## Point and click project

# Joe Place 991717262

The player will control a ship that will follow the mouse and go about collecting coins and avoiding rocks

This navigation will happen with the player dragging the mouse around the screen controlling the ship.

The game will feature a title gameplay and game over screen

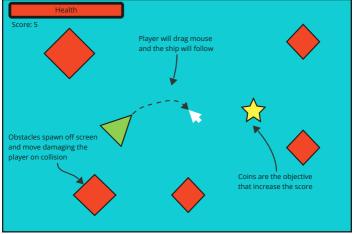
#### **Functionality**

The player object will move behind the mouse at a distance constantly

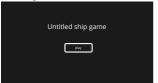
The player will be able to dash increasing there movement and changing their appearance. The coin will increase the player score which will be displayed to the HUD.

The obstacles will spawn off screen and slowly move across the screen damaging the player

### Gameplay scene



#### Starting screen



#### Game Over screen



### Player Object/Ship

The player object will be a kinematic rigid body with colliders to detect what it collides with

The player will have health that is reduced by obstacles

The player will have an animation clip for being destroyed and damaged

The movement of the player will be handled in **fixedUpdate()** where the equation **Atan2()** will take the mouse position and the ships position and get the angle between the two points using trigonometry. The ship will then rotate towards it and move its position closer towards it.

The player will have to be able to record the mouses position at all times and constantly update. This can be handled in an array of **Vector2** using the position retrieved with **Camera.main.ScreenToWorldPoint()**; which will then be added to the list.

The list will need a threshold of when to retrieve a new position to have a delay between its positions. This can be used by the **Distance()** function between the previous recorded position and the mouses current position

The player will have its own take damage function and detect if it has contacted a game object with the tag "Obstacle"

If it collides with the coin object it will call the coins function to increase the score and destroy the coin.

Players movement ability.

When the player presses the mouse key there speed will increase as well as change color using Lerp and an animation curve to add juice to the experience