GAMEBOYZ II MEN PRODUCTIONS

HOLEY ROLLER

'Roll into the New Year!' - GameBoyz II Men

This page: Table of Contents and Team Member Listing

Table of Contents

Game Development Team Members

PRODUCER
Robin Wantah
Jesus Aviles
Dao Vo
James Romanov

PRODUCTION MANAGER
Robin Wantah
Jesus Aviles
Dao Vo
James Romanov

PRODUCTION COORDINATOR
Robin Wantah
Jesus Aviles
Dao Vo
James Romanov

GAME DESIGNERS
Robin Wantah
Jesus Aviles
Dao Vo
James Romanov

SYSTEMS/IT COORDINATOR
Robin Wantah
Jesus Aviles
Dao Vo
James Romanov

PROGRAMMERS
Robin Wantah
Jesus Aviles
Dao Vo
James Romanov

TECHNICAL ARTISTS
Robin Wantah
Jesus Aviles
Dao Vo
James Romanov

AUDIO ENGINEERS
Robin Wantah
Jesus Aviles
Dao Vo
James Romanov

UX TESTERS
Robin Wantah
Jesus Aviles
Dao Vo
James Romanov

1 Game Overview

Title: Holey Roller
Platform: PC Standalone
Genre: Platformer
Rating: (10+) ESRB
Target: Casual gamer (aging from 11 - 99)
         Serious games
Release Date: 10 December, 2020
Publisher: GameBoyz II Men

Description:
The Player is a ball and controls the movement of it. The Player must move towards the end point (denoted by the Red Platform) while avoiding falling off the platform and before the time limit finishes. There are holes, obstacles, and moving platforms that will hinder the progress of the player or knock them off their path. Backup time collectibles will be available to the player if the time is about to run out, these collectibles will add time to the player's current time limit.

The total time the Player took in each stage will be displayed on an End Screen result after completing all 3 stages, the number of falls and a rank based on their total time taken will also be displayed (e.g. "SSS" will be displayed for sub 2 minutes.)

2 High Concept

A game that will encapsulate the player as a sphere as they traverse through the map while avoiding obstacles as they strive to reach the end of the level without falling off the platform as they race against the clock.

3 Unique Selling Points

Addicting levels that will challenge the players hand eye coordination. Go too fast and risk falling to your doom! Go too slow and risk looking like a noob! Avoid tricks and overcome obstacles to reach the finish line! Time and gravity is your enemy! Speed thrills!

4 Platform Minimum Requirements

PC/Windows10

5 Competitors / Similar Titles

Super Monkey Ball.
Maze Ball.

6 Synopsis

The Game Master has turned you into a ball, and the only way out alive is to roll to your freedom!

7 Game Objectives

The Player must move towards the Red Platform to complete the stage. The faster they complete all 3 stages, the better grade they will receive at the end of the game. The Player must accomplish these objectives while simultaneously overcoming obstacles and avoid falling off the platform.

8 Game Rules

- Finish level within time limit
- Avoid Impeding obstacles
- Pick up time collectibles to increase the time limit
- Falling increases time taken

