

# **RUBBER BANG**

# **GAME DESIGN DOCUMENT**

“An online two player game with a twist”

## **Project Description**

*This game design document describe about a 3D low poly online multiplayer shooter with a unique mechanic and an original story.*

## Version History

Version #	Implemented By	Initial Date	Approved By	Approval Date	Reason
1.0	Anmol Mittal	20/02/2023	Anmol Mittal & Faizal Khan	22/02/2023	Initial version with player movements.
1.1	Anmol Mittal	23/02/2023	Anmol Mittal & Faizal Khan	27/02/2023	Online multiplayer support.
1.2	Faizal Khan	01/03/2023	Anmol Mittal & Faizal Khan	02/03/2023	Basic skeleton map design.
1.3	Anmol Mittal	04/03/2023	Anmol Mittal & Faizal Khan	06/03/2023	Added a placeholder gun, shooting & it's muzzle flash and power up system
1.4	Faizal Khan	07/03/2023	Anmol Mittal & Faizal Khan	15/03/2023	Added park environment, terrain, grass, rides, buildings, roads, cars.
1.5	Faizal Khan	16/03/2023	Anmol Mittal & Faizal Khan	20/03/2023	Added refinements to the environment, colliders, more buildings
1.6	Anmol Mittal	21/03/2023	Anmol Mittal & Faizal Khan	22/03/2023	Added a basic menu UI & respawn system
1.7	Faizal Khan & Anmol Mittal	23/03/2023	Anmol Mittal & Faizal Khan	26/03/2023	Researched & Added power up Ulimages
1.8	Anmol Mittal & Faizal Khan	01/04/2023	Anmol Mittal & Faizal Khan	05/04/2023	Music & SFX
1.9	Anmol Mittal & Faizal Khan	06/04/2023	Anmol Mittal & Faizal Khan	06/04/2023	Development build for user testing [bugs found!]

# **Table of Contents**

- 1. Characters**
- 2. Story**
- 3. Gameplay**
  - 3.1. Goal**
  - 3.2. User Skills**
  - 3.3. Game Mechanics**
  - 3.4. Items & powerups**
  - 3.5. Losing**
- 4. Art style**
- 5. Mock UI(s)**
- 6. Music & Sounds**
- 7. Technical description**
- 8. Marketing & Funding**
  - 8.1. Demographics**
  - 8.2. Platforms & Monetization**
  - 8.3. Localization**

## **1. Characters**

Main characters in this game are two kids who are playing in a park, running, jumping climbing rides & shooting each other by rubber bands.

## **2. Story**

Game is set on a sunny day in a kids playground in the middle of a city. There are two young kids imagining themselves playing in a playground shooting each other with rubber bands.

## **3. Gameplay**

### **3.1. Goals**

- Shoot other player.
- Win as much rounds as possible.

