MonsterZone

- Project number:22703
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- Workshop: 3D Animation
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Game Overview

Monster zone is a first-person shooter computer game, that was developed using Unreal Engine framework.

The Goal is to defeat the main enemy (A gigantic monster) while avoiding the disruptive enemies.

As part of the 2 – Level game, the player can switch weapons, gain life points, and use his abilities to jump, crawl, run etc.

In order to win the game, the player must complete each level successfully.

Game Design

- Imported external characters and design there behavior (appearance, animations, actions, etc.)

- Adjusted camera behavior to first-person view

- Implemented shooting-game features such as life-management, variety of weapons etc.

- Implemented level dependency
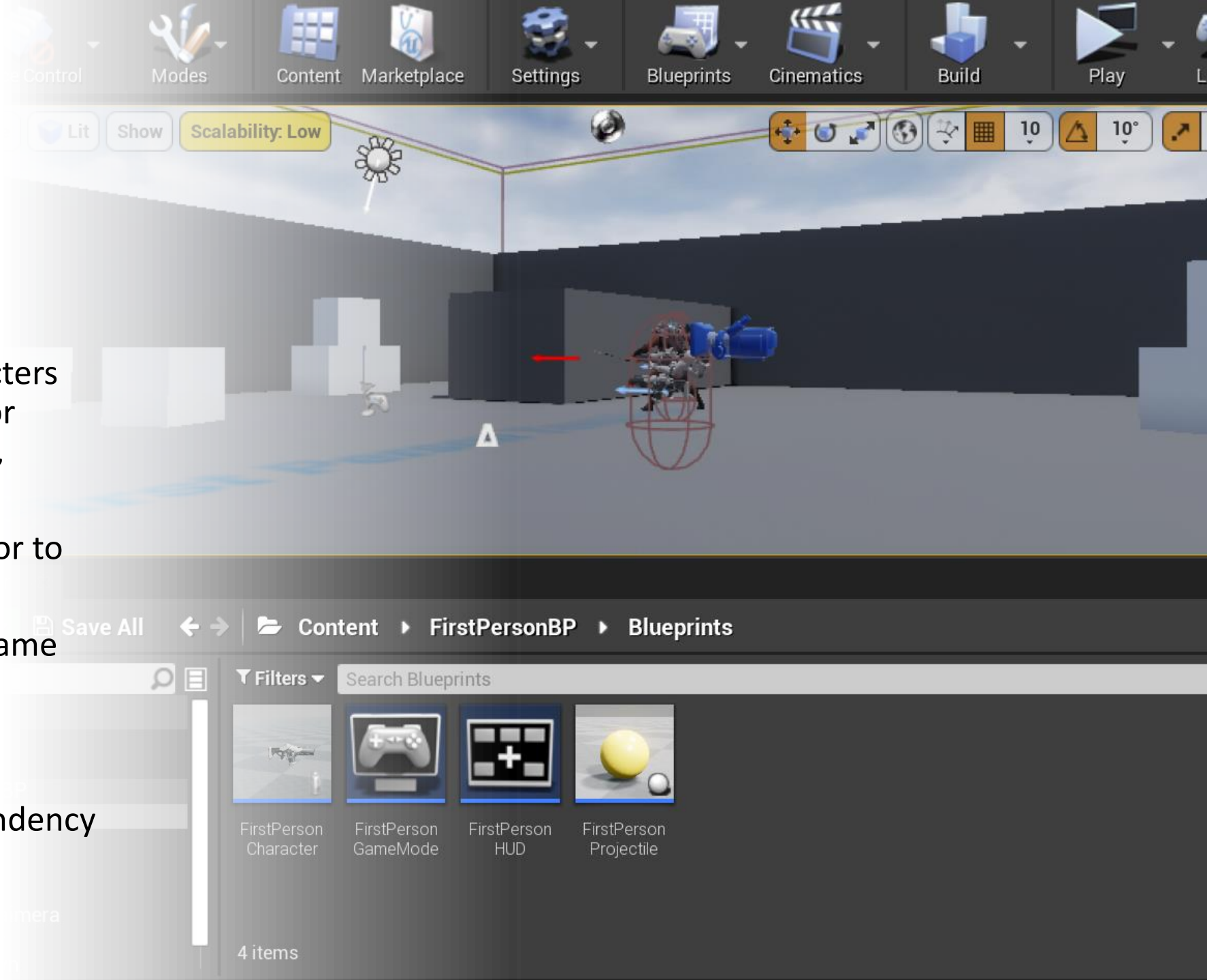
Creating the enemies:

