Gebze Technical University

Virtual Strike Information Report



Prepared By VS Games (Group 4)

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2. Introduction

Game name: Virtual Strike

Project scope: A shooting game where players shoot targets using VR glasses and a special aiming device.

The aim of the project: To offer players an interactive gaming experience with their real-life movements.

This report introduces a shooting game that is played using VR (Virtual Reality) glasses and integrates the player's real-life movements into the game.

3. Technologies to be used

- Unreal Engine game engine
- VR headset
- Arduino or a similar microcontroller for the device to be used as a handheld sighting device.
- Node.js, It will be used in the server-side development of the project and will support the backend functionality.
- A button and a cursor sensor for a handheld aiming device (which can change position on the screen depending on real-life movements)
- In order to experience the game played on the computer with VR glasses, a technology will be used to project the game on the Android phone.
- A Bluetooth card that can wirelessly connect the handheld tool to the computer.

4. Game flow

At the beginning of the game, the player will play in a lobby-style place by choosing the item to be used in the game and the mission to be performed. The game will generally be to aim and shoot an object or entity that suddenly comes on the player.

5. Conclusion and Product to be Obtained

The project will result in the realization of "Virtual Strike", an immersive virtual reality game that translates real-life movements and interactions into the gaming world. This game will provide players with a real-time and interactive gaming experience, giving them the feeling of a real shooter as they take aim at targets within the game. "Virtual Strike" will be played using a specialized aiming device integrated with the Unreal Engine game engine and VR (Virtual Reality) headsets. Players will have the ability to directly control real-world movements in-game and explore different gameplay experiences through various game modes. The main goal of the project is to transfer real-life physical activity into the game world while providing players with interactive entertainment. This will make the game both fun and attractive for players who want to spend time in a healthy way. The "Virtual Strike" project represents an innovative approach that combines technology and entertainment to offer players an immersive shooter experience in a virtual reality world. With the successful completion of the project, players will experience a unique gaming experience where they will be able to control their real-world actions in the virtual world.