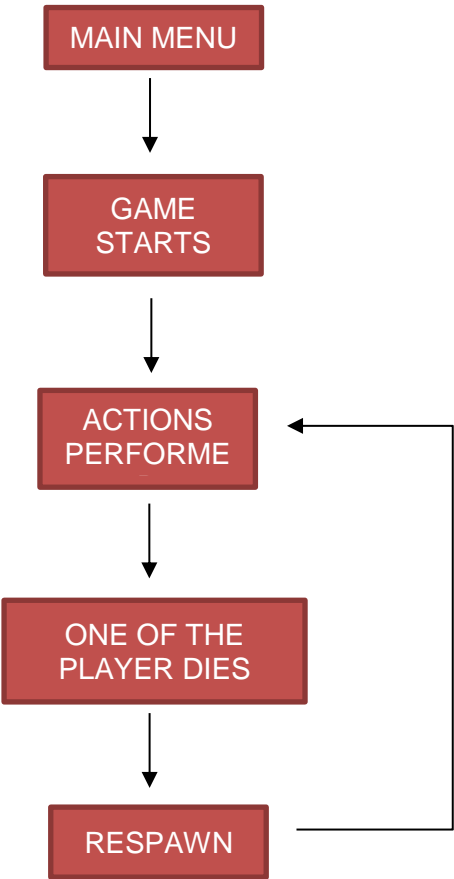
### **3.2. User Skills**

- Walk
- Sprint
- Jump
- Shoot

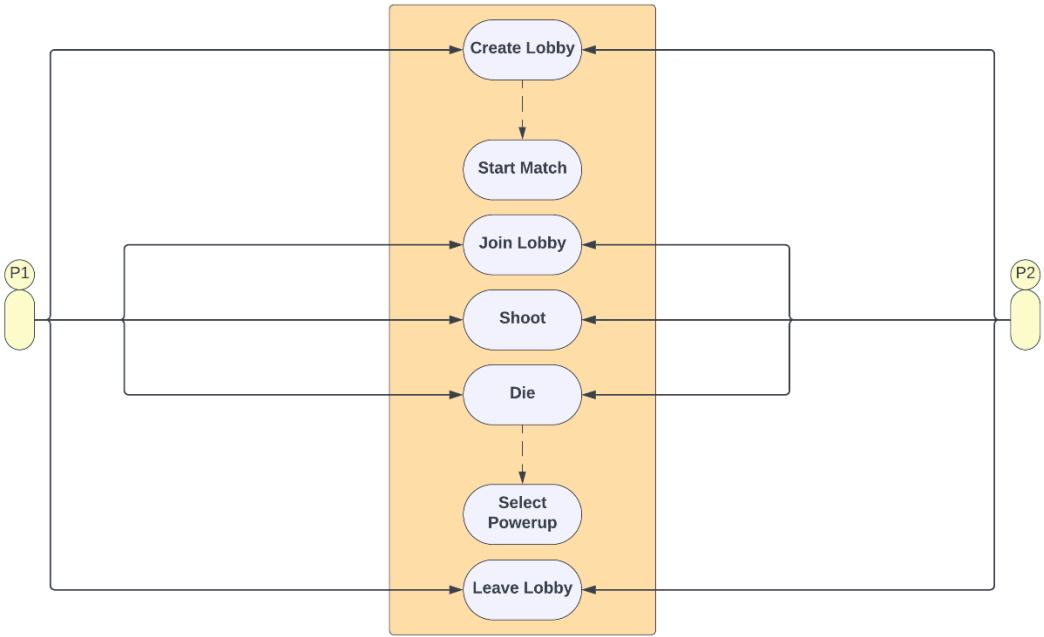
### **3.3. Game Mechanics**

- Players are spawned randomly at any corner of the map.
- A canvas with three options pop up in front of the players from which the players will choose a starting power up.
- Walk, sprint, jump & shoot actions are performed.
- The player which gets killed by the other one gets respawned again with those three powerups to choose from.
- YES! The defeated player gets a power up.
- The players fight a number of matches after which the winner is announced.
- Players can shoot some small objects like trash bags, baseball bat etc. which are rigid bodies.

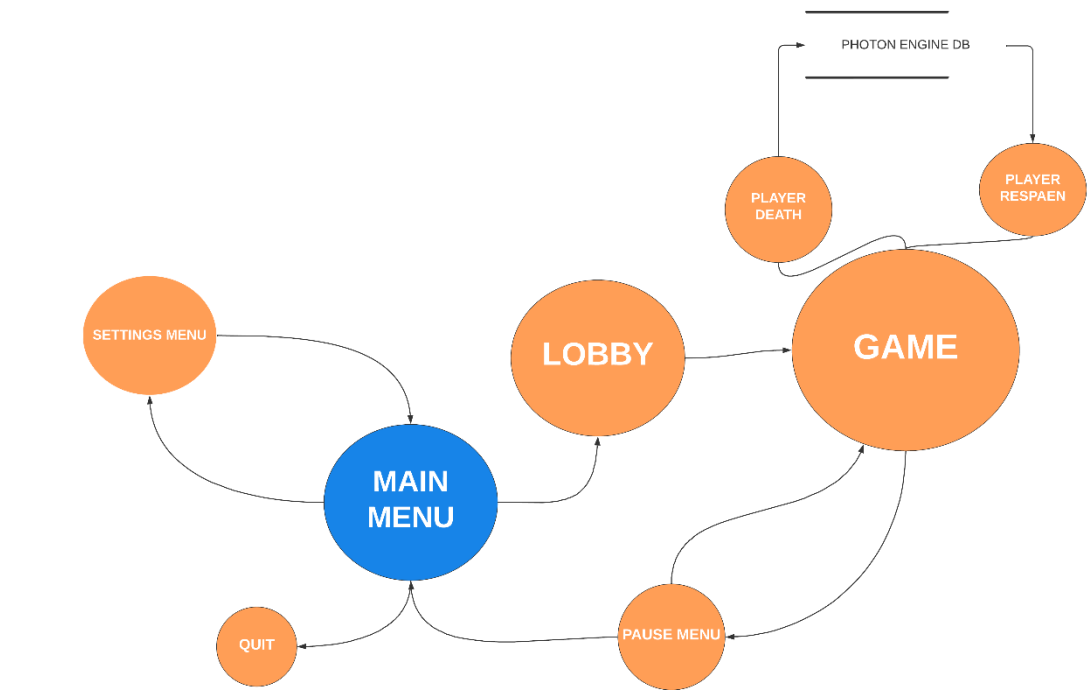
System Flow Chart:



