Duck Hunt VR/Android

By

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Cross Platform Development

# Concept

Aim of the game is to shoot the ducks as they fly out from behind bushes. More ducks you kill with your limited ammo the more points you score.

# Technical Goals

* Functioning VR interaction using VR controls.
* Shootable Ducks
* Diegetic UI to show scores, ammo level, and round number.
* Environmental meshes
* Simplistic AI
* Diegetic User interface, I.e. you must shoot the buttons for the menus to change.

# System Requirements

OS: Windows 10 and Android.

Minimum Hardware:

Recommended Hardware:

# Technical Risks

* Implementation of VR controls
* Complications with mesh sizes on different resolutions/equipment

# Third Party Tools

**UNITY3D 2019**

Unity will be the game engine in which Duck Hunt VR will be made, this tool allows for developing for different devices such as VR and Android.

**INNO SETUP**

Inno Setup is an installer package used to create installers and uninstallers.

# Game Objects

* Walls
* Trees
* Shrubs
* Score Sign
* Gun
* Wall
* Start Game Sign
* Exit Game Sign
* Duck
* Bullet meter

# Platform Controls

Windows pc/VR

Movement:

The player will be stationary and turning the head will direct the gun the crosshair.

Firing:

Using the mouse/VR controller, the player will shot the ducks, and select items from the user interface by pressing the same button.

Android systems

Movement:

The player will be stationary and moving the phone will turn the

camera and aim the cross hair.

Firing:

On the phone/tablet the firing button will be on the right of the

screen this will act as the fire and select button

# Enviromental Considerations

PC/VR

Because the game will require no movement the player will be able to sit or stand while playing. To avoid possible collisions with exterior, real world, items before the game loads there will be splash screen that warns the player to make sure that there is nothing within play range that could cause injury to themselves or others, when collided with.

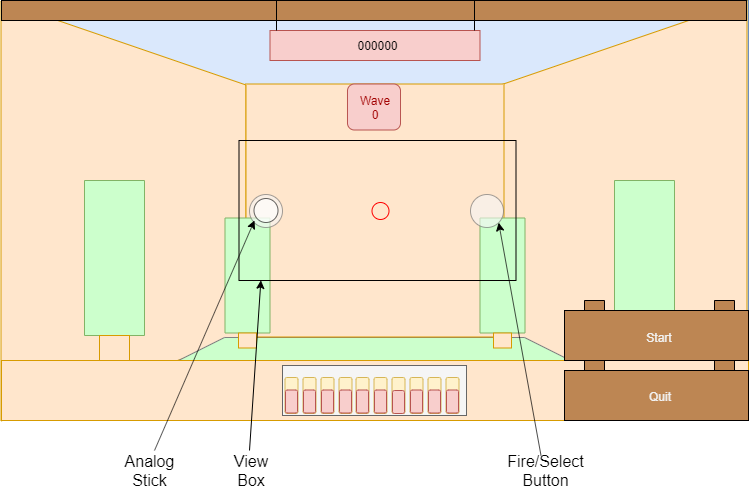
Android:

The tablet/phone version will have the player moving the around using an analog stick on the left, this moves the crosshair and shoot the ducks, the splash screen shall read the same as the VR version.

# GUI

## PC/VR

## Android



# UML class Diagrams

