CMP112 Introduction to Game Development Assessment Brief

Abertay University – Faculty of Design Informatics and Business

# Learning Outcomes

1. Communicate the core ideas of game development in a professional manner.
2. Confidently break down game engineering problems using problem-solving techniques.
3. Use modern game development tools to build robust and efficient video game prototypes.

# Introduction

For this coursework submission, you are expected to demonstrate your understanding of core game development principles and problem-solving skills through the creation of small game prototypes and supporting documentation.

You will work with others for Unit 1 and individually for Unit 2.

# Unit 1 – Group Project

## 30% of overall grade

You are to build a small game prototype using the Unity engine alongside your assigned partner. Each individual is expected to clearly demonstrate their contributions to the work. In the event that there is a clear imbalance in the work put in by team members, we may decide to grade students individually – this will be clearly communicated.

If there are any issues with the team dynamic, you should contact a module tutor as soon as possible.

### Requirements

The game must meet *all* the requirements below to achieve a passing grade.

* Make use of Version Control for collaboration
* Scripting in C#
* User input through keyboard or controller
* At least one object that the player has control over
* At least two objects that can interact with each other
  + One of these might be the player-controlled object
* At least one object that is primarily driven through the physics system (2D or 3D)
  + This may also be the player-controlled object
* At least one imported asset
* The game is built to an executable that runs on lab PCs You must also submit a short document that outlines:
* How to play the game
* A link to the public repository
* A list of features and scripts each student is responsible for developing (Follow excel spreadsheet template on MLS)
* A statement on any assets or code that is not the work of the student team
* A statement on AI usage
* A short statement from each student (max. 300 words) about an interesting problem they solved, or an interesting solution they devised, as part of their work.

Credit is awarded for work beyond the requirements.

Credit is *not* awarded for game design or for the game being “fun”.

Please see the attached rubric for specific grading criteria.

### Example work

* A Super Monkey Ball style game where the player rolls a ball around a scene to collect items and reach a goal.
* An Angry Birds style game where the player launches physics objects to destroy buildings.
* A Shoot-Em-Up that uses physics to control projectiles

As long as it meets the requirements above you are free to be creative with the work.

### Submission

Your team will submit one .zip file which contains all of the evidence listed below in the format that is listed below. Failure to follow the instructions will impact your assessment.

The .zip file should be named CMP112\_U1\_TeamX.zip where ‘X’ is your team number. For example: CMP112\_U1\_Team13.zip.

You submission folder should have the following folder structure: Build

This folder should contain a working executable (.exe) version of your game. Please test this.

Project

This folder should contain all of the project files necessary to open your game in the Unity Editor. Please delete the “Library” folder as it massively increases the size of the project and is not required.

Documentation

This folder should contain your supporting documentation in .docx (Word) or .pdf (Adobe) format.

Contributions Sheet (from template on MLS)

Please fill in the contributions sheet as outlined on MLS explaining the tasks conducted and work distribution.

Video

This folder should contain a short video (*maximum* 1 minute) the shows your executable working. It does not require any sort of narration.

### Deadline

The group project is to be submitted in Week 9.

The submission deadline is Wednesday November 12th 2025 at 12 noon.

# Use of Generative AI in CMP112

The use Generative AI is heavily discouraged for your CMP112 assessment. We are assessing you on your understanding of core game development concepts and on your ability to solve the problems that arise during development *without* Generative AI.

Explicit use of Generative AI at any point in this process undermines the learning that you are here to do. This includes code generation tools such as GitHub Copilot.

This is certainly case for the documentation and critical reflection tasks. We expect you to evidence your understanding of your own project and to effectively communicate what you have learned.

We are not interested in reading something that you did not write. You may use Generative AI to:

* Understand concepts or questions related to the work you are undertaking (though it is recommended that you speak to module staff or your peers instead)
* Specific tools, such as Grammarly, are acceptable but they should be referenced as you would with any tool.

Any evidence of use outside of the above will be referred to the Student Disciplinary Officer within the Faculty and may results in Academic Misconduct charge.