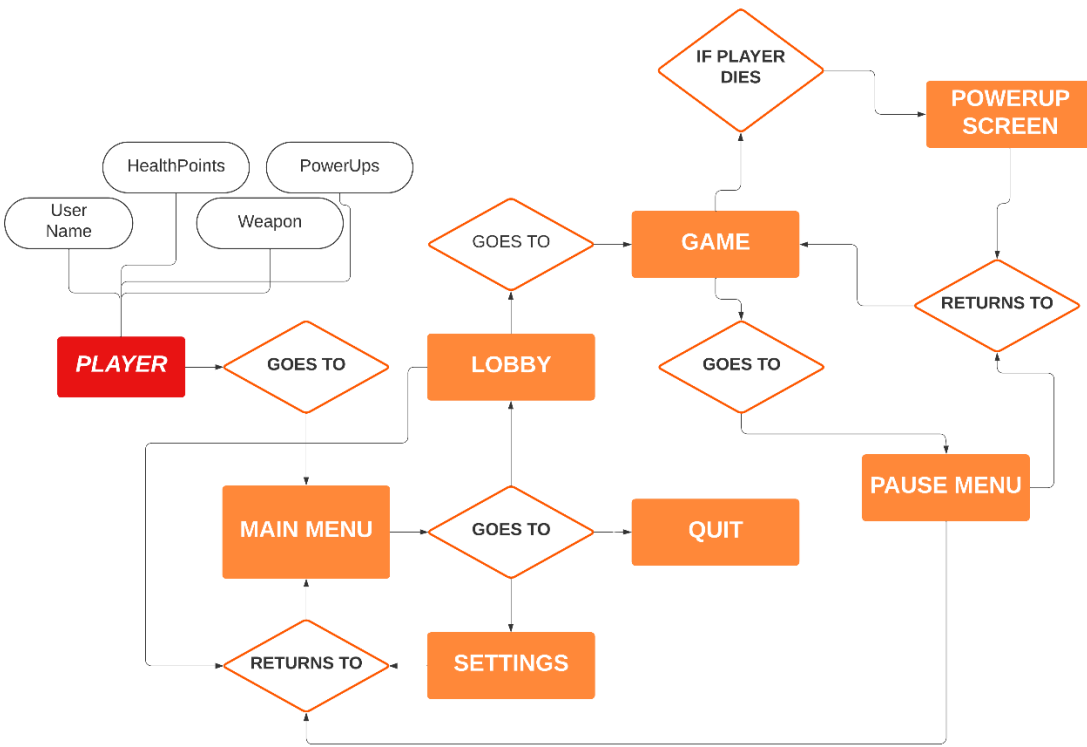
Use Case Diagram:



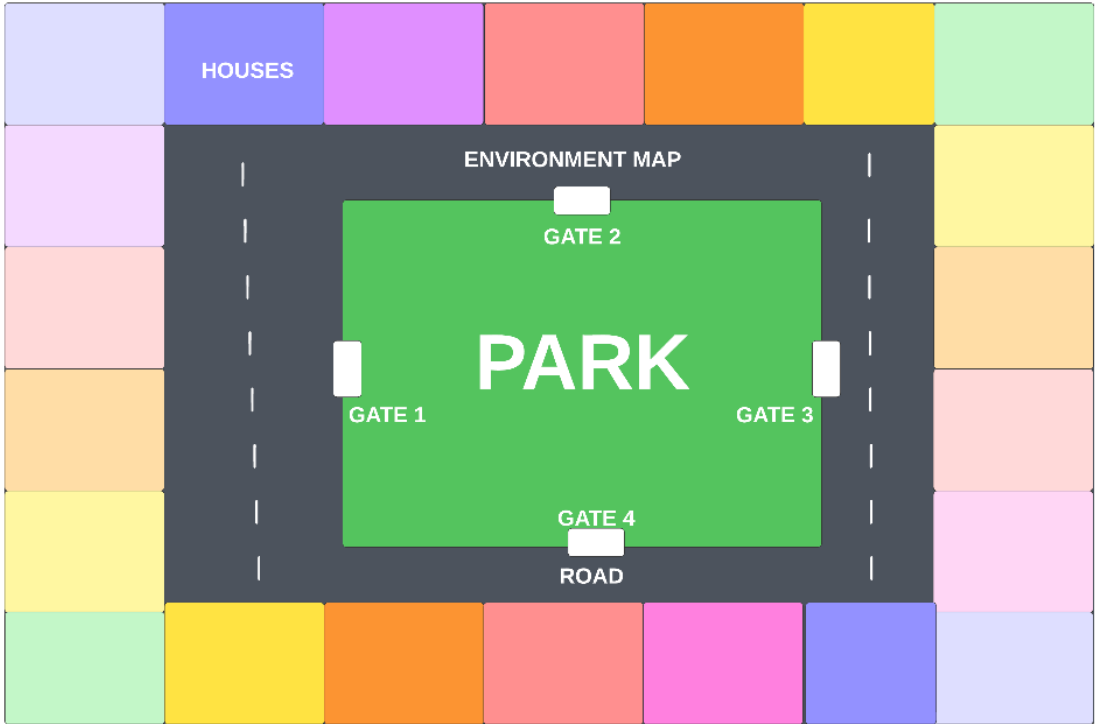
Level 2 DFD:



