

CITS4401/3301 Software Requirements and Design

Semester 1 2024

Group project overview

- Part 1 (requirements) of the project due in **Week 7** (worth 15% of the marks)
- Part 2 (design) of the project due in **Week 11** (worth 15% of the marks)
- Each group member is expected to spend around 20 hours on each part of the project, including researching and background reading.
- All project deliverables (questions and final report) must be submitted in LMS as pdf files by the submission deadlines.
- Please submit your response for Tasks 1 and 2 for Part 1 vis LMS (one submission per group) by Week 6 (**11th April @11.59pm**).
- Please conduct the **interview** (select an interview time slot **2nd - 10th April**) before you submit the Tasks 1 and 2 that aligns **with the stakeholders' availabilities**. Please refer to their availabilities in the Excel sheet (will be available on **15th March**) on LMS. Ensure that the **interview takes place before the deadlines for Tasks 1 and 2 (11th April)**. Ideally, **reserve some additional time after the interview to finalize and refine the report**. Therefore, prioritize choosing an earlier time slot.
- The teaching team will help to provide some general feedback on the submissions so you can review them before the Tasks 3 and 4.
- Please submit your response for Tasks 3 and 4 as a **FULL group report** via LMS by week 7 (**17th April @11:59 pm**).
- Group member evaluation: To ensure that every group member contributes equally to the project, we will utilize Feedback Fruits for evaluating group member performance. Once the group member evaluations are completed, you will receive a Group Contribution Factor (GCF).
 - **Calculate the final grade:** Multiply the student's project grade by their Group Contribution Factor to determine the final grade. For this project, the minimum threshold is 0, and the maximum threshold is 1.1.

$$Final\ Grade = \begin{cases} Project\ Grade \times GCF, & 0 \leq GCF \leq 1.1 \\ Project\ Grade \times 1.1, & GCF > 1.1 \end{cases}$$

- You can find more details about how Feedback Fruits works and how to evaluate your team members on the LMS (**Project (30%) ->Group Member Evaluation Information**).

Note:

- * Ensure that the name and student number of all group members are included in the submission.
- * Late submissions: the penalties for late submissions are described in UWA's Consequences for late Assignment Submission which is available from the LMS in the unit outline.
- * All group members are expected to contribute equal effort to the project. Please maintain a simple spreadsheet and update it weekly. Each team member can summarize the tasks done that week, hours for each, the members responsible for each week.

Academic conduct

You are expected to have read and understood the university's guides on Academic Conduct which is available from the LMS unit outline. In accordance with this policy, you may discuss with others the general principle required to understand this project, but the work you submit must be result of your own group's effort.

Project help

Please take time to read carefully this project description carefully. Post any requests for clarification on Teams so that all the students may remain equally informed. Further information may be provided as required during the project.

- In this project, some of the requirements might not be clear or complete, leaving room for uncertainty. Your job is to carefully go through these requirements, spot any missing pieces or unclear parts, and then refine them into a clearer set of requirements. As a team of requirements engineers, you'll use planned interviews with the right people to tackle these issues. These interviews will help you get the details straight, clear up any confusion, and make sure everyone understands what's needed for the project.

Enjoy the project!

Project Overview: personalized video recommendation system

You're tasked with developing a **Personalized Video Recommendation platform**. This platform will offer customized video suggestions based on user preferences and interests. Additionally, **users will have the ability to upload their own videos, fostering community engagement and creativity**. Your goal is to **create a seamless experience that keeps users coming back for more**, while seamlessly integrating user-generated content with personalized recommendations. Embrace the challenge of empowering users to contribute their own content and shape the platform's vibrant ecosystem.

Goals:

- (1) **Support efficiency and ease of use for users to discover videos they enjoy by providing personalized recommendations based on their interests and viewing history.**
- (2) Support users to **upload their videos** and **search** and **view** videos on the platform.
- (3) Promote **meaningful learning for user through access to legal and healthy resources.**

Users:

The potential **video viewers, creators, and administrators** (these individuals or teams are responsible for moderating and managing the content uploaded to the platform), etc.

Project tasks

Task 1 (10 marks):

- 1) Begin by **identifying stakeholders** within the proposed system. **Provide concise descriptions of each stakeholder's interest in the system.** Then, **create user stories based on these identified stakeholders (3 Marks).**
- 2) Transition to the requirement elicitation phase. Identify both **functional** and **non-functional requirements** for the platform/system **(7 Marks)**.

Task 2 (10 marks):

- 1) **Prepare a set of interview questions aimed at clarifying any unclear aspects** discovered during the initial phases (task 1). Note that, **your group should not try to cover the requirement for the whole system.** You should **focus on the requirements of your chosen stakeholder.** You will have 15-20 minutes to meet your stakeholder representative, ask questions, and record their answers, so make sure your questions can be asked and answered in this amount of time. The time is short, so it is important that you plan the interview. For each interview question, state the question, and also writ down the following **(5 marks)**:

- What project detail or requirement does this question aim to clarify?
- In what way is the original detail or requirement ambiguous, imprecise, contradictory, or in some other way lacking? If it is ambiguous, give examples of two different interpretations which could be placed on it.
- What are some of the possible answers you envisage to your question? How will you use them to make the project requirements more precise?

2) Proceed to conduct interviews with the stakeholders. You will need to record **(5 marks)**:

- Where and when the meeting was held
- Who was in the interview
- What answers were given to your question
- Any other information you obtained

These details should be included in your final report. (There is no page limit, but ensure that your documentation of the meetings clear, comprehensible, and satisfies the requirements above.)

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Now you basically have collected the information that you need. Let's move the requirement analysis phase.

Task 3 (10 marks):

- (1) Record a **traceability table** for major requirements you collected (including requirement identifier, potential component/subsystem that the requirements relates to, and the dependences between requirements) **(5 marks)**;
- (2) Sketch out a UML use case diagram for the whole system. This diagram should give an overview of how the platform or system will be used **(5 marks)**.

Task 4 (10 marks):

Now that you've gathered and sorted out the requirements, it's time to dig deeper by breaking them down into specific use cases.

Your goal is to come up with **five different use cases** involving **various actors**. Each use case should outline how the platform should function in both typical and alternative flow of events. These alternative events cover instances where users might face challenges diverging from the standard flow of events. For instance, consider how the platform should respond if users input keywords that aren't searchable. This approach ensures that the platform remains adaptable and user-friendly across different scenarios

Submission

One person should submit for the whole group. The group report should meet the following requirements:

- It should be in PDF format and use A4 size pages. It should clearly show the name and student number of each member of the group.
- The font for body text should be between 11 and 14 points. The report should contain numbered headings, with useful heading titles. Any diagrams, charts or tables used must be legible and large enough to read when printed. All pages (except possibly the cover, if you have one) should be numbered.
- If you give scholarly references (though you are not required to), you may use any standard citation style you wish, as long as it is consistent.