

College of Engineering, Construction and Living Sciences Bachelor of Information Technology ID737001: Game Development Level 7, Credits 15 Assignment

Assessment Overview

In this assessment, you will:

- Form a **group of Bachelor of IT and Bachelor of Design** learners to design and develop a game using a game engine of your choice. In addition, marks will be allocated for code quality and best practices, documentation and Git usage.
- Produce a report covering what you learned from attending a game development meetup.

Learning Outcome

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

1. Design and develop a game using industry standard tools, technologies and practices.

Assessments

Assessment	Weighting	Due Date	Learning Outcome
Assignment	30%	Monday 9th June at 7.59 AM	1
Project: Game Development + Demo	70%	Monday 9th June at 7.59 AM	1

Conditions of Assessment

You will complete 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 **Monday, 9 June 2025** at **7.59 AM**.

Pass Criteria

This assessment is criterion-referenced (CRA) with a cumulative pass mark of **50**% over all assessments in **ID737001: Game Development**.

Authenticity

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

Learning to use AI tool is an important skill. While AI tools are powerful, you must be aware of the following:

- If you provide an AI tool with a prompt that is not refined enough, it may generate a not-so-useful response
- Do not trust the Al tool's responses blindly. You **must** still use your judgement and may need to do additional research to determine if the response is correct
- Acknowledge what AI tool you have used. In the assessment's repository README.md file, please include
 what prompt(s) you provided to the AI 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 application files via **GitHub**. Create a repository and add the course lecturer as a collaborator. Late submissions will incur a **10% penalty per day**, rolling over at **8:00 AM**.

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 for poor time management or pressure of other assessments.

Resits

Resits and reassessments are not applicable in ID737001: Game Development.

Instructions

Project - Technical and Professional Proficiency (Individual and Group) - Learning Outcome 1 (50%)

- · Group:
 - The game needs to open without code or file structure modification in the chosen game engine.
 - Gather requirements and deconstruct them into user stories.
 - Design and develop a game using the chosen game engine that meets the requirements.
 - Demo the game on itch.io.

· Individual:

- Contribute a meaningful amount of code to the game. This will be judged by the number of Git commits and the number of lines of code contributed.
- Perform the following for each feature that is merged into the main branch of the GitHub repository:
 - * Code review another team member's code.
 - * Play test the feature and provide feedback to the team member.

This needs to be documented in the **GitHub** issue that the feature is associated with.

 Communicate with team members. This should be through Microsoft Teams. If you wish to use another communication tool, you need to get approval from the course lecturer. Provide screenshots of your communication in the GitHub repository.

Project - Code Quality and Best Practices (Individual) - Learning Outcome 1 (20%)

- Appropriate naming of files, variables, methods and classes.
- · Idiomatic use of the programming language and game engine.
- · Efficient algorithmic approach.
- Sufficient modularity considering the **SOLID principles** and **design patterns**.
- Each file has a **comment** located at the top of the file. The comment should explain the purpose of the file and the author.
- · Formatted code.
- · No dead or unused code.

Project - Git Usage (Individual and Group) - Learning Outcome 1 (10%)

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

Project - Documentation (Group) - Learning Outcome 1 (10%)

- · Attend and participate in group meetings with Bachelor of IT and Bachelor of Design learners.
- For each meeting, record meeting notes. Each member of the group must take turns recording meeting notes.
- In a Microsoft Word document, explain the following:
 - Date and time of the meeting.
 - Who attended the meeting.
 - Main focus of the meeting.
 - Discussion points including decisions made and ideas shared.
 - Tasks assigned to each group member including deadlines if applicable.
 - Follow-up actions or questions that need to be addressed in future meetings.

Game Development Meetup Report (Individual) - Learning Outcome 1 (10%)

- Attend a game development meetup and in a Microsoft Word document, write a report covering the following:
 - Who were the speakers at the meetup and what were their roles?
 - Did you learn anything about game development that the Game Development pathway has not covered?
 - What surprised you the most about the meetup?
 - Did anything challenge your existing assumptions about game development?
 - How did the meetup compare to your expectations?
 - Were there any roles or career paths discussed that you had not considered before?
 - Has this experience influenced your short-term or long-term career goals?
 - How did it feel talking to other game developers, whether professionals or learners/students?
 - Did you ask any questions at the meetup? If not, what stopped you? What would you ask if you could go back?
 - Would you attend another game development meetup? Why or why not?
- · Word guideline: 1000 words.
- · Ensure correct spelling and grammar.
- Use APA 7th edition for references and in-line citations.

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.