

**3rd Year Project Proposal**

**Programme:**

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| **Student Name:** | **Student Number** |
| Adam Sheedy | K00266925 |
| Luke Courtney | K00267879 |
| Ishka Yao | K00270402 |
| Cillian Murphy | K00271399 |

**Working Title:** Submarine Mayhem

**Description:**

We aim to create a game in which you control a small submarine. You can pilot the submarine through a long underwater cave in which you will encounter hostile enemy submarines. When defeated, the enemy submarines will drop powerups and upgrades. These can be used to make your own sub more powerful, and allow you to fight of the increasingly difficult enemies.

Your submarine will initially have a small cannon that deals little damage, will have a weak hull, and will not be particularly manoeuvrable. By collecting powerups and upgrades from defeated enemies you can steadily progress to become significantly more powerful. This is in fitting with the project theme of “Start from nothing”.

As you progress, your limited oxygen supply will decrease. When it hits zero, you will lose. To prevent this from happening, you can collect oxygen in the form of oxygen tanks from fallen enemies, and find oxygen sources in the environment. This will encourage the player to keep moving forward in search of more oxygen, as if they were to remain in one place for an extended period of time, they would run out.

**Reasons for selecting project:**

We found the concept to be an interesting idea to build a game around. We believe that it will build off of previous projects such as the Zombie game and Thomas was Late that we have covered in previous modules. It will test our knowledge in C++ and SFML, and allow us to further develop skills that we gained in the past. Many parts of the game incorporate elements from other projects studied, which will help us greatly when creating these elements in our own game.

**Proposed research content: -** Further C++ and SFML research

-Games with similar concepts, including endless runners and Subnautica

**External links (if applicable):** NA

**Hardware requirements:** PC

**Software requirements**: SFML, C++

**Other requirements**: NA

**Signed**: Adam Sheedy, Luke Courtney, Ishka Yao, Cillian Murphy

**Date**: 19/09/2023

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Approved/Not Approved: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reasons for not approving project: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Conditions attached to approving project: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of supervisor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_