ER Diagram:



Environment Map:



Hand reference image:





### 3.4. Powerups

- Increase damage by a 10%
- Increase reload speed by 10%
- Increase accuracy by 20%
- Increase max HP by 10%
- Increase jump power by 10%
- Increase walk speed by 1 unit
- Regeneration 5%
- Increase resistance by 10%
- Increase fire rate by 10%

### 3.5. Losing

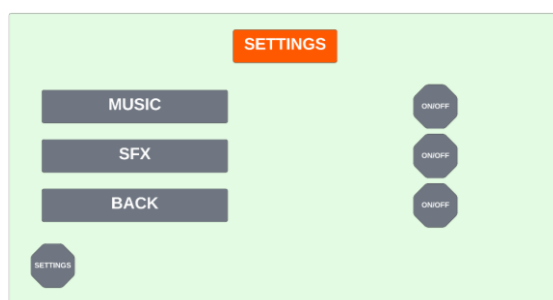
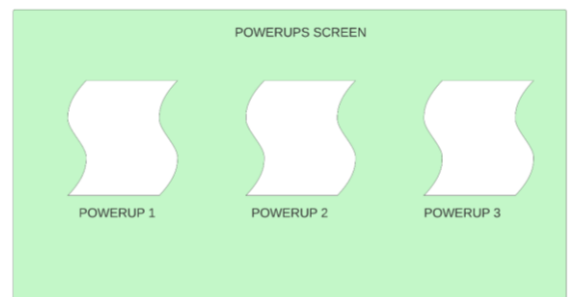
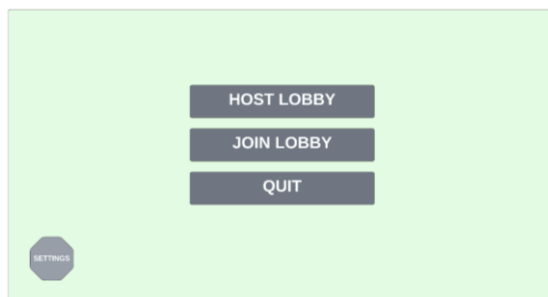
There are two ways by which a player can lose:

- Losing a life
  - Getting killed by other player's bullets
- Losing the match
  - The other player has more number of kills

## 4. Art Style

Game will be in 3D low-poly graphics with bright colors. Environment should look like an afternoon scene.

## 5. Mock UI(s)



## **6. Music and Sounds**

- In game fun BGM
- Main menu music
- Sound on button click [rubber band strike]

### **6.1. Players sounds**

- Jump sound
- Shoot sound
- Hurt sound
- Win sound
- Lose sound

## **7. Technical Description**

Initially the game will be released on the following platforms:

- Windows
- MAC OS
- Linux

Consider the following engines: Unity Engine.

## **8. Marketing and Funding**

- Create a demo reel or a vertical slice to show to the audience for feedback.
- Is there any govt. Funding that we can apply for?
- Contact gaming new websites and send them that vertical slice.
- Post videos about the game on Facebook, Instagram, YouTube etc.

### **8.1. Demographics**

- Age: 6+
- Gender :Anyone

### **8.2. Platforms & Monetization**

- Windows, Mac OS & Linux.
- Free demo level containing ads.
- A full version which is paid.

### **8.3. Localization**

- Initially English.
- Later update with: Italian, French, and German etc.

END OF THE DOCUMENT.