



Programme

Diploma in Software Development - 240 Credits
Bachelor in Software Engineering - 360 Credits
Year Two

Course

202 Cross-Platform Development
(Level 6, 15 Credits, Version 1)

Assessment 2

Research Proposal

Weighting within course:

75%

Objective

The purpose of this assessment is to help you practice proposing an innovative Research & Development (R&D) project focused on creating high-performing, cross-platform web apps. By considering project goals, target audiences, and available technologies for different operating systems, you will develop vital skills in collaborative teamwork, thorough research, and effective project proposal writing. This assessment aims to build your confidence in evaluating and selecting technical options through a combination of research, teamwork, and potential field reviews, while also enhancing communication skills and the ability to make informed decisions in dynamic professional environments.

Candidate's Assessment Instructions

- This assessment is an **open-book activity**, you can use your own course and review notes as well as offline or online resources, such as textbooks or online journals.
- Teams with high degrees of social sensitivity are known to perform well when executing several specialised collaborative activities. In relation to this, you need to collaborate with your peers to form a team of 2-3 people.
- You will each submit an identical piece of work separately for the work that requires collaboration
- You can always ask your tutor if you need further explanation about forming a group or if the instructions are unclear.
- The purpose of this assessment is to assess your knowledge. In the event Yoobee suspects collusion, this will be addressed. For more information on plagiarism, please refer to the Student Handbook.
- Marks and feedback will be returned within 15 days of the submission date.

Success Criteria

- You need to achieve 50% **or more** of the marks to pass this course.
- You are allowed a maximum of three attempts. The maximum percentage to be awarded on second and third assessment attempts is 50%.

Submission Instructions

Please submit a **single compressed/zip file containing the following files** via Blackboard, no later than the due date outlined for your class.

- Your team project proposal, including all team member names, student IDs, and course codes.
- Presentation file
- Individual reflection report from every team member

Learning Outcomes (LOs)

LO1: Integrate an understanding of academic practice and research methods to identify and investigate subjects of interest in relation to professional projects and directions.

LO2: Generate effective communication to share ideas and concepts and enhance professional practice.

LO3: Demonstrate understanding of how development in an area of personal expertise can be used to contribute to the execution of a team-based software project.

LO4: Integrate investigative findings to develop a coherent argument for a project proposal.

Assessment brief

As the head of the R&D department, you are responsible for generating and evaluating concepts for your company's upcoming project. The project involves developing a globally accessible web application through your online platform, offering real-time functionality. This application must deliver consistent performance across different browsers on both desktop computers and mobile devices, ensuring a uniform and exceptional user experience.

Assessment Tasks

Tasks

Write a detailed project proposal containing a production plan, your research output, and design prototypes.

Include sections in your proposal according to the headings and details below:

Title Page

- Course and assessment details: 202 Cross-Platform Development | Assessment 2- Research Proposal
- Your name

- Your student ID
- Class code

Product concept (including rationale)

This is a simple summary (250 to 500 words) of the product concept and a brief overview of the features provided by the product you are proposing. Answer questions about the product like:

- Product rationale
- Proposed features
- Programming framework/technology selected

Field review

If field review is being used, it will include the following:

- What is the existing system (if any) in place to meet the business objectives?
- What are the problems being faced by the users of the existing system (for example, in terms of UX/UI)?
- What are the features desirable by the existing users in an improved or new system?
- What are the proposed features of the new system (for example, improved UX/UI, online booking, payment system, voice user interface, accessibility options etc.)

In the context of creating a novel system that doesn't involve enhancing an existing one, you have the opportunity to develop an innovative concept. In this scenario, you can delve into case studies of analogous systems or draw inspiration from existing literature. Employing a comparison and contrast methodology, you can assess the merits of your proposed system against these comparable solutions within the relevant domain.

