College of Engineering, Construction and Living Sciences
Bachelor of Information Technology
ID721001: Mobile Application Development
Level 7, Credits 15

Project

Assessment Overview

In this **individual** assessment, you will develop **two** mobile games using **Unity** and publish them to **Google Play Store** or **Apple App Store**. Also, you will provide documentation that addresses several aspects of the mobile game development process. In addition to the mobile games and documentation, you will present the mobile games and answer follow up questions via a video recording.

Learning Outcomes

At the successful completion of this course, learners will be able to:

1. Implement and publish complete, non-trivial, industry-standard mobile applications following sound architectural and code-quality standards.
2. Identify relevant use cases for a mobile computing scenario and incorporate them into an effective user experience design.
3. Follow industry standard software engineering practice in the design of mobile applications.

Assessments

Assessment	Weighting	Due Date	Learning Outcome
Practical	20%	13-11-2024 (Wednesday at 4.59 PM)	2, 3
Project	80%	13-11-2024 (Wednesday at 4.59 PM)	1, 2, 3

Conditions of Assessment

You will complete majority of this assessment during your learner-managed time. However, there will be time during class to discuss the requirements and your progress on this assessment. This assessment will need to be completed by **Wednesday, 13 November 2024** at **4.59 PM**.

Pass Criteria

This assessment is criterion-referenced (CRA) with a cumulative pass mark of **50%** over all assessments in **ID721001: Mobile Application Development**.

Authenticity

All parts of your submitted assessment **must** be completely your work. Do your best to complete this assessment without using an **AI generative tool**. You need to demonstrate to the course lecturer that you can meet the learning outcome for this assessment.

However, if you get stuck, you can use an **AI generative tool** to help you get unstuck, permitting you to acknowledge that you have used it. In the assessment's repository **README.md** file, please include what prompt(s) you provided to the **AI generative tool** and how you used the response(s) to help you with your work. It also applies to code snippets retrieved from **StackOverflow** and **GitHub**.

Failure to do this may result in a mark of **zero** for this assessment.

Policy on Submissions, Extensions, Resubmissions and Resits

The school's process concerning submissions, extensions, resubmissions and resits complies with **Otago Polytechnic** policies. Learners can view policies on the **Otago Polytechnic** website located at https://www.op.ac.nz/about-us/governance-and-management/policies.

Submission

You **must** submit all program files via **GitHub**. The latest program files in the **master** or **main** branch will be used to mark against the **Functionality** criterion. Please test your **master** or **main** branch application before you submit. Partial marks **will not** be given for incomplete functionality. Late submissions will incur a **10% penalty per day**, rolling over at **5:00 PM**.

Extensions

Familiarise yourself with the assessment due date. Extensions will **only** be granted if you are unable to complete the assessment by the due date because of **unforeseen circumstances outside your control**. The length of the extension granted will depend on the circumstances and **must** be negotiated with the course lecturer before the assessment due date. A medical certificate or support letter may be needed. Extensions will not be granted on the due date and for poor time management or pressure of other assessments.

Resits

Resits and reassessments **are not** applicable in **ID721001: Mobile Application Development**.

Instructions

You will need to submit a mobile games and documentation that meet the following requirements:

Functionality - Learning Outcomes 1, 2, 3 (60%)

- The mobile games needs to run without code or file structure modification in **Unity**.
- Playable on a variety of mobile devices, i.e., devices with different screen sizes.
- Free of bugs that significantly affect the playability.
- The mobile games are published to **Google Play Store** or **Apple App Store**.To published to **Google Play Store** or **Apple App Store**, you will need an account. The account's credentials will be privately given to you on **Microsoft Teams**. **Do not** disable any applications published on this account.
- Ability to download the mobile games from **Google Play Store** or **Apple App Store** on to a variety of mobile devices.

Documentation - Learning Outcomes 2, 3 (20%)

For each game, in a **Microsoft Word** document, explain the following:

- Core concept.
- Inspiration games.
- Design pillars.
- Main features and mechanics.
- Target platform and audience.
- Interface and controls.
- Basic story.
- Visual style.
- Initial design sketches. These can be hand-drawn or created using a design tool.
- Audio style.
- Known issues and bugs.
- Future improvements.
- A URL to the games on **Google Play Store** or **Apple App Store**.
- A URL to your presentation on your **Microsoft OneDrive**.

Presentation - Learning Outcome 3 (15%)

- Present the mobile games via a video recording. In addition, you need to answer the following:
  - How did you plan and prioritise features throughout the development process?
  - What tools and technologies did you utilise to streamline your development workflow?
  - How did you handle potential challenges, such as time management and motivation?
  - What strategies did you employ to maintain code quality and avoid technical debt during the development process?
  - How did you handle testing and debugging of the mobile games?

Git Usage - Learning Outcome 3 (5%)

- A **GitHub** project board or issues to help you organise and prioritise your development work. The course lecturer needs to see consistent use of the **GitHub** project board or issues for the duration of the assessment.
- Your **Git commit messages** should:
  - Reflect the context of each functional requirement change.
  - Be formatted using an appropriate naming convention style.

Additional Information

- **Do not** rewrite your **Git** history. It is important that the course lecturer can see how you worked on your assessment over time.
- You need to show the course lecturer the initial **GitHub** project board or issues before you start your development work. Following this, you need to show the course lecturer your **GitHub** project board or issues at the end of each week.