9 Game Structure
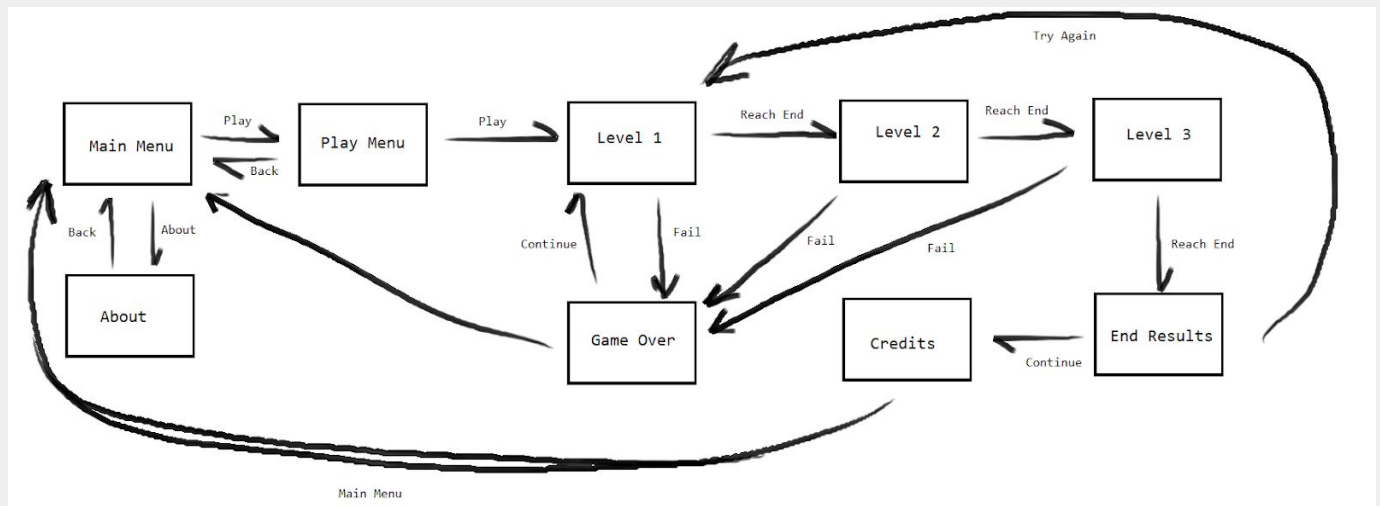
10 Game Play

10.1 Game Controls

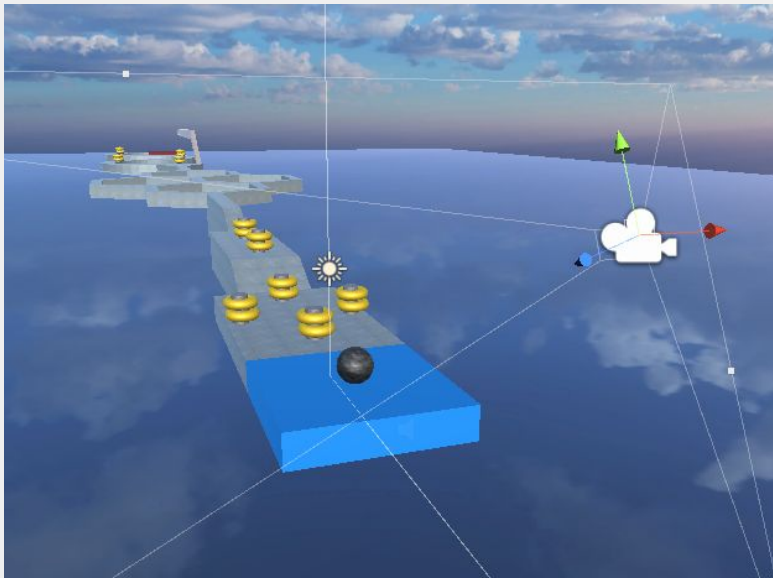W / Up-Arrow Key - Move forward.
A / Left-Arrow Key - Move left.
S / Down-Arrow Key - Move backwards.
D / Right-Arrow Key - Move right.

10.2 Game Camera

During gameplay, the camera tracks the player from behind.

What the player sees:

10.2.1 HUD

As seen in this image, there are some HUDs visible to the player.

On the top-left, the Run-Time will display the time taken to complete the corresponding stages.
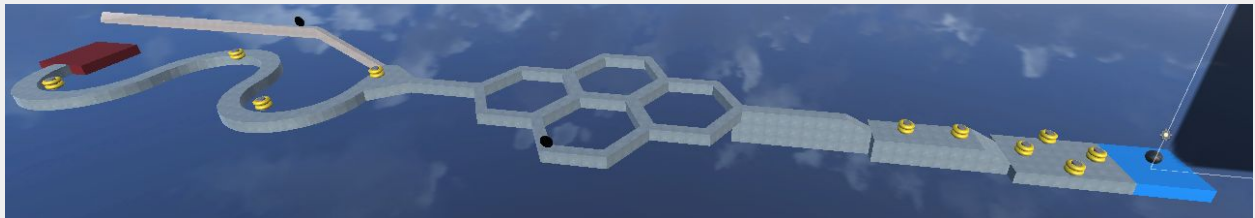On the top-middle, the remaining time is displayed for the player for the current stage.
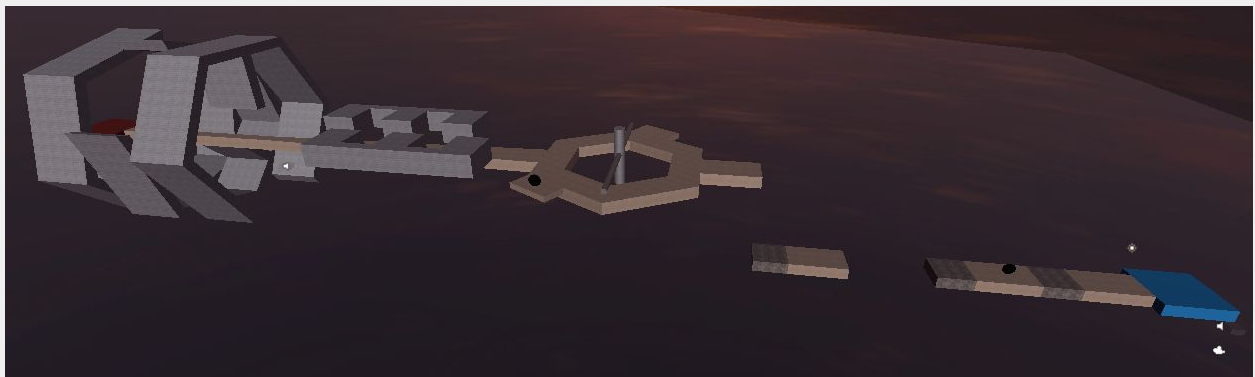On the top-right, the icon and the number represents the number of times the player has fallen off the stage.

