

# Project Design Document

29/11/2022  
Adrianna M

## Project Concept of Pachinko

1

### Player Control

You control a

*box*

in this

*Side view*

game

where

*A,d,right and left arrow*

makes the player

*Move right and left*

2

### Basic Gameplay

During the game,

*balls*

appear

from

*Top screen*

and the goal of the game is to

*To gain balls as much as you can in limited time*

3

### Sound & Effects

There will be sound effects

*For ball - when it hits obstacle and when it hits the box  
For box - moving*

and particle effects

*For ball - some sparks or cloud when it starts  
For box - a little cloud when it move to side*

[optional] There will also be

4

### Gameplay Mechanics

As the game progresses,

*More balls appears*

making it

*impossible*

[optional] There will also be

*Time counting, ball counting*

5

### User Interface

The

*score*

will

*increase*

whenever

*Ball is in the box*

At the start of the game, the title

*Pachinko balls*

will appear

and the game will end when

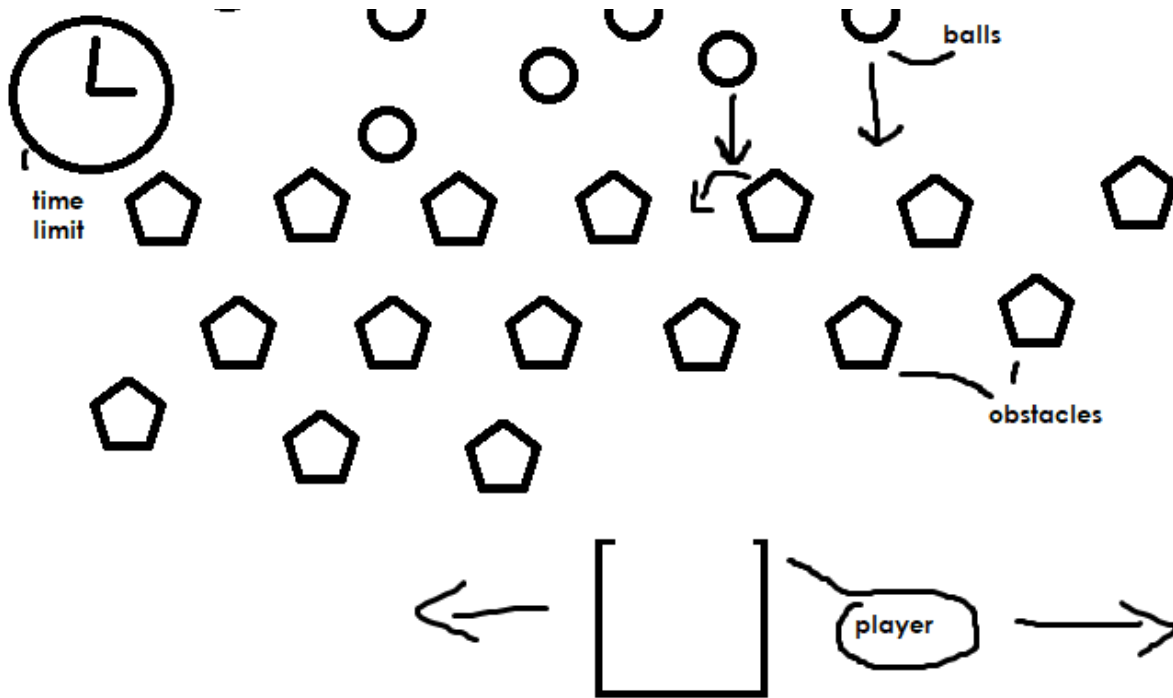
*Time is ended*

## Project Timeline

Milestone	Description	Due
#1	<ul style="list-style-type: none"> <li>- Moving the box</li> <li>- Set up score - Counting the balls when they are in the box</li> <li>- Set up time eg 30 sec</li> <li>- Randomized ball from the top of the screen</li> <li>- Simple UI at start and the end</li> </ul>	29.11
#2	<ul style="list-style-type: none"> <li>- Create obstacles</li> <li>- <del>Destroy balls, when they are too long on ground?</del></li> <li>- Upgrade mechanic (box is too slow when the ball spawn far away) or increase size of it (make it longer)</li> </ul>	30.11
#3	<ul style="list-style-type: none"> <li>- Light change with time</li> <li>- Rewind time for balls (and sun)</li> <li>- Add a background music</li> <li>- Add slider to regulate volume to background</li> <li>- Resolve a problem with sound effect (when it collides with player it should stop)</li> <li>- Add lerp move to first row</li> </ul>	6.12
#4	<ul style="list-style-type: none"> <li>- Add a sound effects</li> <li>- Add particle effects</li> <li>- Add slider to regulate volume to effects</li> <li>- Instruction panel</li> </ul>	9.12
#5	<ul style="list-style-type: none"> <li>- Fix the sound fading problem</li> <li>- More mechanics - rotating and moving obstacles, screen rotate</li> <li>- Camera moving</li> <li>- Level menu</li> <li>- Snow</li> <li>- Cloud effect/sparks effect</li> </ul>	16.12
Backlog	<ul style="list-style-type: none"> <li>- Christmas assets (instead of balls there will be gifts, christmas balls, lamps etc)</li> </ul>	21.12

- In the background will be christmas song
- Obstacles will be glass/breakable christmas balls
- Christmas background
- More levels

## Project Sketch



## Project Brainstorm

- Rewind time (when key is pressed, balls are move backwards to where they were before, other objects are not rewinding, levels keeps getting harder)
- Harder means - obstacles are rotating and moving, that player cannot predict where balls will be
- Future trails after picking an upgrade powerup
- Changing size of box, after picking an upgrade powerup
- Settings to music,
- Settings if user want to time limit game,
- Levels move to the right after time?
- Two modes - one with time limited, after it passed, level change (it moves to left and destroy) and one endless
- Player can move obstacles not the box - player should move obstacles to create a path to the box
- Balls can change
- After some regular amount of balls in the box, level change

- Destroy balls when space is pressed?

## Project Concept Level

FIRST GAME 60 SECONDS shows mechanic of game  
(first aim - 10 balls in the box)

10 first seconds - box is spawn from up, rows are appears, arrows near box appears (informing player what he can do, what game is about) do not inform about time rewind

10 seconds later player know what to do

10 seconds later first row is moving

10 seconds later second row is moving

10 seconds later third and fourth rows are moving and rotating cubes

Now other levels are unblocked

INFINITY LEVEL  $\infty$

Aim: the longest time

Aim2: gain X balls in X time

New: every 10-30 seconds new mechanic (like in the FIRSTGAME camera rotating, new obstacles, moving, rotating)

LEVEL 1

Aim: 5 balls

New: Power Up - Changer box

LEVEL 2

Aim - 5 balls

New: Balls -

LEVEL 3

Aim - 5 balls

New: Power Up - Future trails of balls

LEVEL 4

Aim - 1 ball

New: Player is moving with obstacles, the box is following the balls

Tips

- Add directions
- Make decisions affect gameplay
- Good color scheme
- Gameplay speed
- Camera movement