Lab

* How the shape of each of elements in the game are drawn

Using the draw function

* How the player turns

Using the left and right arrows the player rotates.

Get\_axis turn\_right\_input

* How the player moves

Using the up and down arrows to move forward and backwards

Get\_axis forward\_input

Transform.y is used to find the direction the player is facing

* How to modify the attributes of the player and create new ones if needed

You can modify things about the player in the inspector.

You can ass more attributes by cretaing variables in the script

* What happens if the player crashes into a ufo

Using an if statement, if the player crashes into a ufo –1 is taken from the players lives.

An explosion is instantiated and +1 is added to the ufo count and the ufo is deleted.

* How the colors are assigned

Using a variable of the color.hsv and it is chosen at random

* How to adjust the firing rate of the player and how would you do this in code

The speed is set as a variable in the bullet script, changing this should change the velocity

velocity = -transform.y \* speed is how the volocity of the bullet is calulated.

* What determines the positions of the ufo's

An if statement using variables determines the positions of the ufos.

There is a different amount of ufos each level

* How would you change the ranges?

You can change the range using the inspector tab on the ufo spawner script.

You can also change the variables in the script

* How is the ufo color calculated

Using the line of code: var color = Color.from\_hsv(randf(), 1, 1, 0.9)

This randomly choses a colour off the hsv for the ufo.

The colour is then assigned in the spawn func with the line

ufo.color = color

* What is the firing sequence of a ufo?

I think it susing the tween?

* How do the UFO and the player appear. Can you improve this?

The player and ufo appear using the draw() func

Class notes

Rules-

Shoot all the enemies without running out of ammo

Dont touch off the enemies or youll lose a life

To move you use the up and down arrow keys to move, the left and right arrows to turn and the spacebar to shoot.

Whatever direction the player is facing is forward

Character body 2d – something that can be controlled by code (bullets, character)

Move and slide + velocity

Move and collide

Collision shape – any shape

Timer – used for repeated things using timeout signal

Camera 2d – allows lerp

Audio player

Marker 2D – marks place with crosshairs (like for bullets)

Canvas – holds the ui and it wont move around