Project Design Document

11/01/2023
Adrianna Milewska

Roll a ball

Project's idea

The player can roll a ball on the moveable table. It is a ~~puzzle~~ arcade game, where the ball starts at one point and a player has to move it to the end point. The game has to be challenging to make the player think harder. Additionally there are pickups. Their purpose is to roll a ball in every corner even if this means to move away from the end point. It is not obligatory to collect all pickups, as it is only another challenge to the level. To make the levels harder, there will be some obstacles to overcome. The obstacles will contain: moving walls, holes in the ground, moving enemies, spikes (on which collision the level will be restarted).

Project Concept

1

Player Control

You control a

| *Board and a ball* |

in this

| *top down* | game |

where

| *w,s,a,d* |

makes the player

| *Roll every direction* |

2

Basic Gameplay

During the game,

| *types of objects* | appear |

from

| *area(s) of the screen* |

and the goal of the game is to

| *Roll a ball to the end point* |

3

Sound & Effects

There will be sound effects

| *Bounce from walls, falling?* |

and particle effects

| |

[*optional*] There will also be

| *description of any other expected special effects or animation in the project.* |

4

Gameplay Mechanics

As the game progresses,

| *levels has more obstacles* |

making it

| *harder* |

[*optional*] There will also be

| *description of any other gameplay mechanic(s) and their effect on the game.* |

5 User Interface	The	will	whenever
	score	*increase*	*Pickups are collect*

At the start of the game, the title

Roll a ball	will appear

and the game will end when

Player beats all levels

6 Other Features	*Any other notes about the project that you don't feel were addressed in the above.*

Project Timeline

| Milestone	Description	Due
#1	- *Start menu* - *3 concept levels* - *Collectable pickups* - *Moving ball and board* - *Fancy moving background on the start* - *Moving walls* - *Point light* - *Concept of instruction light?*	*10/01*
#2	- *Start and end points* - *Make a level 1* - *Make a level 2* - *Create spikes in the blender!*	*11/01*
#3	- *Make levels 3, make a glowing menu, player* - *When player get a pick up its more emissive*	*12/01*
#4	- *How to depend the intensity of the emission's player from the number of pickups?* - *Level 4, 5, 6* - *More fancy light*	*13/01*
#5	- *Create menu with ability to go to levels* - *Block unfinished levels* - *Save player's completed levels* - *Levels 7,8,9*	*16/01*

#6	- Pause menu - Level 10, 11 ,12, 13, 14, 15 - Sounds, music, settings to volume	20/01
#7	- Level 16-20	23/01
#8	-	/01
Backlog	- Feature on backlog - not a part of the minimum viable product - Feature on backlog - not a part of the minimum viable product - Feature on backlog - not a part of the minimum viable product	/01

Project Sketch
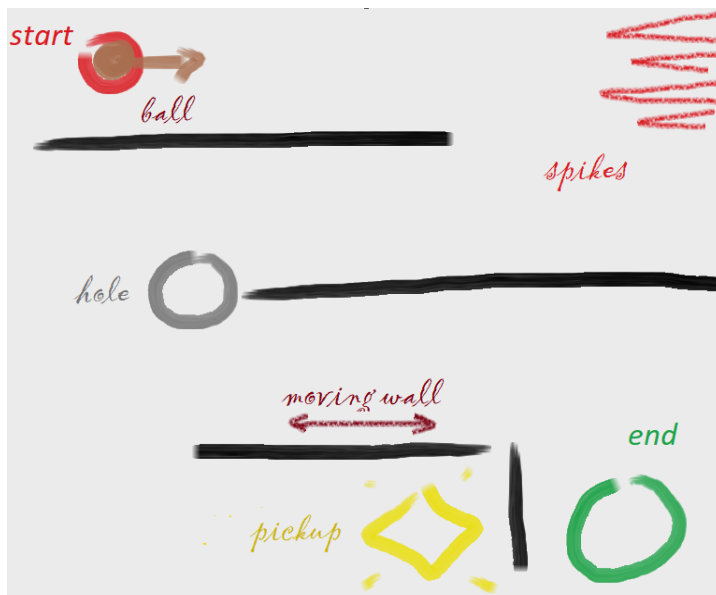
Project Brainstorm

- Dark levels
- Holes as gate to other levels
- Hidden rooms
- Moving enemies with spikes
- Stylish levels (pacman, mario, indian colors etc)

Project Concept Level

Level 1-5 Teaching

Level 1 Moving
Aim: How to move
Player teaches how to move the ball. Many pickups all over the board.

Level 2 Spikes
Aim: How to avoid obstacles near walls (spikes)
Spikes near the end point. Teaches the player how to avoid obstacles.

Level 3 Many spikes
Aim: How to avoid many obstacles near walls (spikes)
More spikes. Teaches the player how to precisely roll a ball.

Level 4 Holes and moving wall
Aim: How to avoid obstacle on the ground (hole)
Introducing holes.

Level 5 Many holes
Aim: How to avoid many obstacle on the ground (hole)
The player teaches how to precisely avoid holes.

Level 6-10 Medium

Level 6 Spikes and hole
Aim: More challenge to the game. Show the player that levels can be modified (obstacles can be combined)

Level 7 Spike and holes
Aim: More challenge to the game.

Level 8 Spikes and holes
Aim: More challenge to the game.

Level 9 Spikes and holes and moving walls with spikes
Aim: Though level, which demands reflex from the player.

Level 10 - 2 moving walls with spikes, moving spikes

Level 11-15 Hard

Level 11 Spikes on walls, moving spikes, different holes
Aim: Teaching the player to die many times

Level 12 Spikes on every wall, wall moving player
Aim: Variety to the game

Level 13 Dark level
Aim: Variety to the game

Level 14 Two-story level
Aim: Variety to the game

Level 15
Aim:

Level 16-20 Stylish levels

Level 16 Pacman
Black-Blue level with ghost around and yellow player with jaw

Level 17 Mario
green level with mushrooms and green pipes. Blue player with red hat.

Level 18 Limbo black white
Black-white level

Level 19 Superliminal?
When object are touched, they become larger and larger, gold

Level 20 manifold garden? Portal style
When object is inside hole, transform up
Red button, cube, doors