

INFO2110 Analysis & Design of Web Information Systems Semester 1, 2018

Assignment 2, 2018 (20%)

System Modelling and Design

1. Project Overview

The second assignment is based on project topic of your choice. The members of the team remain the same as in Assignment 1. This assignment aims to produce a system modelling and design document that uses appropriate notations with a clear explanation.

2. Deliverables

2.1. Documents

A written electronic system modelling document (doc or pdf format) need to be submitted to Learning Management System (https://canvas.sydney.edu.au).

Note:

- Official university academic honesty cover sheet must be signed by all members and attached to the electronic document
- Late submission is subject to a deduction of 10 marks (out of 100 marks) per day.

2.2. Prototype

All groups should create a medium fidelity prototype of your interface design using any prototyping tools of your choice. This prototype will be briefly demonstrated to the tutor during the tutorial in **week 12**.

3. Report Requirement

For the assignment 2, prepare a final report that includes (but not limited) the following parts:

1. Introduction, Background, and Motivation

A general introduction to the project of your group working on (e.g. what it is, how it works, products/services available in the market, why the project is important, and so forth).



2. Project Details

- a. Project Needs and Significant
- b. Project Objectives
- c. Project Scope
- d. Expected Benefit and Outcome

3. Related Literature

Conduct a systematic review of the existing systems, what has been done, and what is the gap that your project can contribute.

- 4. System Requirements
 - a. Functional requirements
 - b. Non-functional requirements

5. System modelling

- a. Data Flow Diagram (DFD)
- b. Object Relationship Diagram
- c. Use Case/s
- d. Use Case Diagram
- e. Sequence Diagram (SD)
- f. User interface design
- g. System architecture design
- h. Prototyping development

This section should include the key feature of your mid-fidelity prototype (screenshot and descriptive explanation).

i. System implementation plan

This section explains the plan of how will you implement the system in the future. This might in the form of Gantt chart and includes an explanation of it.

- 6. Conclusion
- 7. Reference
- 8. Appendix

Note:

The final report has a similar structure to the proposal especially in **point 1 to 4**, and it is acceptable to reuse material from the proposal. For example, if your literature review



perfectly covered all the relevant material then there is no need to update. More likely, you will need minor revisions to add new material you discovered during the project.

4. Teamwork

Teamwork is essential for this project. Please meet regularly with all your team members and ensure that everyone contributes towards the report (proposal and final report) and the presentation. Please discuss with your tutor and lecturer if your team is facing any problems. There might be a peer review at the end of the semester to gauge your contribution to your respective teams. Despite good intentions and effort, it happens that some team members fail to take their role within the team seriously. If your team is experiencing such challenges, please follow this procedure:

- 1. Active members should make a significant effort to contact the slacking member(s) by all means; for example, e-mail, phone, locate him/her at lectures and tutorial, etc.
- 2. Maintain a paper trail of interactions between the team members and the slacking member (e.g., keep a proper log of communications and events), in order to substantiate the claim of "significant effort" mentioned in paragraph (a) above.
- 3. Contact the tutor and lecturer to report and discuss the team's problems in a meeting. You should do this early and not wait until the last minute. Bring all supporting evidence to the meeting. The lecturer will investigate the problem and take appropriate action. Please note that the lecturer will not mediate in all other cases (e.g., social incompatibility, skills mismatch, etc.).

5. Reference

- Please cite all references at the end of your paper (both proposal and final report).
 You should include references to facts, figures and any other information that you obtained from various sources. References from relevant papers in the University Digital Library are preferred over Internet sources as Internet sources may not always be reliable.
- Whenever you quote, paraphrase, summarise or refer to ideas, facts, figures or
 findings from another source (e.g. research paper, book, website), you should cite the
 source, with appropriate formatting, in the sentence that mentions these ideas or
 figures. It is not sufficient to just provide a list of references at the end of your paper.



The source that you use should be cited in the text of your paper, either in parentheses or as part of the text itself. We suggest the use of APA style for referencing.

• You are reminded that the University takes plagiarism infringements seriously. If the sources are not cited correctly, it may be deemed as plagiarism. Please note that your submission will be forwarded to an automated plagiarism checking system.

6. Grading Criteria

Note: please see section 2 and 3 for detail.

Description	Marks
	allocated
Document	
Project details (reuse from assignment 1 project title, introduction, objectives,	/00
and requirements), no marks allocated for this section	
Data Flow Diagram (1 only)	/10
Object Relationship Diagram (1 only)	/10
Use Case/s (1 or 2, to be decided by the group)	/5
Use Case Diagram (1 only)	/10
Sequence Diagram (1 or 2, to be decided by the group)	/10
User Interface Design, and Clarification of the Design (e.g. a table used in	/15
task2 in tutorial 7)	
Brief overview of system architecture design	/5
Prototyping (e.g. provide a screenshot of UI)	/5
System implementation plan (e.g. a table, 1-2 pages)	/5
Report presentation (e.g. writing style, organization of the report, and	/10
interpretation of the models)	
References (including citations), appendix (if any), and length of the report	/5
Demonstration	1
Prototype demonstration during tutorial in week 12 (see section 2.2)	/10
Total	100
	(20%)