FINAL PROJECT REPORT

COSC 729

Project Title: Shooty Shoot

(Tunde Ayodele & Tolulope Oshuntoye)

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GOALS AND OBJECTIVES

The name of the project is shooty shoot, this is a first-person shooter game, the game shows concepts learnt in class can be incorporated to produce a game. They include: model designs from sketch up to first person controller, health bar, weapon system, level upgrade, importing audio as well as scripting and adding interactivity.

The game has levels, Enemy systems as well as a weapon system, the player of the game can pick up weapons as he progresses in the game, the health system is also for the player to upgrade his health as he loses health in the course of battle.

The Environment for the game is simulation of a mall environment. The objective of this project is to clearly show the concepts learnt in class:

- Modeling
- First person controller concept
- Health system
- Interactivity

- UI system
- Model importing

MODELING

The models used in the game were imported from Google SketchUp, which is a tool for modeling 3d Environments. This Environment is a simple simulation of a mall. The application the First person shooter can move around the Environment, as the first person comes to a few meters to the enemy, there is a trigger which causes the enemy to start running towards the shooter, the shooter will have to shoot certain number of bullets before the enemy is killed.

FIg 1. Showing the the user interface

Fig 1.1 showing the Skybox, and back side of the building

Fig 1.3 The Enemy

Fih 1.4 Acloser View of the building

Fig 1.5 The Ammo and health system

Fig 1.6

Fig 1.7

Fig 1.8 showing the Ambulances

Sounds

There is an implementation of Audio which was a concept learnt in class. This is heard during the course of the game, also the sound of gun shots

Animation

Animations were also implemented in the game, there is a floating gun, and moving Avatars.

Sensor

There is a simple simulation of a sensor system, when the shooter gets a certain distance close to the enemy, the enemy senses the presence of the shooter and invariably moves towards the shooter.

Unity Functionality

There is a health system which indicates the health level of the first-person shooter, as the total health is 50%, as it gets to 0% the first-person shooter dies.

Implementation Plan

The models were built by Tolulope Oshuntoye using google SketchUp, while the c# script was implemented by Tunde Ayodele

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Usage

The entire built can be used to shot simple animations as well as show introduction to concepts in virtual reality and it apps

Challenges

One of the problems encountered was getting the right Environment to simulate the mall

Shortcomings

The game has some shortcoming which I believe can be overcome, the avatar can be improved, also the environment. Furthermore, the Ambulance system can also be improved upon

Recommendations

Adding An Avatar as the first person shooter, also creating multiple scenes

SOFTWARE TOOLS

Unity Game Engine

Google Sketchup

Unity Asset Store

Windows 11.

REFERENCES:

https://sharadonly.github.io/3DGalleryAssets.zip

https://sharadonly.github.io/vrlab/Projects2021.html