

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

Pre Production

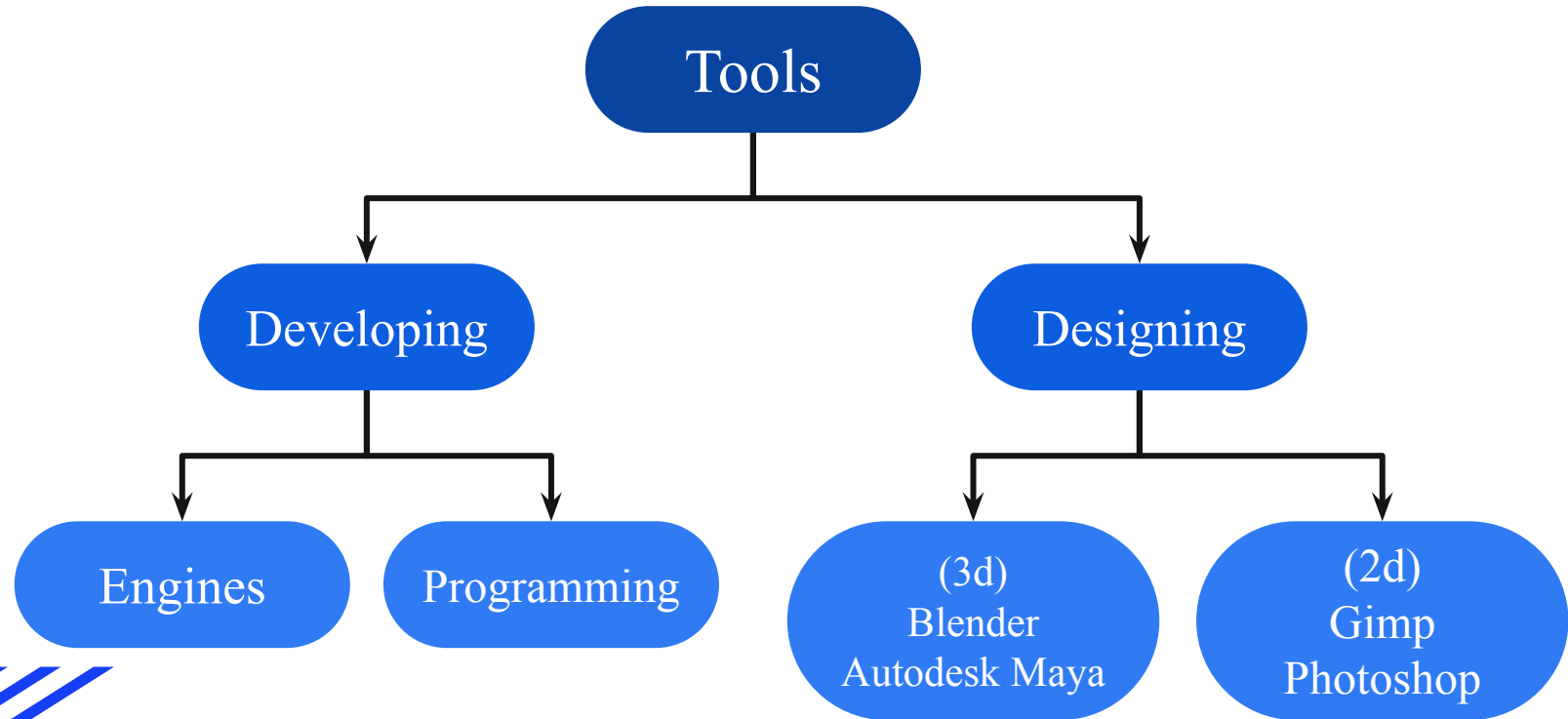


Production



Post Production

Technology Used



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

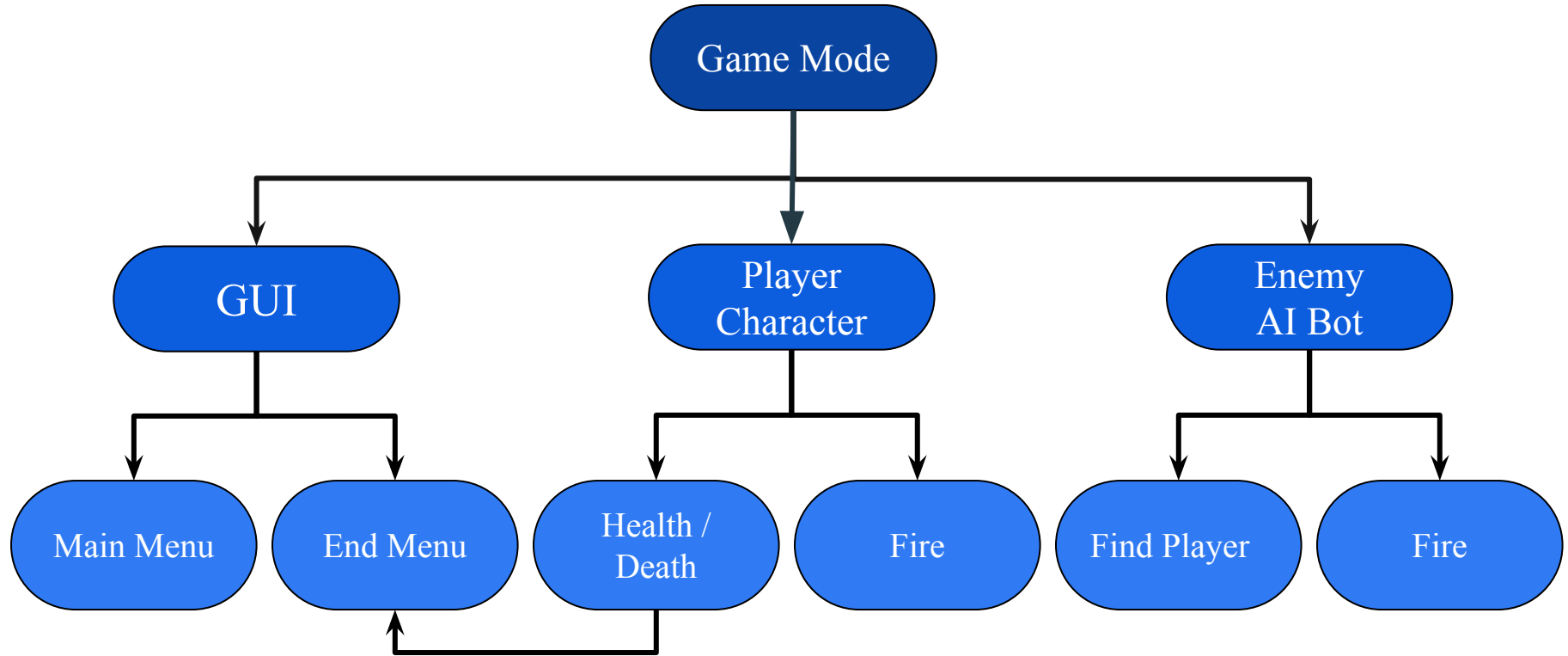
- To design and implement a 3-dimensional game written in C++ using a game development studio. **(ACHIEVED)**
- To facilitate multiple players in a single session/room.
- To implement enemy bots with the help of Artificial Intelligence.
(ACHIEVED)

Game Design

Single or multiple players will enter a virtual 3D environment equipped with weapons (primarily guns). The objective for victory is to eliminate all the artificially intelligent enemy bots to survive and take over the location where the enemy bots operate. If the player(s) die or if the player(s) do not defeat all enemy bots in time, the game will be lost.

The players can move freely in a large virtual 3D environment. Players have to save their health and defeat their enemies in order to win the game.