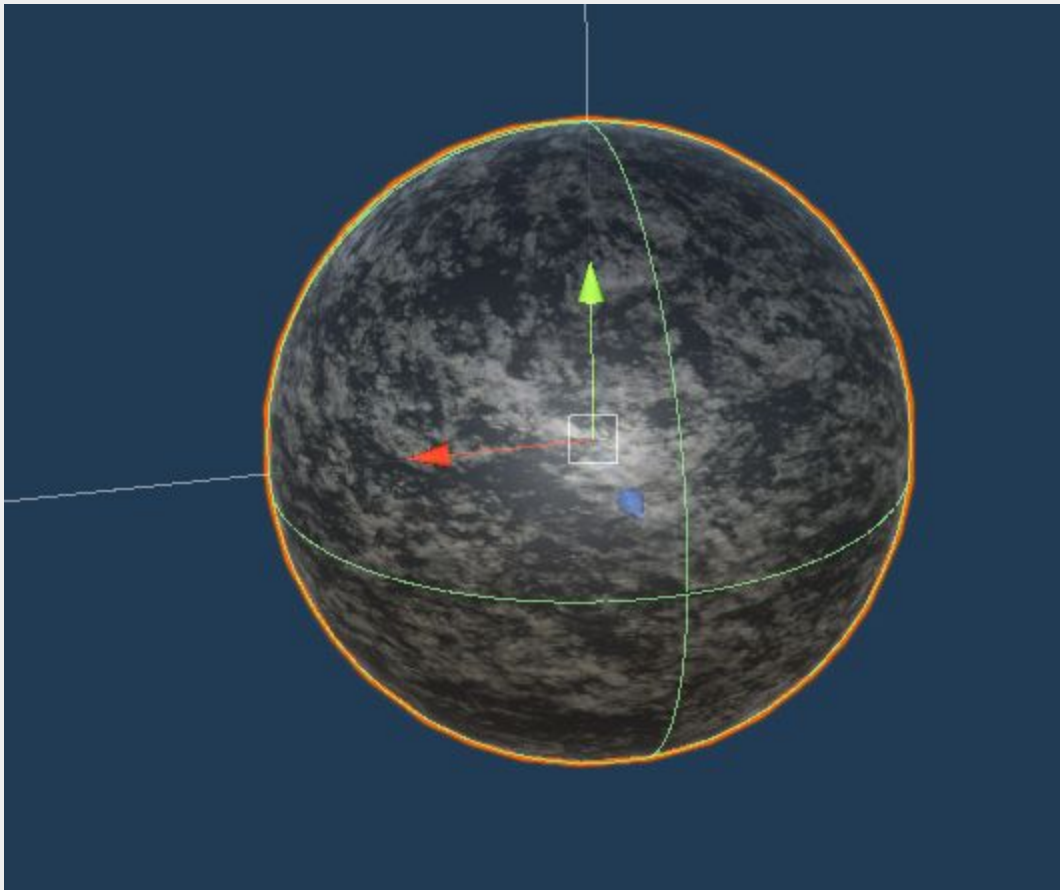## 10.2.2 Maps

There are 3 maps in total.
Level 1:

Level 2:

Level 3:

11 Players

11.1 Characters

There is only one character, which is the ball.

