√ Contents

- A. Modeling requirements
- **B.** Requirements Specification
- C. Marking Scheme

✓ Objectives

- 1. Evaluate the risks of requirements
- 2. Complete requirements prioritization worksheet
- 3. Complete the SRS document
- 4. Propose a risk management template

✓ Documents will be submitted

- 1. SRS document(.docx file)
- 2. The requirements prioritization worksheet (.xlsx file).
- 3. Risk Management Plan(.docx)

You will do assignment 2 based on the contents and documents in assignment 1.

A. Modeling requirements (Suggestions)

- 1. Identify the risks that you face in conducting a requirements analysis for this organization. Anything that might affect your ability to complete the course assignments successfully is a project risk. Use the risk identification tools covered in the lectures to help you identify as many risks as possible.
- 2. Assess the risk exposure for each risk you identified, and use this to rank your risks. Use either a quantitative or qualitative approach the important thing is to be able to compare risks to find the biggest ones.
- 3. Draw up a risk management plan for your top ten risks. For each of your top ten risks, write a brief management strategy, including:
 - (a) any steps you can take to mitigate the risk
 - (b) indicators you can monitor to give you an early warning of things going wrong
 - (c) a recovery plan to invoke if things do go wrong
- 4. Arrange information gathering sessions (e.g. interviews, questionnaires, site visits, etc) to collect any additional information you need about the requirements from the key stakeholders and domain experts.
- 5. Develop models of key aspects of the problem. Your models must include:

- a. The structure of application domain information to be represented by the proposed system (using either UML Class Diagrams or Entity-Relationship diagrams);
- b. The dynamic behaviour of relevant objects in the application domain of the proposed system (using either UML Statechart Diagrams or SCR Mode Tables);
- c. The required functionality of the proposed system (using UML Use Case Diagrams and UML Sequence Diagrams);
- d. Other models as required, e.g. of business processes, business rules, organizational dependencies, fault trees, stakeholder goals, quality requirements, etc, using whatever modeling notation is appropriate.
- 4. Write a short report that summarizes the problem you chose, the methods you used, the models you generated, and the discussions you had with the client. Discuss any interesting lessons learned during the elicitation and modeling process.

B. Requirements Specification (Suggestions)

- 1. Identify the requirements, including all functional and non-functional requirements for the new system, the data that the system will need to manage, interfaces to other systems, and interfaces for different classes of users:
- 2. Trace these requirements to the models you produced for assignment
- 3. Requirements must be traceable to the models and the stakeholders. Note: You don't need to redo the models, just reference them.
- 4. Validate these requirements with your contact(s) in the customer organization, and get feedback. Don't forget to describe any meetings, discussions and feedback in an appendix of your report.
- 5. Write a requirements specification that documents these requirements (using the IEEE standard).
- 6. Write a short report that summarizes the process of writing the specification, including any observations about organization of the document, traceability, the validation process, the models you generated, and the discussions you had with the client. Discuss the lessons learned and any difficulties you encountered.

C. Marking Scheme

Your assignment will be marked by your instructor. If you have questions about a marked assignment, you should ask your instructor before/after a tutorial.

Assignment 2 - Due Date:
Marks for this assignment will depend on the following factors:
Documentation (50%) and Modeling (25%): How complete and accurate are your
diagrams describing the problem and the alternatives you are recommending? The
supporting evidence you include in terms of figures, tables, cost/benefit analysis etc. Also,
organization of appendices; usefulness of supporting information; how well does the
evidence support the recommendations?. Assignments will be judged on the basis of visual
appearance, grammatical correctness and quality of writing, as well as their contents.

Presentation (25%): The style of your presentation, including language, grammar, clarity of the presentation etc. (10% - Language; 15% - Style and clarity)

Please make sure that the text of your report is well-structured, using paragraphs, full sentences, and other features of a well-written presentation. Use itemized lists of points

Team Report Form

(must be submitted with assignment)

Description of roles and contributions of each team member:

where appropriate. Text font size should be either 12 or 13 point.

Name	% of team Effort	Signature
Date submitted:		