The main challenge of the project was to build a realistic AI for our enemies.

Except of building the AI itself, we had to adjust different animations to the game's logic.

For example - an attack animation when the enemy's location is next to the player, chasing the player when he is detected by the enemy, and death animation when the player had succeeded to prevail the enemy.
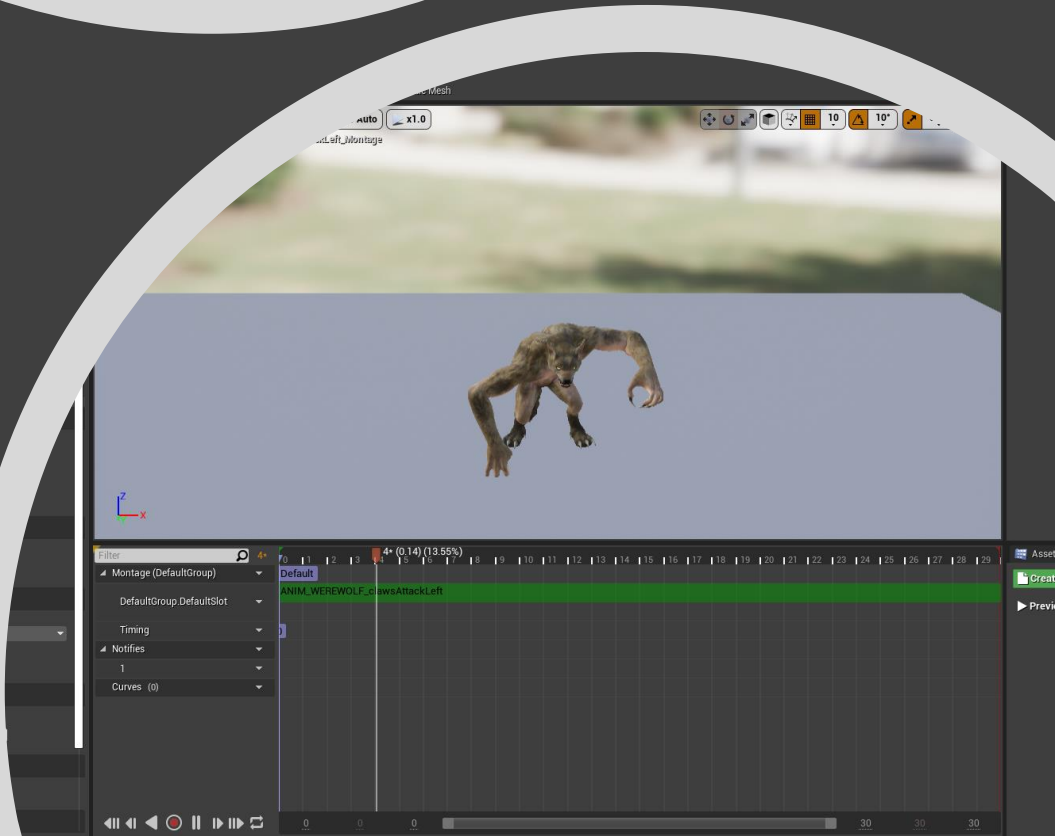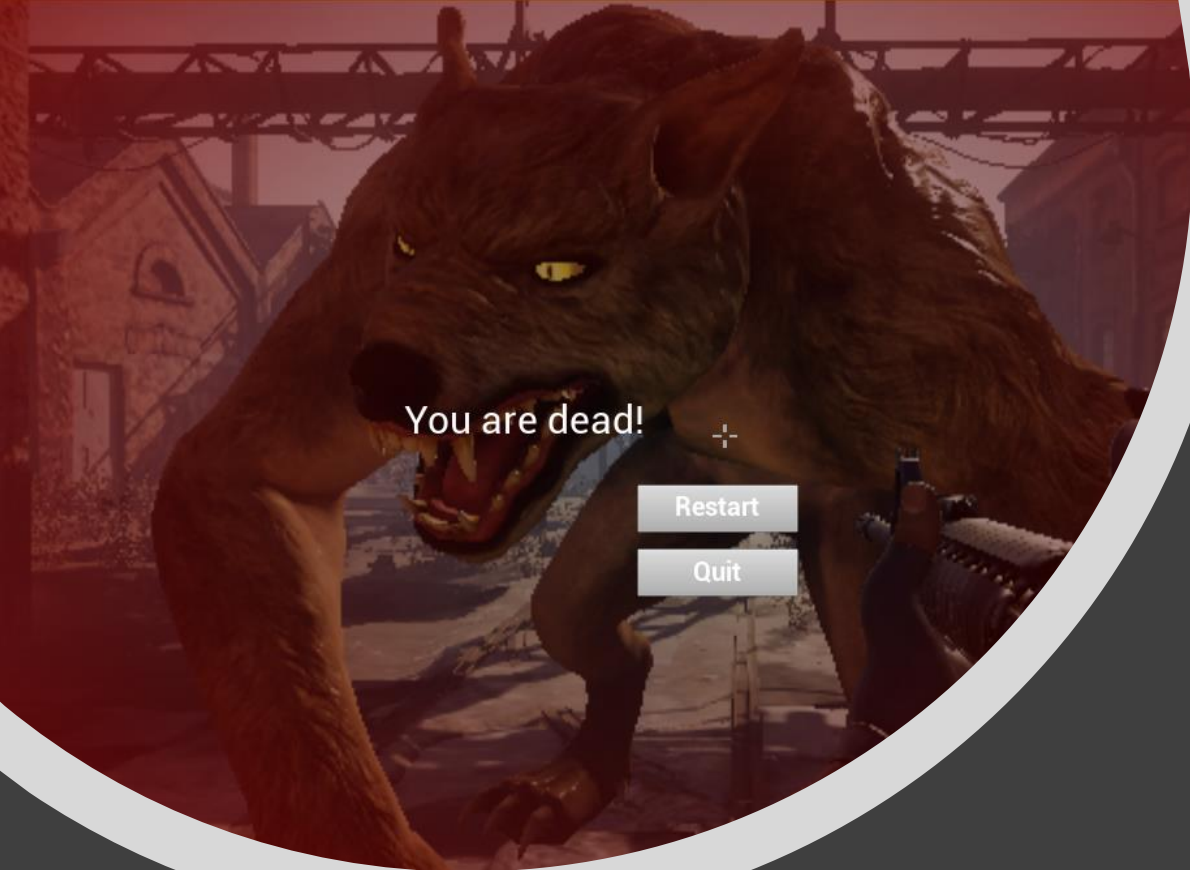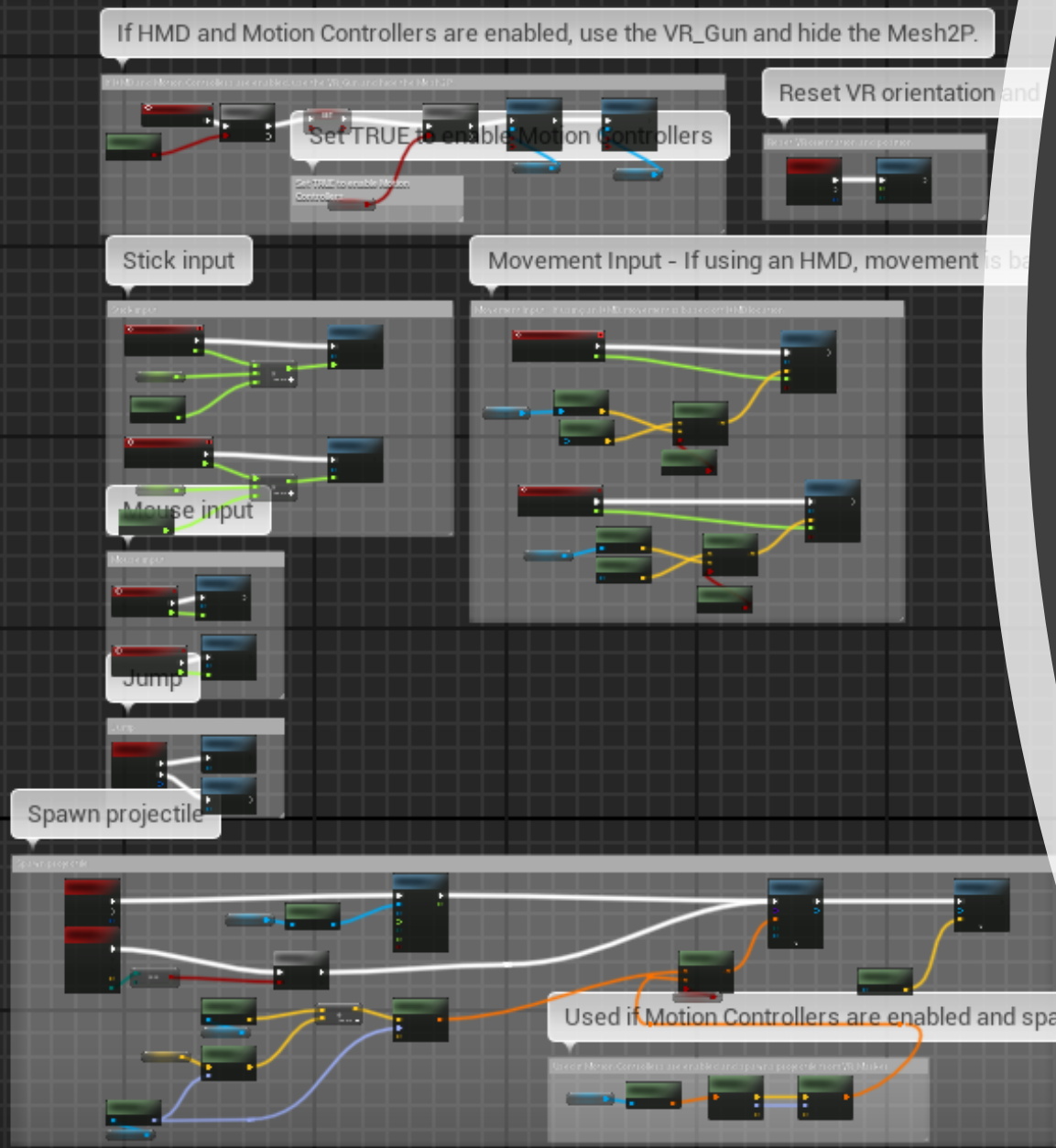
Life management

