

Yaksh Goyani

I am the exclusive creator of these projects. While the audio and sprite assets were provided in the coursework, my individual contributions encompassed testing, the design and implementation of the graphical user interface, the development of the game's internal logic, and scripting.

Here is the link to my portfolio where you can find links to these playable games on a browser:

<https://yakshg.github.io/port-gotilo/>

Games

Merlin's Demon War

In this game, I programmed the cards, made a game controller script to handle the scene transitions, imported the assets and visuals, designed a graphical user interface within the canvas, added attack, defense, and sound effects, and toyed with the animator to generate animation. In order to properly time the card dealing, coroutines were included.

Tiler50

I made the levels using Unity's tilemap system, and I managed the sprites' interactions via composite colliders. The levels were made rapidly with rule tiles. Using the supplied components, I then made animations, animation states, and transitions. Moreover, to follow the player and periodically zoom in and out, a cinemachine state-driven camera was used. I adjusted the physics to provide the player with a seamless experience. I designed levels and an exit gateway to another level once the game was functioning as it should have. The gaming session controller script was responsible for this. I included monsters and traps to challenge the player, as well as coins as rewards, to achieve a higher score.

The Return

First, I made a graphical user interface with two panels to show the messages and an input field for player input. For each action, a distinct script and a scriptable object were made. Player input is handled by the game controller script. Additionally, player and location scripts were written. The tricky element was scripting the interaction between the player and the items.

Snake Game

This game was first created for mobile devices. I designed a gaming controller to manage the length of the snake and the score. I then configured the smartphone and made swipe controls so I could examine them. I added the snake's head, then I developed a script for

the body and tail to follow the head and grow with each meal. For extra challenge, some random spikes were added. Colliders are added, along with a GUI for the score and sound effects.

whiz-Quiz

The entire foundation of this game is the GUI. It features sliders, buttons, text, and a canvas. One scene was created for loading the game, and the other was created for gameplay. The questions and answers are stored in lists and arrays. To finish the timer picture in a predetermined amount of time, a timer fill fraction is used. A score text is used to keep a track of correct answers.

Laser Defender

Initially, the scenes were made. The boundaries were established. In the game, certain spots have been chosen where the enemies will appear and follow that certain course. The introduction of coroutines was intended to time the appearance of new enemy waves. I introduced laser sprites as bullets. When a bullet strikes any ship, particle effects are applied, and screen shaking is achieved by arranging the camera in an extremely constrained region at random. The player was then given the impression of advancing ahead by having the backdrop sprites slide over one another. Scenes are overseen by the level manager. To show health, a slider and score text is utilized. The sound effects were added.

Snow Slip

I moved the player over the surface using the surface effector. Particle effect triggers, cinemachine follow-cameras, and edge colliders are used in this game.

Solar System

I was originally introduced to Unity3D through this project. I put the spheres in place and used the transform component to spin them around one another. I added a couple random comets that fly by. I then applied the textures and materials to the spheres. One of the fundamental mechanisms was to focus the camera on the sphere clicked. I used Skybox as the environment.

Art

Troy

This is a 3D model that was rendered in Blender. I textured it with different solid colored images and applied an image created in Krita as the face. This model was then imported in Unity and lights were added.

Doggo

This image was an introductory project to Krita in which I used brushes and interface, masks and selection, transform and text.