Nil Silva - 113836 - LECI

Escape Room

Introduction

For my project in the Introduction to Computer Graphics course, I am developing a **3D Escape Room** using **Three.js**. This interactive application will allow users to explore a closed environment, solve puzzles, and unlock a door to escape. The project uses **3D modeling, animation, lighting, textures, and user interaction** via keyboard and mouse.

Objectives

The **main objective** of this project is to create an engaging storyline for users to follow in order to solve the room mystery and open the door. To achieve this, it's essential to allow interactions between the player and various objects, such as doors, drawers, keys and more.
To accomplish this goal, I have planned several features and elements:

- **Creation of two rooms**: One will be the lobby, where players will receive a quick briefing about the game, and the other will be the main room that the player must escape from.
- **Object interaction at the lobby:** The player will be able to pick up a flashlight and open a door to get into the main room.
- **Atmospheric lighting:** The inclusion of strategically placed lights will help create a mysterious and immersive atmosphere.
- **Engaging storyline:** Plan a game narrative that makes sense.
- **Interactivity:** Enable interaction with keyboard and mouse.
- **First-person experience:** Adjust camera to simulate an immersive first-person experience, focusing on the exploration of the environment.

Currently implemented

Initially, I immediately implemented camera adjustments for a first-person view, as well as player movement and interaction using the keyboard and mouse. Both rooms have already been created, and a connection between them is established. The player must interact with a door to move from one room to the other. Once the player passes through this door, it remains locked, preventing them from returning to the lobby.
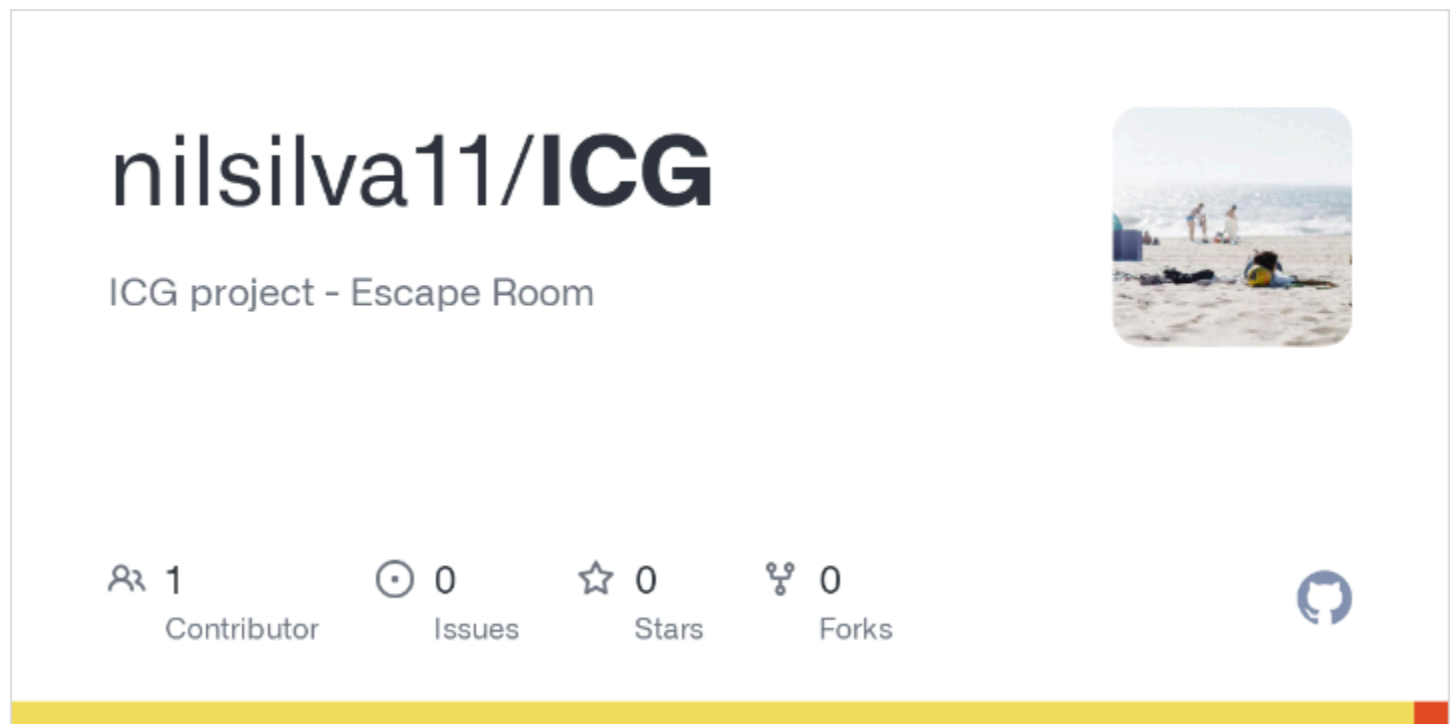
Additionally, the lobby room has been fully completed. It now contains game information and interactions between the player and objects, such as the flashlight. The flashlight is programmed with functionality to be turned on and off (pressing a keyboard key), along with its corresponding light.

Moving to the main room, strategic lighting has been implemented, and the exit door for this room has been added.

Future work

For future work, the next steps would involve adding more objects and interactions. However, the main focus will be on creating a coherent storyline that allows the player to discover the necessary code to open the door. This storyline will be designed in a way that makes sense within the context of the game, ensuring an engaging and logical progression for the player.

Github

https://github.com/nilsilva11/ICG