We have created a realistic life management mechanism, which works in the background throughout the game.

As expected, player's shots that hit the enemy will cause a life reduction. Also, an enemy's attack that hits the player will cause life reduction.

When a life limit is exceeded, a 'death' event will be fired.

Creating the Event Graph

Using the Unreal Engine's event graph feature, we created the actual architecture of the game life cycle.

We built functions, provided arguments, and linked between different events.

The event graph feature provides a comfortable interface for controlling the characters' behavior

through out the game's life cycle.

An analyze of an event cycle

A close look on an event's functions and their calling order.

The main challenge here is to make the transition from the world of writing code (managing the life cycle with writing text only), to the world of a user interface environment where functions are represented as lines and boxes.
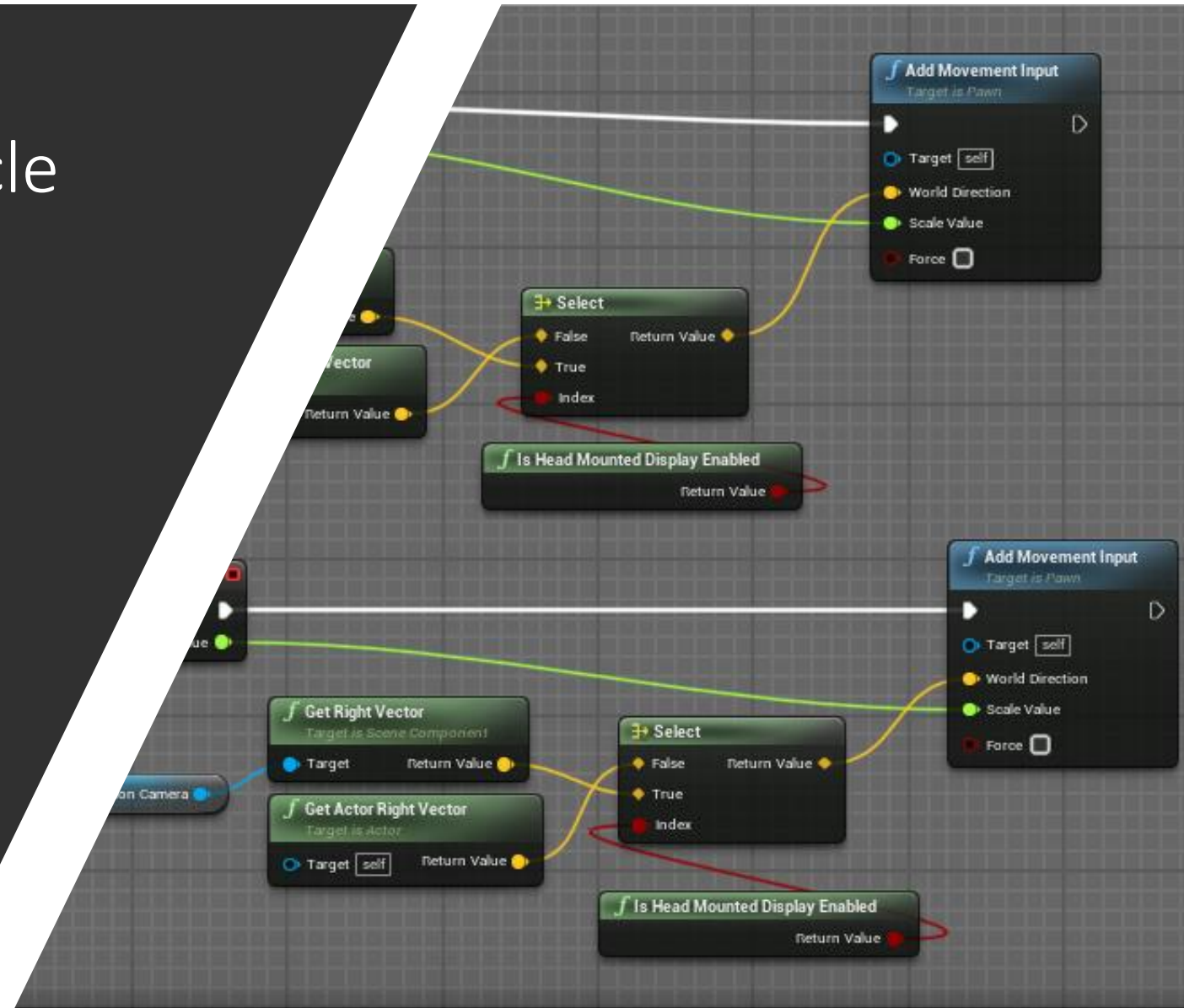
Conclusion

Using Unreal Engine's framework, we succeeded to create a first person shooting game easily . The features that the framework provide makes the process of building a realistic life cycle user friendly and comfortable.

Also, the Unreal Engine's online market provides plenty of useful objects, characters, and maps, that can be added easily to one's project.