

# COMP220 WORKSHEET A: PROJECT FRAMEWORK

Version 1.0  
BSc Computing for Games  
COMPXXX

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## Introduction

In this worksheet you have to develop a Framework that can be used as basis to build a game or demo. This framework should use OpenGL, GLEW and SDL2.

To complete this worksheet, build an application which implements the following:

- (a) **Initialise** SDL2
- (b) **Create** a Window which can be configure with different sizes, titles and can be toggle to full screen
- (c) **Create** an OpenGL Renderrer
- (d) **Initialises** GLEW
- (e) **Runs** a Game Loop
- (f) **Exits** when **escape** is pressed on the keyboard
- (g) **Cleans up** all resources when application exits

## Submission instructions

Begin by **forking** the GitHub repository at the following URL:

<https://github.com/Falmouth-Games-Academy/comp220-worksheetA>

You should complete a pull request before the hand-in on Friday by 5pm on Week 4. Feedback will be given in the pull request and in class.

## Marking criteria

Remember that **it is better to submit incomplete work than to submit nothing at all**. If you do not manage to finish all assigned task, then you can complete this before the submission of Worksheet B

To demonstrate **basic competency**, complete the following:

- Initialisation of SDL2
- Create of a basic Window
- Cleanup after exit

To demonstrate **basic proficiency**, complete the following:

- Achieve **basic competency**
- Initialisation of OpenGL
- Initialisation of GLEW

To demonstrate **novice competency**, complete the following:

- Achieve **basic proficiency**
- Implement Game Loop

To demonstrate **novice proficiency**, complete the following:

- Achieve **novice competency**
- Application exits when key is pressed
- Some evidence of software design
- Some evidence of reusability (functions, classes, inheritance)

To demonstrate **professional competency**, complete the following:

- Achieve **novice proficiency**
- Evidence of good software design (unit tests, static code analysis)
- Evidence of reusability (Framework is compiled into a library and can be reused)