Production plan

This can include the following:

- Project duration and chosen project methodology (Agile, Waterfall, etc.)
- Project phases and work breakdown structure (WBS)
- Gantt chart (including milestones/project deliverables, dependencies etc)
- Communication plan
- Proposed roles (for example, if Scrum has been adopted, then you can talk about the roles of product owner, Scrum master, and developers).
- Project management tools (scheduling, version control, etc.)

References

You are encouraged to survey at least five relevant conference/journal articles in the proposed area of research/investigation and should summarize them in the research output section of the report. All the literature review performed should be properly referenced in APA Version 7 format.

Include a complete list of references used in the report at the end of the report under REFERENCES section.

Note: Please use EBSCO database provided by college. You can also use Google Scholar to find articles. Reference management systems like ReadCube, Zotero, EndNote, Mendeley can be used to organize all your references in one place. Additionally, MS Word's referencing features can be used to edit your references.

Research Output

This proposed research output will include (but is not limited to) the following:

- At least 5 relevant conference papers or journal articles should be summarized in this section and proper citations in APA Version 7 to the published work should be correctly provided.
- Three user personas for the proposed system.
- Use case diagrams and UML sequence diagrams.
- Mock-ups and digital Lo-Fi/Mid-Fi wireframes of the proposed UI (responsive webpages).
- Usability Testing of the Lo-Fi wireframes with at least five users.

Presentation

Present your team project proposal to your class. Cover each of the above headings. Presentations should be no longer than 15 minutes.

Individual Reflection

The individual reflection report should be submitted as a written document or a link to the personal blog and will include your thoughts about your contribution to the following:

- Investigation/research.
- UI prototyping.
- Team formation.
- Personal learning outcomes.

Marking Rubric

Criteria & Weighting		D Range D- D D+			C Range C- C C+			B Range B- B B+			A RANGE A- A A+		
Product concept (including rationale) (LO4)	10%	The required elements in the initial product concept have been described with ambiguity or NOT described at all.			The required elements in the initial product concept have been described but some details are missing			All the required elements in the initial product concept have been described with less clarity.			All the required elements in the initial product concept have been described correctly and with full clarity.		
Field review (LO2)	15%	All the required elements in the field review have been described with ambiguity or NOT described at all or no case study has been discussed.			All the required elements in the areas of investigation have been described but some details are missing, or one case study has been discussed but lacks details.			All the required elements in the field review have been described but with less clarity or one relevant case study has been described.			All the required elements in the field review have been fully described and with full clarity or two relevant case studies have been described.		
Production plan (including proposed roles and technologies to be used) (LO2, LO3)	25%	The required elements in the production plan have been described with ambiguity or NOT described at all.			The required elements in the production plan have been described but some details are missing.			All the required elements in the production plan have been described with less clarity.			All the required elements in the production plan have been described correctly and with full clarity.		
References (LO1)	5%	None of the references have been edited in the APA Version 7 format correctly.			Three references have been edited in the APA Version 7 format correctly.			Five references have been edited in the APA Version 7 format correctly.			All the references have been edited in the APA Version 7 format correctly.		
Research output (LO4)	25%	The required elements in the research output have been included, described with ambiguity or NOT described at all.			The required elements in the research output have been included, described but some details are missing.			All the required elements in the research output have been included, described but with less clarity.			All the required elements in the research output have been included, described correctly and with full clarity.		
Presentation pitch (LO2)	10%	All the required elements in the PowerPoint presentation have been included/described with ambiguity or are not included/described at all and the presentation is not completed in the allotted time.			All the required elements in the PowerPoint presentation have been included/described with some missing details and the presentation is completed in the allotted time.			All the required elements in the PowerPoint presentation have been included/described with less clarity and the presentation is completed in the allotted time.			All the required elements in the PowerPoint presentation have been included/described with clarity and the presentation is completed in the allotted time.		
Individual reflection (LO3)	10%	The required elements in the individual reflection have been described with ambiguity or NOT described at all.			The required elements in the individual reflection have been described but some details are missing.			All the required elements in the individual reflection have been described with less clarity.			All the required elements in the individual reflection have been described correctly and with full clarity.		