

## Year 2

# Group Assignment

IT2020 – Software Engineering

Semester 2, 2024

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### Instructions:

1. This assignment will be done with the same group as the OOP grouping.
2. **Do your assignment for the given topic.**
3. **Identify different functions for the topic allocated for you. (Each member should have a separate function)**  

**Example: 4 members group – 4 different functions with equal scope.**
4. **All the functions must have equal scope and should have a considerable amount of work. (Ex: Do not take login as a function for a single member).**
5. **draw a high-level use case diagram for the identified functions. Common use case diagram is okay for all four members.**
6. **Each group member is responsible for writing a use case scenario and drawing a sequence and a communication diagram according to the guideline at the end of this document.**
7. **Overall assignment should include,**
  - **A high-level Use case diagram (Common for all members)**
  - **4 use case scenarios (one for each member)**
  - **4 sequence diagrams (one for each member)**
  - **4 Communication diagrams (one for each member)**
8. **Assignment submission should be included followings;**
  - **Cover page**
  - **Introduction to Topic (Maximum 1 page – Introduce the scenario you considered for given topic)**
  - **Common Usecase Diagram**
  - **For each Member (Registration number, Name and function name need to be included)**
    - 1 **Use case scenario**
    - 2 **Sequence diagram**
    - 3 **Communication diagram**
9. **Late submissions will be penalized by a 5 marks reduction per day.**
10. **You have to submit a softcopy of the assignment (PDF document).**
11. **The assignment deadline will be published on the course web and links will be available.**

12. Follow the link on the course web for softcopy assignment submission – **Separate Links will be available for weekday and weekend students of different campuses.** Make sure you submit it to the correct link.
13. Plagiarism will be penalized.
14. Each member's contribution **must** be given at the end of the document using the following format. **(No marks will be allocated for a member whose contribution is not mentioned).**

**Note: If a particular, member did not contribute to the assignment, that should be mentioned under "Remarks" column with his/her function name.**

Reg. No	Name	Function Name	Remarks
ITxxxxxxx	xxxxxx	xxxxxx	Function name OR Not contributed to the assignment

15. You must attach the cover page for the document. The cover page format is given in the course web.

### Guidelines

1. Use software to draw the diagram/s (any software)	02 marks
2. Usecase diagram and Selecting a main use case with enough functionality	05 marks
3. Write a logical and complete use case scenario for the use case you have selected for the given topic.	20 marks
<b><u>Sequence Diagram</u></b>	
4. Identify correct class stereotypes for the use case scenario	10 marks
5. Correct and logical use of at least <b>three</b> of the following concepts /frames <ul style="list-style-type: none"> <li>Iteration concept</li> <li>Conditional concept – (ALT and OPT)</li> <li>Parallel execution concept</li> <li>Ref Concept</li> </ul>	30 marks

6. Correct use of messages according to the scenario <ul style="list-style-type: none"> <li>Synchronous, Return, Asynchronous, self-call, Create, Destroy</li> </ul>	10 marks
<b><u>Communication Diagram</u></b>	
7. Drawing of Communication Diagram <ul style="list-style-type: none"> <li>Draw a communication diagram for the same use case scenario you drew the sequence diagram</li> </ul>	20 marks
8. Overall completeness of each function design (Individual marks for each member's contribution).	03 marks
Total	100 marks