11.2 Metrics

Speed: 750f.

Mass: 1
Drag: 1
Angular Drag: 0.05f

11.3 States

Still state.
Moving/rolling state.
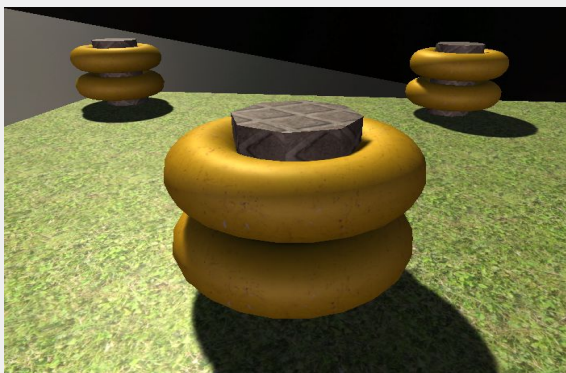
11.4 Weapons

None.

12 Player Line-up

There is only one player character.

13 NPC

13.1 Enemies

The enemies of the game are bumpers and moving obstacles. The player will not have a health point, so they will not take damage from the obstacles, but instead will be knocked away by a certain amount of force to try to knock the player off the stage.
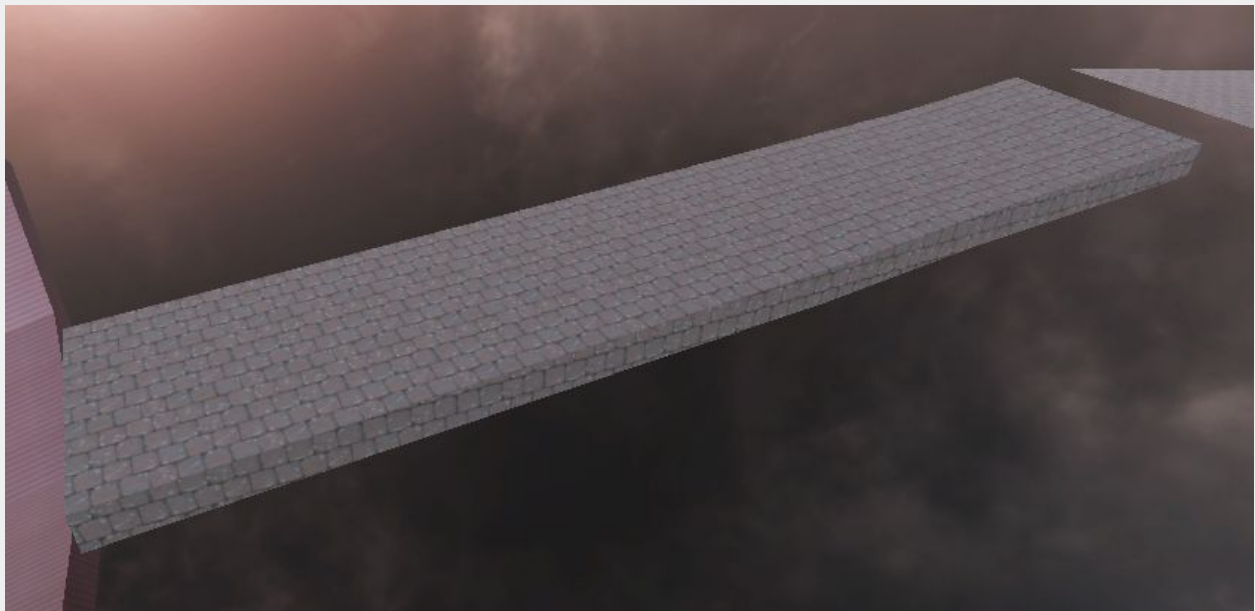
Bumpers:

This enemy serves as an obstacle for the player by bouncing them off by a certain amount of force to knock the player off the map should the player collide with them. Examples of Moving Platforms:
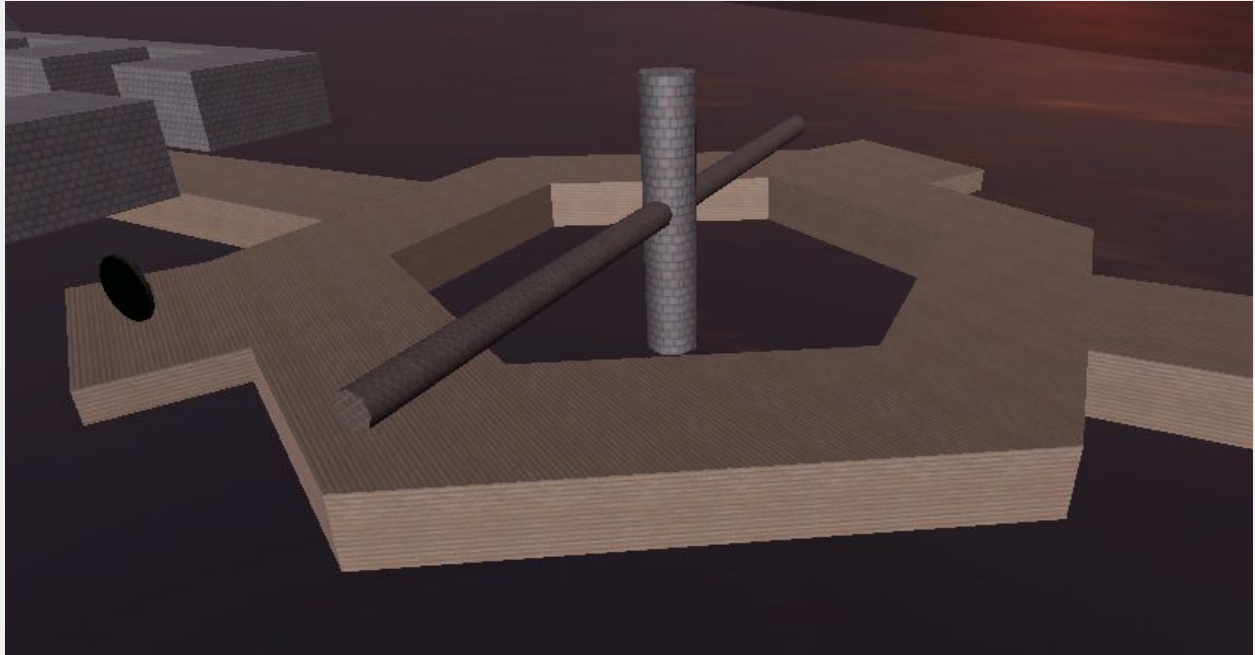
In this example, the arms stretching from this cylinder rotate in a 360 degree cycle to knock the player off in the middle of level 2.

In this example, this rectangular platform tilts left and right to make the player slip off the platform in the middle of level 3.

13.1.1 Enemy States

The enemies stay in one place. However, there are some moving platforms which the player must time their move correctly to overcome.

13.1.2 Enemy Spawn Points

The enemy spawn points are always in the same location, as the location of the bumpers and the moving platforms can always be found in the same location.

13.2 Allies / Companions

The allies in this game are the time collectibles the players can pick up to increase the time limit on the current stage.
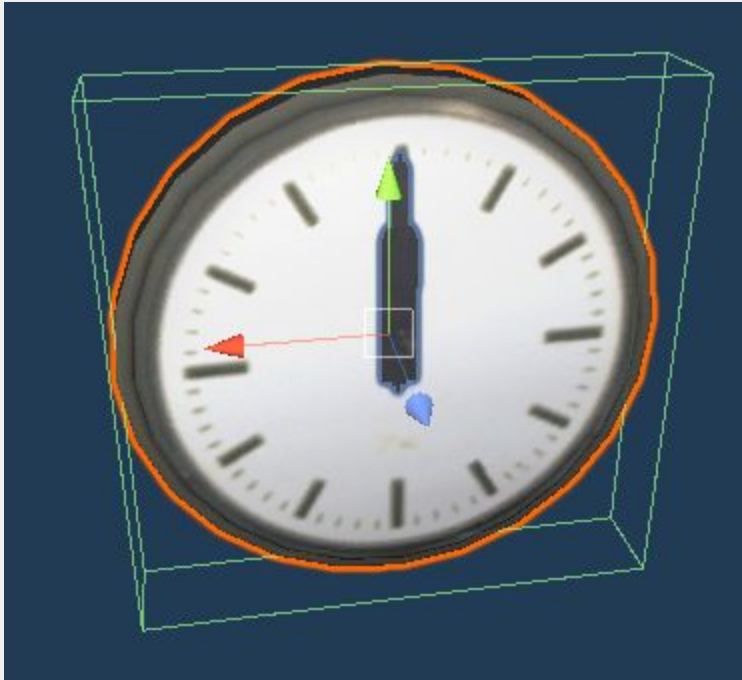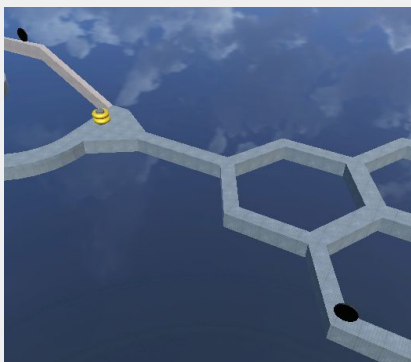

