Cecity

Lacking Sight

Blake Andrews

GDD
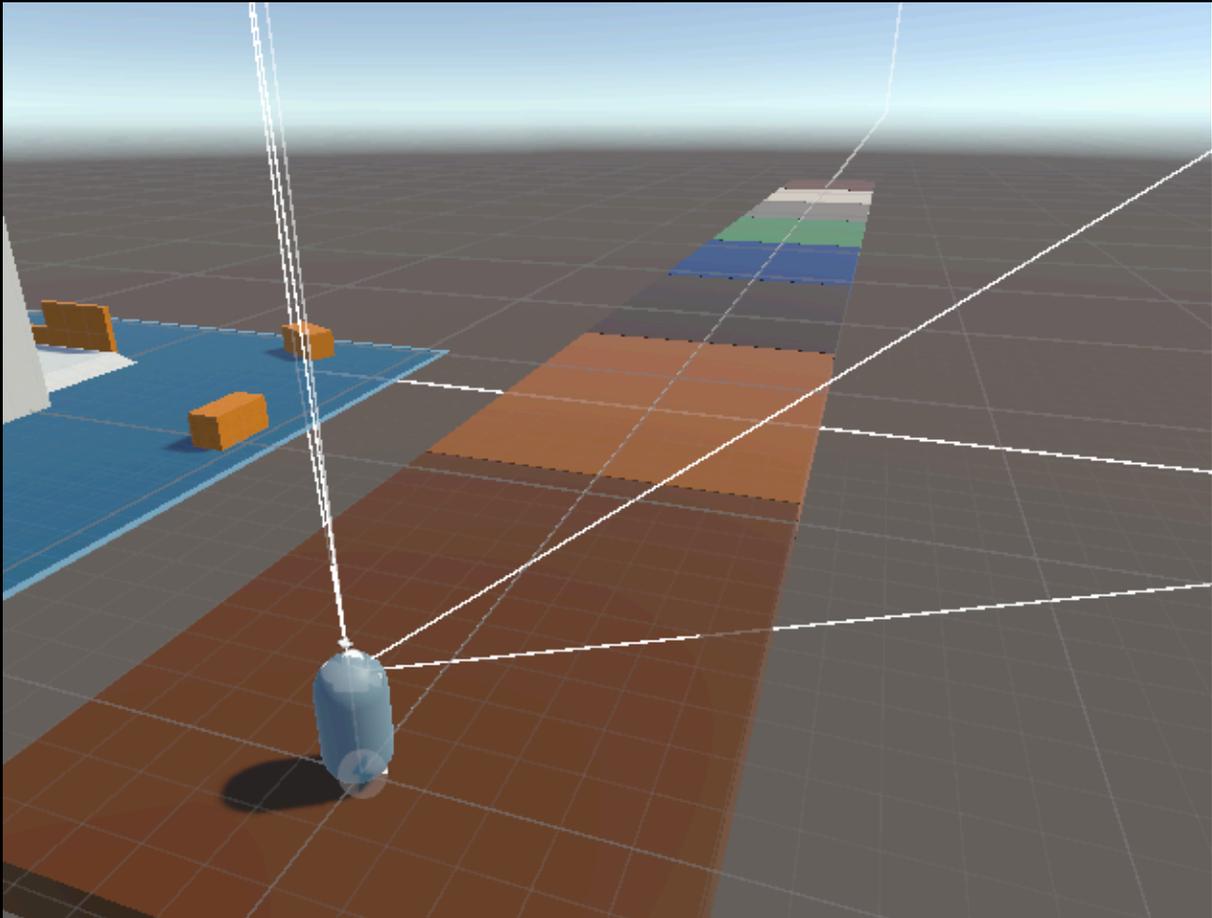
v 1.1

Change Log

Date	Version	Changes Made
27/4/24	1.0	Initial Document Creation & Mechanics
4/6/24	1.1	Final Documentation.

Requirements & Expectations

- Engaging for blind people

- No graphics

- Played with just sound

- Uses a controller

Blind Gamers League

Project Goal
Create an engaging play experience for blind people.

Required Elements
A game that blind people can play.
Has no graphics.
A game that can be played just with sound.

Limitations
Can still use any controller that a blind person could use.

Platform
Any.

Client
Blind Gamers League

Research & Development

Controller Research

https://partners.playstation.net/

https://github.com/nullkal/UniSense

https://assetstore.unity.com/packages/tools/input-management/controller-interface-for-dualsense-199328

https://www.youtube.com/watch?v=gGhBF_xoRvk&ab_channel=Interhaptics

Looks like it will be easy to implement the actual rumble from the PS5 or something very similar, but trying to implement trigger tension seems almost impossible without being a PlayStation partner.

Idea Dot Points

- Game that boots straight into the game when you open it…

- Start of the game is some ominous recording about going on some quest… maybe being chased by something?

