

This project is the main assessment of this subject. It is worth **50%** of your total assessment. You are required to choose a game of interest that you will design and implement over the whole semester. All work is to be completed individually. If parts or all of the source code you submit *is not your own work*, you will receive **ZERO**.

The project is divided in two parts: Design and Implementation.

Part 1. Design

This first part is worth **20%** of your total assessment. It is designed to evaluate your understanding in programming using standard algorithms and user defined data structure. First, you need to choose a game of interest that you will develop throughout this course.

What to submit

A design document that outline

- Introduction about your game, including
 - A main objective
 - A reward for fulfilling the objective
 - A consequence for failing the objective
 - A challenge for the player(s)
 - etc.
- Why do you want to develop this game?
- How to play your game?
- GUI: how will your game look like?
 - Welcome screen
 - Instruction screen
 - Main game screen
 - Result screen
 - etc.
- A list of C++ classes for your game (including variables and functions' names and description)
- Class diagrams, sequence diagrams, and collaboration diagrams are optional for bonus marks.
- Schedule/Plan/Milestones on completing your game by the end of the semester

When is due

Week 6, late penalty would be applied refer to AIT late submission policy.

Submission

Submit your document in Jivi using the following **STRICT** filename convention and in **PDF** format.

StudentNumber_FirstName_LastName_Assessment1.pdf

Example: 1234_John_Doe_Assessment1.pdf

Part 2. Implementation

This second part is worth **30%** of your total assessment. You are required to develop the game designed in part 1. Students are expected to have their console game application fully function and ready to run.

What to submit

1. Your source code and project files that met the following requirements
 - Developed in C++
 - Source code is properly indented and formatted
 - You can use any editors, but Microsoft Visual C++ is preferable
 - Classes and other C++ features (inheritance, polymorphism, pointers, dynamic memory allocation, etc.) are appropriately used
2. Test plan and test script.

When is due

Week 12, late penalty would be applied refer to AIT late submission policy.

Submission

Submit your project in Jivi using the following **STRICT** filename convention and in **ZIP** format.

StudentNumber_FirstName_LastName_Assessment2.zip

Example: 1234_John_Doe_Assessment2.zip