13.2.1 Ally States

These time collectibles only spawn when there are 30 seconds remaining on the stage, they spin around in-place as an animation.
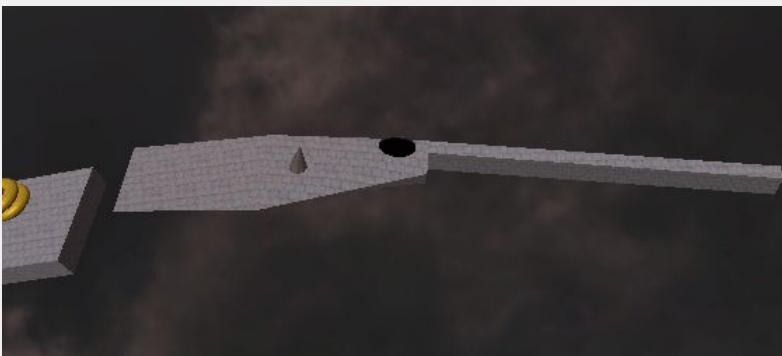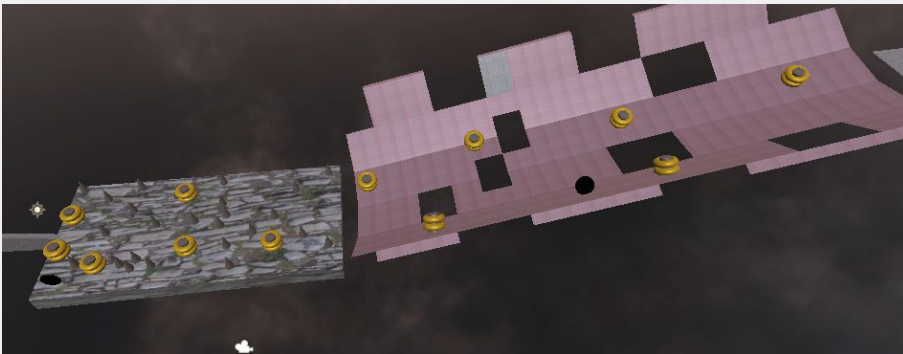
13.2.2 Ally Spawn Points

In Level 1:

In Level 2:

In Level 3:

14 Art

14.1 Setting

The game is set with a sky backdrop, with different floating platforms (with different materials) the player must use to maneuver towards the end of the stage.

