The Survivors

A Multiplayer Game using Artificial Intelligence

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Introduction

The Survivors is a 3D virtual environment game in which single or multiple players will fight/survive using weapons (eg. guns) against a random number of artificially intelligent enemy bots until either all bots are eliminated or all players are eliminated.

Video Game Development Phase

How Games Are Made? Tools Developing Designing (2d)(3d)Engines Programming Gimp Blender Autodesk Maya Photoshop

Why Unreal Engine?

Unreal Engine is a complete suite of development tools for anyone working with real-time technology. From design visualizations and cinematic experiences to high-quality games across PC, console, mobile, VR, and AR, Unreal Engine gives you everything you need to start, ship, grow, and stand out from the crowd.

- Cross-platform support
- Written in C++
- Open Source
- Great graphics system

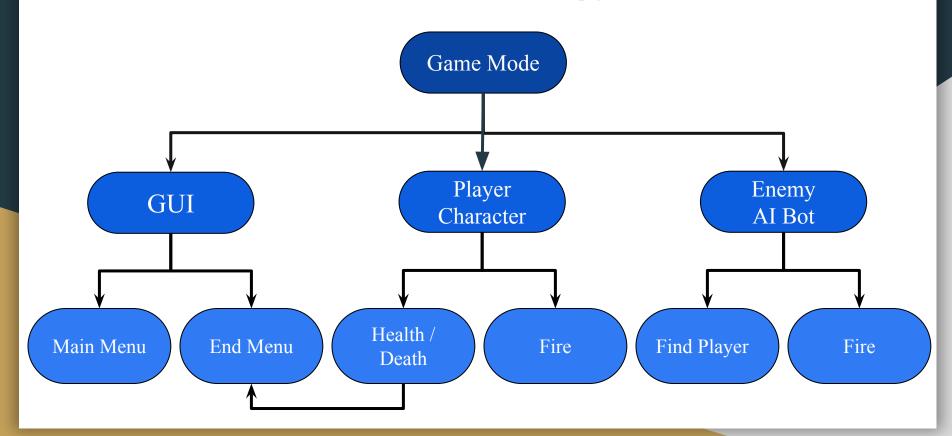
Why We Chose Game?

- ❖ We chose this topic since we already worked on a game in our Minor Project. We also did our 6 Months industrial training in game design and development. The Survivors will be multiplayer and will implement Artificial Intelligence since these are the latest trending technologies.
- Playing game is also very beneficial for a player
 - It can help you focus.
 - > It improves short-term memory.
 - > It improves on-the-spot thinking.
 - It improves reaction time.

Objectives of Project

- To design and implement a 3-dimensional game written in C++ using a game development studio.
- To facilitate multiple players in a single session/room.
- To implement enemy bots with the help of Artificial Intelligence.

Methodology



Steps to Follow

- Designing the 3D virtual environment map, character models and weapons
- Enabling player movement and animation
- Enabling weapons to fire
- Implementing health and death (health=0) mechanics
- Enabling enemies through Artificial Intelligence
- Implementing multiple players in a single lobby.
- Implement end of game conditional (win/loss)

Gameplay Mechanics

- We will use physics and gravity so that player can walk easily on the floor.
- We will implement weapons firing mechanics and ray-tracing for aiming.
- We will use variables to keep track of player and enemy bots health.
- We will use conditional statements to declare win or loss.
- We will also use background music and sound effects in order to make game more interesting.

Thank You