Team No Name 2

Design Document for:



No amount of 0's and 1's will save you

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Design History

Initial concepting and planning the various aspects of the game.

Version 1.00

Version 1.0 is the initial design of the game.

Game Overview

Philosophy

Philosophical point #1

Inspired by the Doom series with plans for power ups/pick ups, in a first person shooter genre. Power ups are able to increase elements such as weapon attributes and health/shields.

Philosophical point #2

Our game is only designed to run on Windows machines. The reason for this is that we all own Windows machines and will only be tested on Windows machines.

Philosophical point #3

We want to make a game that will do better than just pass the unit, but also, to be able to be used in a portfolio to assist in future employment prospects.

Common Questions

What is the game?

Doom clone where the objective is to hunt down a Rogue AI which is tearing apart Murdoch. The traversal of portals and search for secrets in order to create a final showdown between you and the final boss.

Why create this game?

We are creating this game as we all enjoy FPS games especially doom and wanted to create a game that we will enjoy making.

Where does the game take place?

The game starts at Murdoch University and will then progress to the interior of a ship in outer space.

What do I control?

The player is in control of the character and aspects of power, including shields and improvements to the weapon. Potential features including fire rate, player speed and damage are able to be altered.

How many characters do I control?

You control one character which is the only playable character in the game. all other characters are robots.

What is the main focus?

The focus of the game is to save the world by eradicating the dangerous space robots from within their own ship.

What's different?

no other game takes place at murdoch university and involves fighting robots

Feature Set

General Features

- Linear Story
- Boss Room with potential mechanics
- Portal Traversal
- 3D graphics
- 32-bit color
- Enemy AI

Gameplay

- Hunting down the rogue AI while collecting power ups and stepping through portals into new areas.

The Game World

Overview

The game world is set at murdoch university in which the player can walk around murdoch university before entering the bookshop and entering a new world.

World Feature #1

The game is set in space. This is cool because it is in space.

World Feature #2

Portals. enough said.

The Physical World

Overview

Describe an overview of the physical world. Then start talking about the components of the physical world below in each paragraph.

The following describes the key components of the physical world.

Key Locations

Bush Court, Bookshop Stairs, Ship Boss Room

Travel

Boots on the ground movement and portal teleportation.

Scale

God knows what Shay used to scale things.

Objects

Lots of different types.

Time

Time is relative in space, set at any time the player wants.

Rendering System

Overview

Give an overview of how your game will be rendered and then go into detail in the following paragraphs.

2D/3D Rendering

OpenGL

Camera

Overview

The camera is a traditional FPS camera that is controlled by the mouse and keyboard.

Camera Detail #1

The camera will move forward and backwards and strafe left and right using the 'wasd' keys and will rotate in the respective direction using the mouse.

Camera Detail #2

The camera will move faster when the 'SHIFT' key is held to simulate sprinting.

Game Engine

Overview

Refactored Shay World.

Game Engine Detail #1

The game engine will keep track of everything in the world like such and such.

Collision Detection

- Utilises plains for collision of floor/stairs, where the x,y,z components are changed based upon player interaction.

Lighting Models

Overview

Shay's World has no lighting, however it is a potential feature that might be incorporated, into objects such as portals.

The World Layout

Overview

The world starts at Murdoch University then will progress to space.

World Layout Detail #1

The start of the game is based on the real life location of Bush Court at Murdoch University.

World Layout Detail #2

The game will then progress to the interior of a ship in space where the core of the game will be played. This ship will have corridors and rooms to navigate.

Game Characters

Overview

Our main Character is you.

The enemies you encounter are evil robots that want to destroy your way of life.

Enemies and Monsters

Standard Robot - Metal hunk of evil. Will try and shoot you. Boss Robot - Same as above but harder.

User Interface

Overview

Main menu with a list of controls. Options such as exiting the game and an unstuck button to be included.

User Interface Detail #1

Health and Shields bars.

User Interface Detail #2

Ammo count and potential power up time/notification.

Weapons

Overview

The character will have a fixed weapon which will always be equipped.

Fire Rate

The weapon will be semi automatic with a small delay between presses, there will be pickups that allow brief windows of full auto fire.

Weapon Mechanics

The weapon is going to be hitscan meaning that when the user shoots it will destroy whatever is in front of it without launching a projectile.

Musical Scores and Sound Effects

Overview

Our sound effects are going to be mainly weapon sounds and walking sounds. We also might add a backing track for while the user is playing the game

3D Sound

We haven't decided which sound API we are going to use quite yet.

Sound Design

Charlie is also a sound design student so if time allows he is going to record custom sounds for all of our sound effects. if we don't have time we will look at online royalty free sound effects.

Single-Player Game

Overview

The game will be entirely single player with a linear story, where the player is the sole focus and controllable character within the game.

Story

A Rogue AI has torn a path of destruction across Murdoch University, sending a chunk into space. You need to travel through the portals, collect power ups and hunt down the AI to stop it once and for all.

Hours of Gameplay

10 minutes for normal play through 10+ hours for completionists.

Victory Conditions

The game is won when Murdoch is saved from evil space robots. The player must hunt down and kill them all with extreme prejudice.

Character Rendering

Overview

Only the protagonist's arm and weapon will be rendered. The enemies will likely all share the same look.

Character Rendering Detail #1

The player will never see himself so there is no point in rendering anything other than the arm and weapon.

Character Rendering Detail #2

The robots will be rendered as simple boxes to assist with the collision detection. As we don't have any artistic ability we will find a royalty free texture online to wrap the box with.

Extra Miscellaneous Stuff

Overview

Collectables for trophies.

Secret Easter Egg within the game.

"XYZ Appendix"

"Objects Appendix"

"User Interface Appendix"

"Networking Appendix"

"Character Rendering and Animation Appendix"

"Story Appendix"