Methodology



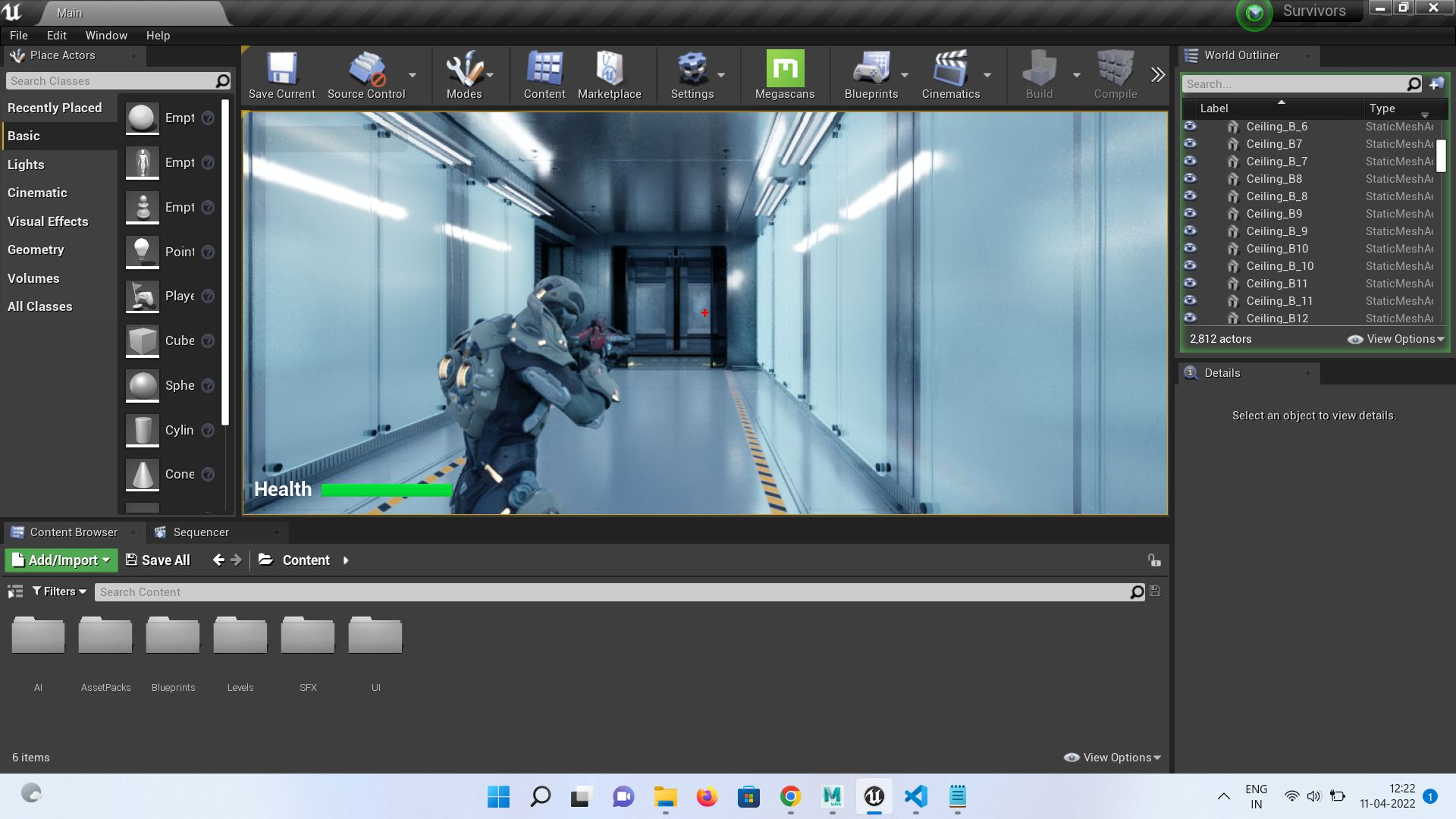
Steps Followed

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

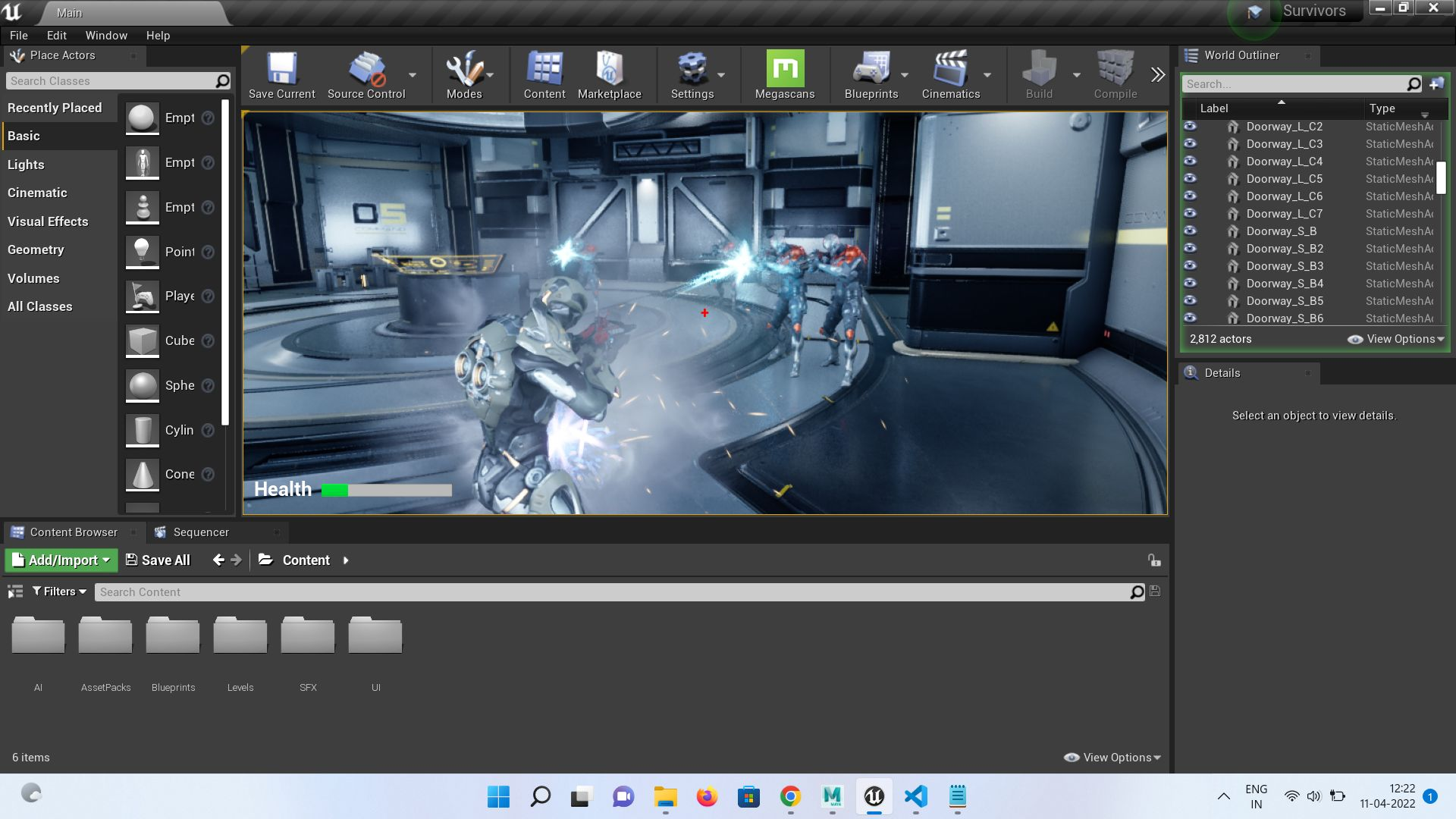
Performance of the Project Developed

