Final Exam

Name	Student number	Role	Contribution	Date and Signature
Evrett Upshall	100784071	Programmer	100%	04/25/2022 Evrett Upshall
	Total		100%	

1 is odd and not prime

Odd

Developer deliverables

Basics

- Character Movement
    - The movement was added by altering the jump behaviour to include movement and then changing the ship move behaviour to work for the enemy moving forward and backwards, this component does not work properly and only sends the enemy forward. The lose and win condition pops up on the console saying if the player loses by hitting the ship or if the player wins by hitting the trigger that is behind the ship, only the win condition appears on the console screen. I chose this because it fits the best for the scene and was easy to implement. All of it was implemented by Evrett Upshall
- Lighting
    - The material I used was the monkey material created by sage in the tutorials. The toggle for the lighting was created by adding a new window to the GUI which controls the lights. Only diffuse and specular are working as ambient does not work. This was implemented so the lighting has more control and can be changed if the player finds the game too bright or dark. All of it was implemented by Evrett Upshall.
- Texture
    - The texture used is the toon texture on the enemy (ship). This shader was chosen since the game is Mario 2 it having a toon shader made sense and fit the theme of the scene. All of it was implemented by Evrett upshall

Post-Processing effects

- Pixelation Effect

- The pixelation effect was implemented by creating a new glsl file that takes in the uv's and then scales with the size and amount of pixels chosen by the player. I added the glsl file in the post-processing effects and created a new .cpp and .h called pixelation effect. The effect is edited in the GIU window for post-processing effects. This effect was chosen because Mario 2 is an old game with very pixel graphics so making the scene pixelized made sense and fit the theme. All of it was implemented by Evrett Upshall.

Shadows

- Shadow caster
  - The shadows are created by the shadow caster created by sage in the tutorials. How it works is it takes the lighting and creates a shadow camera at the position of the shadow caster. It then sets the projection of the shadows by using the perspective of the shadow caster and in radians of how the shadows will look. The shadows were implemented to make the scene look better as Mario 2 was a 2D game and the scene is in 3D so adding shadows makes sense and creates the idea of the sun in the distance. All of it was implemented by Evrett Upshall

Particles

- Particles at the end
  - Particles show where the end of the scene is (the trigger). The particles are created by making a new object called smoke particles in the scene at the location of the trigger. The smoke particles are implemented to show the player where the end of the scene is or where the goal is. Having smoke particles makes it clear where the player needs to get. All of it was implemented by Evrett Upshall