Level 1 skybox:
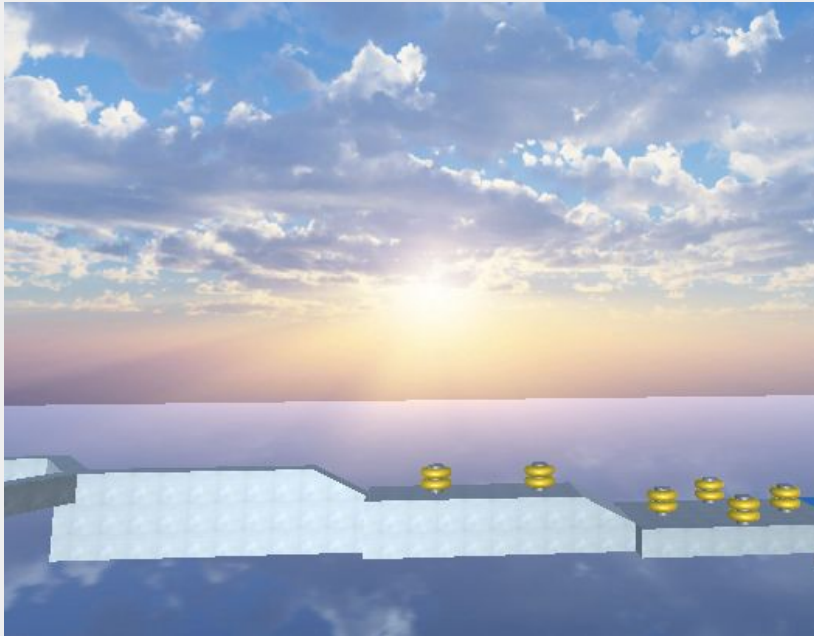
Level 2 skybox:
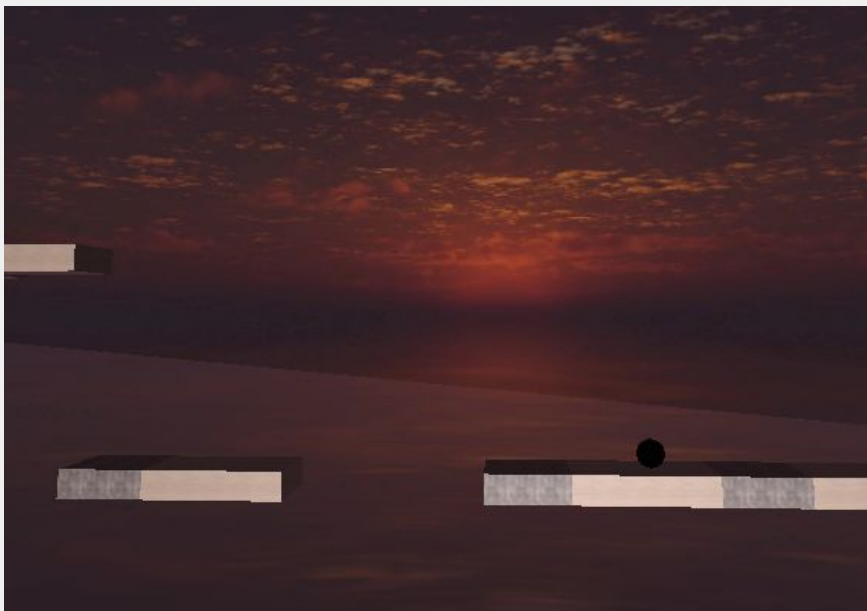
Level 3 skybox (set in space):
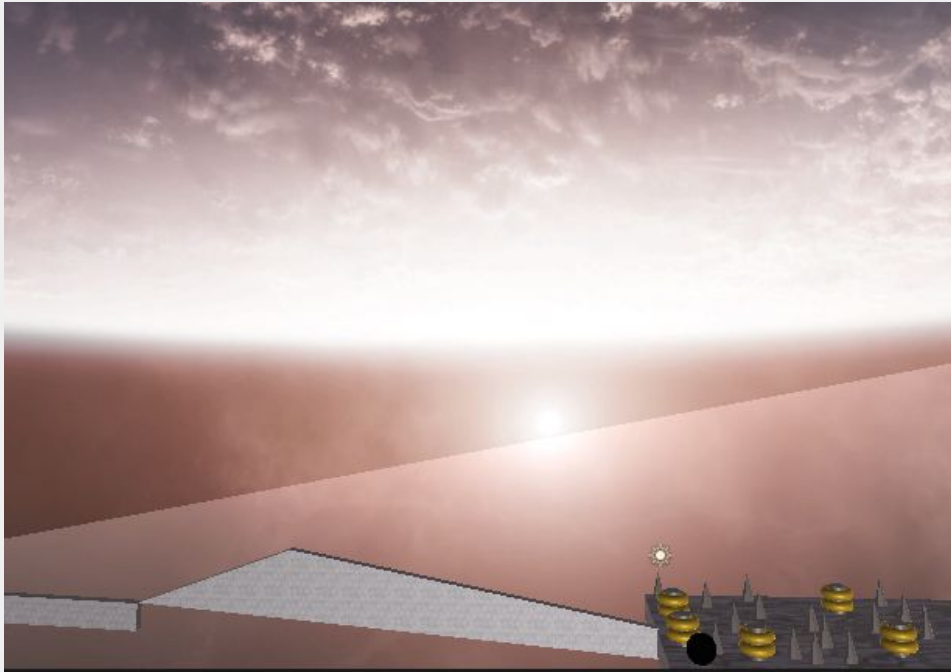
14.2 Level Design

