

GuARdians of Fort Joy

Description:

The goal of this project is to develop a two player Augmented Reality game which will be played on two mobile devices.

The game will use each player's phone's camera to detect a texture which is to be the designated play area for the game and will spawn a respective augmented reality character for each player. The game will focus on the interaction between each player and their character. Both players will see each other's characters on their phone's screen and be able to control their respective character. Controls will include movement around the space, attacking, and using abilities.

The game will offer two different modes -

One will be a player versus player mode which will deal with the two players battling in an arena in which the outcome is determined in a best out of 3 rounds situation. A player wins when the opponent's health drops to 0 or below.

The second mode will be a player versus environment mode which will team up both players in order to defend a certain area from incoming enemies. The virtual world will include interactive terrain which the players will be able to interact with so that they can receive certain benefits.

The location of where the game is played is up to the player, since the game is meant to be portable and played anywhere where a flat surface can be used to place down the cards. Sound will be used to indicate what the players are doing, i.e. give cues that they are taking damage, casting spells, etc. At this point no music has been chosen to be used as a part of the game.

Hardware:

2 x Android Based Phone (Version 7.0)

Fiducial markers in card form (Amount/size based off number of characters/object/levels)

Software:

Unity (5.5.0 / Maybe Unity 2017.2 ?)

Visual Studio (C# Scripts for Unity)

Team:

Bartosz Kupiec

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Libraries/Databases/Archives:

Unity Asset Store (<https://www.assetstore.unity3d.com/en/>)

Yobi (<https://www.yobi3d.com>)

Vuforia API (<https://www.vuforia.com/>)