



Project Description

There are multiple due dates for the project.

Group and Individual: 30% (of the whole unit)

1. Project Overview

This is a group project. The optimal size of a group has 4 members, but 3 or 5 is acceptable. For the ISYS2110 class, the members must come from the same tutorial. You are expected to **study, research, analyse and design a web-based information system for one the case studies given** (or a scenario created by you and approved by the tutor). Organise your presentation or report by what have you learnt from the class or lecture.

2. Project Cases

There are two different cases below for your group to choose as your group project. The description below represents minimum information and activities posted by the company in a project selection process. Your team has to carry out further requirement elicitation to make the system usable and user-friendly, and to build a prototype, so that you can present and demonstrate to the company that your system is superior to the competitors.

Case 1: NeighbourLink

NeighbourLink, a small company, wants to **create a car-sharing plan to help the environment**. It is planned to be a web system. Drivers can share their ride details like when, where they start and end, the number of available seats, type of vehicle, and special features (wheelchair accessible, animal-friendly etc). They may also suggest a petrol contribution (fixed charge, by km, weight, volume ...). Riders share similar information and can decide how much they want to contribute. The system lets drivers and riders see each other's requests. If they agree to share a ride, they become "established neighbours," and the driver will not take more requests once all seats are filled.

Case 2: FriendshipOnWheels

Meals on Wheels is a nationwide non-profit initiative. It aims to help requestors (frail, aged people and people with disability) remain in their homes. This initiative is made possible by having volunteers to deliver not only meals but also provide friendly visits and quick safety checks. They contacted your team for the analysis and design task of this system. It is planned to be a web system. A requestor can share his/her details like when, quantity of meals, hot or cold food, special dietary needs, cultural and taste preferences, language spoken, mobility etc. A volunteer shares his/her available timeslots, driver license details, have-a-car? language spoken, skills & qualifications (e.g. high school, tertiary, Auslan, first-aid certified, CPR trained). The system is to support another person with a planner's role to schedule and to assign relevant volunteer to a requestor. The Meals on Wheels has a policy that a pair of requestor-volunteer can only stay together for at most one year, another volunteer will be assigned to the requestor when the one-year period expires.

3. Tasks and Due Dates

Week	Due Date	Task	Percentage ¹
3		Project release	
9	Tutorial session	ISYS2110: Oral presentation (optional for COMP9110)	10%
9	28-Apr-2024	COMP9110: Interim report submission	10%
12	19-May-2024	ALL: Project final report submission	20%

4. Submission²

ISYS2110: You are expected to give an oral presentation in W9 (optional for COMP9110 students but it will be helpful for you to get feedback from your tutor before report submission)

- Oral Presentation**
- Each group is expected to give a 10-minute presentation. It should contain, *but not limited to*
 - Scope of your project
 - Users (and their characteristics)
 - Requirement modelling: fact-finding methods and results
 - Initial design (how it is driven by the requirements)

COMP9110: You are expected to submit an interim report in W9 (due: 28-Apr-2024)

- Interim Report**
- Each group is expected to give a report not more than 10 pages. It should contain, *but not limited to*
 - Scope of your project
 - Users (and their characteristics)
 - Requirement modelling: fact-finding methods and results
 - Initial design (how it is driven by the requirements)

ALL: You are expected to submit the followings when the project is due in W12 (due: 19-May-2024)

- 5-minute video presentation**
- The video is to convince the project sponsor to give you funding to further develop the prototype to a production system. The video should be left in the front page of your website. It should contain, *but not limited to*
 - the aim and target users of the system
 - the benefits of the system to the business needs
 - how your system will address these needs
 - what are the special features (and design) of your system?
 - simple demonstration of some functions of your system etc.
- Web-based prototype**
- The prototype that includes but not limited to the
 - Skeleton of the website (consistent page design, including CSS)
 - Basic navigation between the main pages
 - Hierarchy of pages (site map)

¹ The percentage refers to the contribution of the relevant assessment to the overall mark of the whole unit of study.

² The following is just a brief list of expectation of the deliverables. You should check the marking rubrics in Canvas for details.

Report

- The report containing
 - A minimum of 8 functional requirements
 - A minimum of 6 non-functional requirements.
 - Your target users and their characteristics.
 - Must include a survey form and results from 10 people or more
 - Other requirements gathering methods are welcomed.
 - At least 3 use cases from your list of functional requirements.
 - A use case diagram of the system.
 - Modelling and designing the new system
 - Group reflections on the system project
 - Peer assessment form

Each member in a group will receive the above mark by their contribution to the project, which is calculated using the RPF (or Relative Performance Factor) formula in SparkPlus³. It is used to measure how other group members view an individual contribution to the project.

$$\text{RPF is proportional to } \frac{\text{Total ratings for individual team member}}{\text{Average of total ratings for all team members}}$$

This RPF will be used to change the group project mark of a group member.

$$\text{Individual mark} = \text{group mark} * \text{Individual's RPF}$$

For example, if a group receives 82/100 for their project and a student in that group receives a RPF factor of 0.9 for their contribution (reflecting a lower-than-average group contribution), the student will receive an individual mark of 74 *if the marker considers the distribution of contribution is appropriate for the group*.

$$\text{Individual mark} = 82 * 0.9 = 74 \text{ (rounded from 73.8)}$$

The maximum mark an individual is capped at 100% to reflect the maximum mark a student can achieve. For example, if a group receives 98/100 for their project and a student in that group receives a RPF factor of 1.1 for his/her contribution (reflecting a higher-than-average group contribution), the student will receive an individual mark of 100 rather than 108.

$$\begin{aligned} \text{Individual mark} &= 98 * 1.1 \\ &= 108 \text{ capped at 100.} \end{aligned}$$

5. Teamwork

Teamwork is very important for this project. Please meet regularly with all your group members and ensure that everyone contributes towards the report, prototype, and the video presentation. Please discuss with your tutor and/or lecturer if your group is facing any problems. There is a peer review after your requirements analysis and initial design of the system to gauge the contribution to your respective groups. Despite good intentions and effort, it happens that some group members fail to take their role within the group seriously. If your group is experiencing such challenges, please follow this procedure:

- 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 etc.
- Maintain a paper trail of interactions between the group members and the slacking member (e.g., keep a proper log of communications and events), to substantiate the claim of "significant effort" mentioned in paragraph (a) above.

³ SPARKPLUS-supporting-resources-version-3.pdf

- c) Contact the tutor and/or lecturer to report and discuss the group'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 tutor will be the first contact point to help resolve the case. He/she will bring it forth the case to the lecturer when necessary. 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.).

6. Referencing

- a) Please cite all references at the end of your 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.
- b) 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.
- c) 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.

7. Late Submission

As announced in the unit outline, late work (without approved special consideration or arrangements) suffers a penalty of 5% of the maximum mark for each calendar day after the due date. No late work will be accepted more than 10 calendar days after the due date and will receive a mark of zero.