Requirements for the final report

REQUIREMENT ANALYSIS AND DESIGN

(Group 1, Semester 2, 24.25)

I. Milestones

- **Submission of initial key deliverables before the live presentation. Deadline: 22:00 May 19, 2025, including:**
    1) Report slides.
    2) Doc/PDF file (this version can still be revised after the presentation).

- **Live presentation in class on May 24, 2025:**
    1) Present the slides.
    2) Submit a hard copy of the report (minimum content must include: requirements, practical significance/contributions, Use Case Diagrams, Activity Diagram, Sequence Diagram, and development model).

- **Final submission deadline: May 31, 2025. Deliverables required:**
    1) Report slides.
    2) Doc/PDF file.
    3) Application.
    4) SQL file.

II. Required Content for the Report

(The report must be written in English, adhere to the standard report template provided by the Faculty of Information Technology, and all model designs must follow standard UML notation.)

A. **Documentation (Doc/PDF File):**

1. Task Assignment

- o Clearly specify the roles and responsibilities of each group member.

2. Requirement Documentation

- o Define and detail the functional and non-functional requirements of the system.

3. **Identify Actors and Use Cases**

   o Include a minimum of 4 actors and at least 11 primary use cases.

4. **Draw Use Case Diagram**

   o *Provide:*

      ▪ A general Use Case diagram.

      ▪ A decomposed Use Case diagram.

      ▪ Detailed Use Case descriptions.

5. **Draw Activity / State Diagram**

   o Illustrate the system's workflows or state transitions accurately.

6. **Draw Sequence Diagram**

   o Show the interaction between objects and their sequences.

7. **Draw Class Diagram**

   o Present the system's classes with their attributes, methods, and relationships.

8. **Draw Entity Relationship Diagram (ERD)**

   o Design the ERD to reflect entities, their attributes, and relationships.

9. **Draw Relational Data Model**

   o Convert the ERD into a relational model, detailing tables, primary/foreign keys, and their relationships.

10. **Select a Development Model**

    o Choose and justify a software development model (e.g., Waterfall, Agile) that suits the project's requirements.

11. **Application**

    o Develop and submit a functional application that aligns with the documented requirements.

B. **Slide:**

Each member must participate in the presentation according to the schedule. Members can choose the section you wish to present but must understand the entire project to answer questions if asked.

The presentation slides must cover the following requirements (**at least up to item 5**):

1. A brief description of the project requirements.

2. Explanation of why the project was chosen and its practical significance / contributions.

3. General Use Case model.

4. Select at least 3 decomposed Use Cases that the group finds interesting or unique to present, and from there, illustrate corresponding Activity/State Diagrams and Sequence Diagrams.

5. Class Diagram.

6. ERD (Entity Relationship Diagram).

7. Relational Data Model.

8. Development Model.

9. Application.

III. Evaluation Criteria Tiêu chí ánh giá

Criteria	Maximum Points	Detailed Description
1. Report Content • Must comprehensively address all 11 elements outlined in Section II. A. • Grading emphasizes depth, accuracy, and clarity of analysis. • Includes all diagrams, models, and justifications as per the specified requirements.	4	**4 points:** Content is comprehensive, accurate, deeply analyzed, well-supported with evidence, and thoroughly developed. **3 points:** Content is relatively complete but lacks depth or contains minor errors. **1-2 points:** Content is shallow, with many missing or unfocused sections. **0 point:** No content or content does not meet requirements.
2. Report Slides • Evaluate the clarity, design, and alignment with the main report content. • The slides should be professionally structured and visually engaging.	1	**1 point:** Slides are clear, professionally designed, concise, and aligned with the report. **0.5 point:** Slides meet requirements but lack aesthetic appeal or coherence. **0 point:** Slides do not meet requirements or are not submitted.
3. Practical Significance/Contribution • Focus on the real-world applicability and value of the proposed system or solution.	1	**1 point:** The report demonstrates high practical significance with clear contributions to the field or society. **0.5 point:** Contributions are theoretical and lack clear practical value. **0 point:** No practical significance or contribution provided.
4. Consistency and Logic • Assess the flow of ideas, argumentation, and coherence in the presentation of content.	1	**1 point**: The report is highly consistent, with well-connected ideas and logical arguments. **0.5 point:** Some logic is present, but a few inconsistencies remain.

		0 points: Lacks logic, ideas are disconnected, and arguments are incoherent.
5. Application • A tangible output that aligns with the report requirements, demonstrating feasibility and functionality.	2	2 points: The report proposes a clear, feasible application with high practical value. 1 point: The application is vague, lacks specificity, or is less feasible. 0 point: No application provided or the application is irrelevant.
6. Group Interaction • Groups are evaluated on how actively and constructively they engaged with other teams.	1	1 point: The group actively and constructively engaged by asking relevant questions, giving thoughtful feedback, and contributing meaningfully to the discussion. 0.5 point: The group participated, but the engagement was limited or superficial; questions or feedback lacked clarity or depth. 0 point: The group did not participate in the discussion or ask any questions after other teams' presentations.

Key Notes for Submission and Evaluation:

- Late submissions will not be awarded any points.

- Reports not written in English will be automatically disqualified or marked as incomplete.

- All deliverables, including diagrams and models, must follow standard notations and conventions (e.g., UML for diagrams).

- Any member who does not participate in the presentation will not receive final semester points.