**“U-Boat”**

Overview

Since the application is incomplete, here is what the game was meant to become;

U-Boat is a game about piloting a submarine in wartime. Upon beginning the game, the player is shown a map screen, where the player can move around the map, and “intercept” other enemy ships. Upon intercepting an enemy ship, the player is then shown a targeting screen, where the player must look for, and sink the enemy ship, using a limited amount of torpedoes. Upon sinking the ship, the player is then awarded a point, and returns to the map screen. If the player fails to sink the ship (by running out of torpedoes), the game returns to the map screen, and continues until the player sinks a sufficient amount of ships

Application Design

The above application can be shown using the following state machine diagram;

Collide w/ ship gameObject

Press **start**

Press **any button**

FrontEnd (Main Menu)

Ship sunk (add 1 to shipsSunk)

GameState1 (Map Screen)

GameState2 (Targeting Screen)

Press **start**

Win Screen

Sufficient Ships sank

Ship got away

Press **start**

Please note that in addition to this, pressing **select** at any time, other than when in the main menu, shows a pause screen, and pauses the game.

Techniques used

An enumerated type was used to control the gamestate, which allowed the use of switch statements to control which state the game was in. This also allowed the calling of states, from other states, further allowing the appropriate funtions to be called when changing states.

User Guide

When the Game opens, you will be presented with the frontend screen. Use the following guide to go from there.

*FrontEnd;*

Press **cross** or **start** to go to map screen.

*Map;*

Press **square** to go to *targeting* screen

Press **start** to back to *frontend.*

*Targeting;*

Press **cross** to return to *map* screen

Press **start** to return to *Frontend*