Level 1:
- Introduce basic movement controls
- Introduce the bouncing enemies
- Provide the player with two choices: The fast but hard way, the slow but easy way

Level 2:
- Introduce basic moving platforms
- Introduce patience and timing

Level 3:
- Combination of complex movements and obstacles
- Final and hardest level to test the player using mechanics learned from prior stages

14.3 Audio

Name	Category	Description
GhostChaser_Loop	Background Music	Plays on a loop during the game
ArcadeGameBGM#3_Loop	Background Music	Plays on a loop in the main menu
Credits_Music	Background Music	Plays in the credits
yell11	SFX	Plays in death
Button_Feedback	SFX	Played when buttons are clicked

15 Wish List

- Bombs with exploding animations if the player rolls into them.
- Another level.
- Bonus level/easter eggs.
- More ball options with different weights and sizes

16 Minimum Viable Product (MVP)

- Player controlled ball.
- 3D platforms / obstacles impeding the player towards the end goal.
- A finish line / end point.

17 Screenshots

01:57

8

LEVEL	TIME COMPLETED	FALLS	FALL TIME-PENALTY
1	00:53	3	+9s
2	01:36	4	+12s
3	01:14	1	+3s
TOTALS	03:44	8	+24s

RANK **D**   PERSONAL BEST   03:44

Try Again

Continue

18 Annotated Bibliography

Original Images:

Aviles, J.S. (2020). *Ball, SplashLogo, SSBG, TimerBackground, WinScreen* [PNG].

Dao. (2020). *SnipOfLvl1, SnipOfLvl2, SnipOfLvl3* [JPG].

External Images:

p0ss. (2011). 117 Stone Wall Tilable Textures in 8 Themes [JPG/PNG]. OpenGameArt.
https://opengameart.org/content/117-stone-wall-tilable-textures-in-8-themes?page=3

rubberduck. (2014). 50 free textures 5 - with normalmaps [JPG/PNG]. OpenGameArt.
https://opengameart.org/content/50-free-textures-5-with-normalmaps?page=2

Webcadabra. (2016). Clock Free [JPG/PNG]. Unity.
https://assetstore.unity.com/packages/3d/props/interior/clock-free-44164

rpgwhitelock. (2019). AllSky Free - 10 Sky / Skybox Se [JPG/PNG]. Unity.
https://assetstore.unity.com/packages/2d/textures-materials/sky/allsky-free-10-sky-skybox-set-146014

Doomcaster. (2016). CavernCobble [PNG]. https://doomcaster.itch.io/button-assets

Super Brutal Assets. (2018). Free 2D Adventure Beach Background [PNG]. Unity.
https://assetstore.unity.com/packages/2d/environments/free-2d-adventure-beach-background-82090#description

upklyak. (2020). HourGlass [PNG]. freepik.
https://www.freepik.com/free-vector/realistic-hourglass-transparent-sand-clock_8368283.htm

Audio:

HaelDB. (2012). Male Grunt/Yelling sounds [WAV]. OpenGameArt.
https://opengameart.org/content/male-gruntyelling-sounds

Mopz. (2012). skulls_adventure [MP3]. OpenGameArt.
https://opengameart.org/content/skulls-adventure-music

Levi Moore. (2018). Button_Feedback [WAV/MP3]. Unity.
https://assetstore.unity.com/packages/audio/sound-fx/sound-fx-retro-pack-121743

B.G.M. (2020). Arcade Game BGM #3 [WAV/MP3]. Unity.
    https://assetstore.unity.com/packages/audio/music/arcade-game-bgm-3-173560

B.G.M. (2020). Space Game BGM #2 [WAV/MP3]. Unity.
    https://assetstore.unity.com/packages/audio/music/space-game-bgm-2-169782

Bart. (2011). ticking clock - tick1 [WAV/MP3]. OpenGameArt.
    https://opengameart.org/content/ticking-clock

Code:

slumtrimpet. (2019). Diagonal movement speed too fast [TXT]. Unity.
    https://forum.unity.com/threads/diagonal-movement-speed-to-fast.271703/

Jayanam. (04/18/2020). Unity Moving Platform Tutorial [Video]. YouTube.
    https://www.youtube.com/watch?v=rO19dA2jksk

John. (2020). How to make a countdown timer in Unity (in minutes + seconds) [TXT].
    gamedevbeginner.
    https://gamedevbeginner.com/how-to-make-countdown-timer-in-unity-minutes-seconds/