- Controls would be using LEFT and RIGHT triggers to walk forward. Controller shakes based on being close to something. Hold X to hold your breath.

- Game opens up being told that there is something outside, you have to get from point A to point B.

- There is a monster chasing you that is lured to sound

- While getting from point A to B, there is different terrain you walk on that changes the rumble and strength of the triggers.

- Terrain in order: Start House > Dirt > Marsh > Water > Grass > Mountain > Snow > End House

<u>Project Proposal Report</u>

Client Needs

- Project goals would be to create a simple game that is targeted for blind people.

- Goals for this project would be to create a game for completely blind people, but also so anyone can jump in and out.

- Limiting factors would be to make the assumption this project is to be for 100% blind people and not particularly blind people. Also the fact I don't have access to any accessible control peripheral, so it will have to be for the controller at the very least.

- Required elements would be the game being able to be played with only sound, because there are no graphics.

- Target audience is for 100% blind people, but people that have probably played a couple games in their life. So people that have probably held a controller before, most people when they hold a controller resting their fingers on the thumbsticks and triggers - so probably people who have BECOME blind, not born with blindness. It is also targeted towards blind people who are into video games and have a PS5. The reason for this is because the PS5 is a growing market that already has games accessible to blind gamers (Last of Us Part 2, God of War Ragnarock, etc.), so if there were blind gamers, they would most likely have a PS5 over any other console.

Known Risks

- Trying to create a captivating game that is simple enough to understand, but engaging enough for a blind person to play.

- Creating an AI enemy, might have to find a way to dumb it down for myself.

- The PS5 controller doesn't have 'amazing' support if you don't go through Sony, so I may have to drop the adaptive triggers plan.

Limitations of Dev Team

- I have no experience with programming an enemy AI, or getting a control to work in Unity.

Tools

- Unity

Proposed Design

The intended design is to create an enjoyable experience for blind users, that has more engaging gameplay than the rhythm games most people seem to make.

It addresses the needs of the client by creating an engaging game for blind people through its control scheme, and is played entirely with just sound.

The target audience is achieved by directing the games towards blind gamers, but blind gamers who have hopefully played a game in their life before, or may have not been born blind. Otherwise the game has relatively simple controls.

Mechanics

Walking is achieved by pressing L2 (left leg) and R2 (right leg). Since the game uses analogue triggers, they are pressure sensitive so you can choose to walk slowly, or quickly depending on how fast you pull them down. Walking also depletes *stamina* depending on how fast you are moving, and in which terrain.

The *Monster* is an enemy that is always chasing the player, the closer the player gets to the ending of the game, the more frequent and active the Monster becomes. The Monster is lured by sound, so if it is close the player must walk *quietly*, stand still, or hold their breath.

Stamina is an invisible resource the player has to manage. The player's stamina is depleted by moving quickly, or holding their breath. To recover stamina, the player must move slowly, stand still, or drink from their canteen which will recover stamina quicker than any other method.

Mechanic	Positives	Negatives
Water Canteen (R3)	- Quicker than 'catching a breath'	- Limited supply - Makes noise

- Rumbles based on the amount of water left (for example it would have a very strong vibration when it's full, but would barely rumble when it is nearly empty).

Mechanic	Positives	Negatives
Hold Breath (L3)	- Increase likelihood of the Monster leaving	- If held for too long, will pass out

- Rumbles to the rhythm of a heartbeat, but increases based on how long you hold it for.

Controls

L2
Left leg

R2
Right leg

L3
tilt up to
hold breath

R3
tilt up to
drink canteen

Delivery Platform

PC (Controller Only) & PS5

The PS5 is the most accessible console for blind gamers.

Schedule

MAY 2024

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2 ✗	3 ✗	4 ✗
5 ✗	6 1st draft GDD Controller Script	7 Monster Script Vibration Script	8 Breathing / Drink Script	9 ✗	10 ✗	11 ✗
12 ✗	13 Alpha Build	14 Feedback 2	15 Terrain / Map Script	16 ✗	17 ✗	18 ✗
19 ✗	20 Sound Sourcing / Editing	21 2nd draft GDD Sound Editing	22 Refine Scripts Sound Manager	23 ✗	24 ✗	25 ✗
26 ✗	27 Beta Build	28 Feedback 3	29 Sound Editing	30 ✗	31 ✗	1
2	3	4	5	6	7	8

JUNE 2024

SUN	MON	TUE	WED	THU	FRI	SAT
26	27	28	29	30	31	1
2	3 Gold Build Meeting 4	4 Final GDD	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

Asset List

Scripts

Controller Input	2	Stamina / Drinking	3	Monster AI	2
Controller Vibration & Triggers	4	Holding Breath	1	Terrain / Map	1
Audio Manager	1				

Sounds

Footsteps	1	Breathing	1	Ambience for each Environment	5
Footsteps in Each Terrain	5	Heartbeat	1	Monster Growl / Noises	2
		Drinking Water	1		