

For the practical portion of my final I had to recreate pac-man and make it visually appealing using shaders from the course. I started by blocking out the map from the original game. For this example I had to use a hologram shader and a scrolling texture shader. I decided to use the hologram shader for the ghosts. In the original game each one has a different "personality" and manner of attacking the player. I wanted these different personalities to be reflected in the shaders so I started by making separate materials for each ghost, applying the hologram shader to each then recolouring them to match the colours of each respective ghost. I then changed the line speed, and intensity so each ghost had a different hologram pattern. Lastly to make them pop more against the background I raised the rim intensity. Next I decided to use the scrolling texture for the background, the original game's background is a plain black texture which is great for visibility but isn't super visually interesting. I started by making my two different textures. I wanted to keep the feel of the original map which uses blue to outline the walls, so for my background pattern I used dark blues and purples in a square pattern to maintain the feel of the original maze. The different textures scrolling at different speeds makes the background feel very unique and visually interesting.

Implementation Diagram



Initial Idea concepting	Asset creation	Texture implementation	Applying textures to shader	Implementing shader
Coming up with a desired effect then planning how to achieve said effect with two scrolling textures	I used a pixel art creation software (Aseprite) to create my two textures, making sure the top one is transparent outside of where my pattern is	I exported both textures as PNGs of the same size and imported them into my project.	I add the textures to the shoulder making sure to put them in the correct orientation and ensuring transparency for the top texture is working correctly	I then add the shader to a material then add the material to my background plane.

Next I had to implement two different shaders from the course. For this I added transparency so I could give the illusion of floating cherries and extra life sprites. Then I added a rim light to the player to make them pop against the background more. Lastly I implemented the outline shader used in my final project, I changed the colour from black to blue and applied it to the walls to mimic the blue outlines of the walls in the original game.