play a role in shaping the overall delivery of your team project delivery 2, which will be a team Submission (with a deadline on 29/2/2024). Further details regarding the connection between Assignment 1 and Project Delivery 2 will be discussed in class. But it is important to emphasize that Assignment 1 constitutes individual effort work.

Submission Method: Your submission for this assignment should be in PDF format, following the provided template below. You will submit your work to Brightspace. Ensure that your document is well-structured, with each section clearly addressing its respective task and providing necessary details as outlined in the assignment instructions. Please refer to the template below.

Assignment Evaluation and Weight: The assignment will be graded out of 100 points. But the assignment is worth 7% of the final grade.

Assignment Overview:

Your individual assignment, Assignment 1, focuses on the system or application chosen by your team for the project. The primary goal of this assignment is to provide you with practical experience in applying requirements elicitation, analysis and documentation techniques for the system that is currently under development for your project. Specifically, you will work individually on the following tasks:

- Identify the stakeholders involved in your project and rank their significance using a predefined ranking system (HIGH-MEDIUM-LOW).
- Research and identify any relevant regulations, guidelines, standards, or laws that apply to the proposed application. Similarly, rank their importance using a predefined ranking system (HIGH-MEDIUM-LOW).
- Utilize a combination of elicitation techniques (**a minimum of three**) that we covered studied to start gathering requirements for your system. It is essential to provide evidence of each activity associated with the chosen elicitation techniques. For instance, if you opt for the goal-based elicitation technique, you should furnish the mission statement and derive goals from it. Alternatively, if you choose the survey technique, you should create a set of survey questions, and so on.
- Document the captured requirements in the format of "The system shall..." statements. Each requirement should also be ranked using the predefined ranking system (HIGH-MEDIUM-LOW).
- Select five functional requirements from the list and transform them into "use cases" format, adhering to the Larman template and following best practices for writing effective use cases.

- Draw a domain model that depicts the concepts and associations from the five use cases.

Assignment 1 Template (You need to follow this template to structure your submission):

Section 1: Introduction (5 points):

- 1.1 Purpose: Define the reasons for developing the system.
- 1.2 Scope and Perspective:
 - Identify the system to be produced by name.
 - Define the system's relationship to other related products, including elements of a larger system or interactions with other products.
 - Clearly specify what is within the scope of your system and what is outside its scope.

Section 2: Stakeholders (5 points):

- In this section you will list all stakeholders of the system.
- Use stakeholder identification questions that we covered in the class as guidance to compile the list.
- Rank stakeholders using HIGH-MEDIUM-LOW ranking system.

Section 3: Regulations, Guidelines, Standards, Laws (5 points):

- Identify applicable regulations, standards, guidelines, etc., related to application.
- Research and provide information on these regulations.
- Rank them using the HIGH-MEDIUM-LOW ranking system.

Section 4: Requirements Elicitation Used (at least 3 elicitation techniques) (15 points):

You have to use at least **3 elicitation techniques to capture requirements**. The elicitation techniques were discussed during lecture 3. You are encouraged to use more than 3 if you want. For each elicitation technique used, provide:

- 4.1 Name of the elicitation technique.
- 4.2 Rationale for using the technique for the system (Why did you select this technique?).
- 4.3 Proof of using the technique (e.g., mission statement and derived goals for goal-based elicitation, set of survey questions for survey technique, etc.).

Section 5: Requirements (20 points):

- List the requirements generated using the chosen elicitation techniques.
- Present the requirements in "The System shall..." statements format. We expect at least 20 requirements.
- Rank each requirement using HIGH-MEDIUM-LOW as the ranking system.

Section 6: Use Cases (20 points)

Select FIVE functional requirements from the list and write the full use case specifications for each following the Larman template discussed during Lecture 5.

- 6.1 Use Case 1
- 6.2 Use Case 2
- 6.3 Use Case 3
- 6.1 Use Case 4
- 6.2 Use Case 5

Section 7: Use case Diagram (10 points)

Create a UML Use Case diagram illustrating the five use cases outlined in Section 6.

Section 8: Domain Model Diagram (20 points)

Draw the Domain Model for the system based on the five use cases described in Section 6. Make sure to add need-to-know associations and attributes. Domain Modeling is discussed in class during Lecture 7.