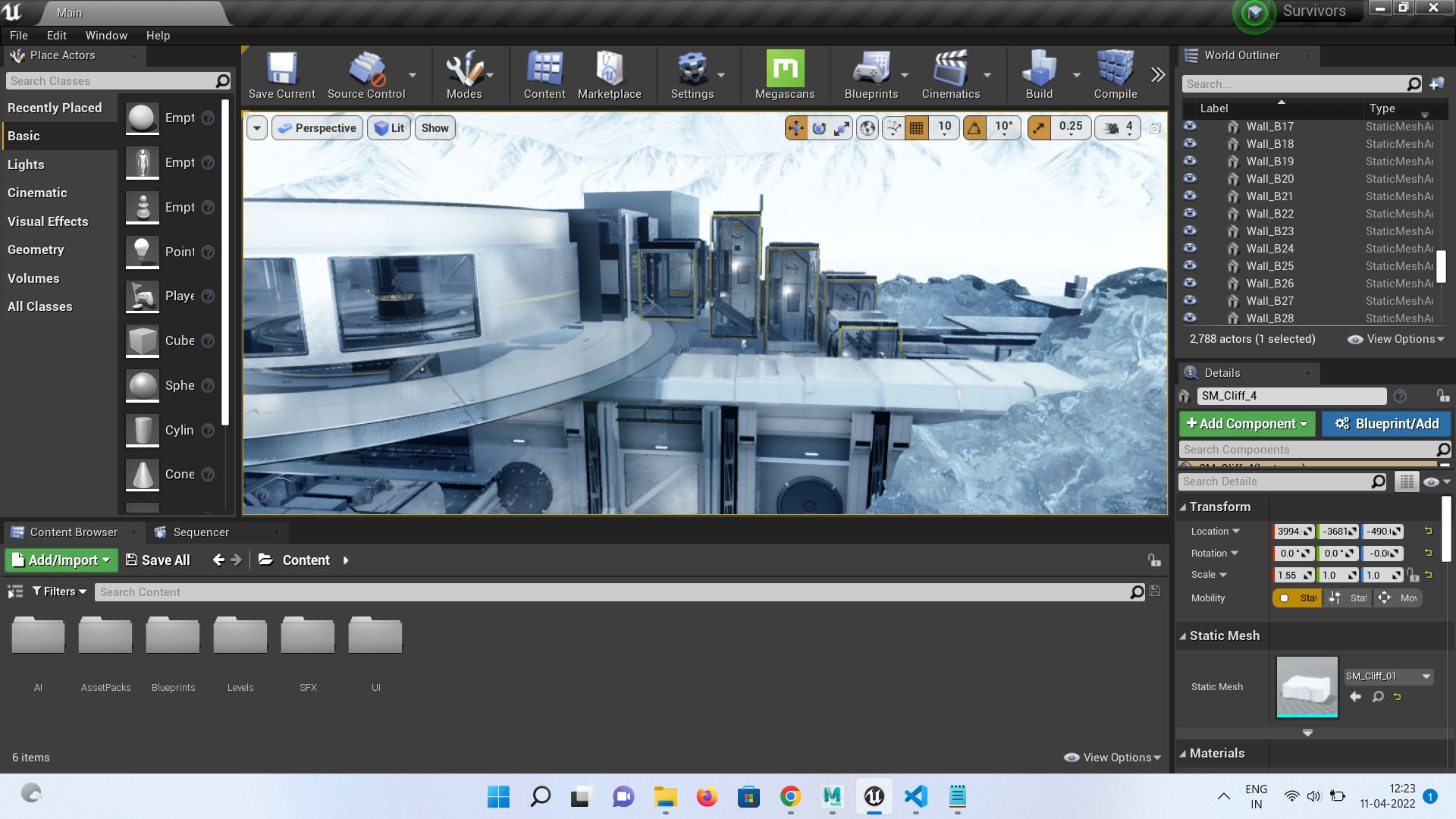
- We have used physics and gravity to enable realistic player movement.
- We have implemented weapons firing mechanics and aiming.
- We have implemented AI in enemy bots.
- We have stored variables to keep track of player and enemy bots health.
- We have enabled conditional statements to declare win or loss.
- We will implement multiplayer mode.

Current Progress











Thank You