1. Title Page

1.1 Game Name

Dual

1.2 Tag Line

Destroy your best friend!

1.3 Team

Solo Project.

2. Game Overview

2.1 Game Concept

A competitive party game that involves two player to play on the same device to have a dual. Each player holds a side of the screen against the other, and switches their roles between Attacker and Defender in turns.

2.2 Target Audience

All ages.

2.3 Genre

Platform: Mobile Game (Android)
Tag: 2 Players on One Device, Party Game, Competitive, Dual, Physical Property, Defence and Attack, Turn-Base.

2.4 Game Flow Summary

Rival game with unequal sides. Players will switch between Attacker and Defender in each turn to

earn points. At the end of all rounds, the higher total score one wins.

2.5 Look and Feel

Cartoon 3D, Low Poly.
Feels like a Easy to Learn mini game.

3. Game Play

3.1 Objectives

To earn points in every round, and add up together at the end to out weight the opponent.

As the attacker, to earn the point of the round is to destroy the Defender's Base.
As the Defender, to keep your Base alive at the end of the round to insure the point of this round.

3.2 Game Progression

Each round last for 80 seconds. 20 seconds for preparation and 60 second for the combat.

For a game to start, two players as the opponents will first choose the total number of rounds. Then they will roll a dice, winner will act as Attacker first. Next, players will choose the first map for the first round. The map selection phase is at the beginning of each round, after the switch of roles.
Through the round, The Defender will use blocks and obstacles to protect the base, and the Attacker will have a cannon to shoot bullets.

3.3 Game Flow

At the first 20 second of preparation, the Defender will get three random blocks for free to put onto the field. The Defender can also move the already existed blocks on the field as well. At this stage, the attacker can not act.

After the preparation, 60 seconds of battle begins. The Attacker will have random bullets give in stock by time, and Defender will have random block supply as well. Both side can use their stock any time they wish through the round.

3.4 Challenge

For the attacker, he/she has to choose among different types of bullet to use, and also adjust to the right angle to shoot. It takes time to recharge the bullet, so the Attacker must try not waste each bullet. Observe how the Defender placed the blocks, and find the easiest path to send the bullet to the Base.

For the Defender, he/she should always take action before the rival. Imagine all the possible path the Attacker could choose, and place a block there to enhance. Use the limited blocks in a reasonable way, and react fast through the combat when the defense line is broken.

4. Mechanics

4.1 Rules

The options for a game are 3-round, 5-round, 7-round or random among the three choices. Every round last for 80s, 20s preparation and 60s combat time.

Each round will have a point given to either the Attacker or the Defender. If the Base of Defender got destroyed within the time, the round ends and Attacker gain a point. Otherwise, if the time reaches the limit, the Defender gain a point.

The Base will have a hit point of 5. Every time a bullet hit the Base, one hit point will be lost.

The attacker can have three bullets available in stock, and two upcoming ones shown as well. Once a bullet is used, the up coming one will catch up but after a 3 second cool down. Rules are the same with the defender, but a 5 second cool down for new blocks.

4.2 Physics

Generally, when a bullet hit a target, wall or block or any other obstacles, it will explode. For all the objects on the field, two categories are formed, one is stable, and one is dynamic. The stable ones are the part of the map's feature, they can not be moved by the Defender, nor be affected by the bullets. They dynamic objects can be affected by the bullets, include position movement, rotation and demolition. All the dynamic objects can be moved by the defender.

4.3 Player Control

For the Attacker, simply drag the bullet in stock to the cannon, and hold still to adjust the direction and intensity. Release the finger from the screen to shoot.
For the Defender, click to drag the blocks either already existed in the field or the ones in stock to

move.

5. Characters

Means upcoming

5.1 Bullets

Attacker : Regular bullet, explode when hit a target.
Size = 3
Speed = 3
Damage = 3
Explode Range = 3
Impact Force = 3

Rusher : Smaller bullet, move faster but do less damage, explode when hit a target.
Size = 2
Speed = 5
Damage = 2
Explode Range = 2
Impact Force = 2

Eater : Big and slow, instead of explode, it kills the first touched block, then disappear as well.
Size = 4
Speed = 2
Damage = 999
Explode Range = 0
Impact Force = 0

#Troubler : Regular size but fast, does less damage but has strong Impact Force, explode when hit a target.
Size = 3
Speed = 4
Damage = 1
Explode Range = 5
Impact Force = 5

#Killer : Small bullet with deadly damage, but only effect on a small range, explode when hit a target.
Size = 2
Speed = 3
Damage = 10
Explode Range = 2

Impact Force = 3

#Freezer : Regular size and speed, explode when hit a target and freeze all the blocks in explosion range(can not be moved by the Defender for 5 seconds).

Size = 3

Speed = 3

Damage = 0

Explode Range = 4

Impact Force = 0

5.2 Blocks

Box: Basic square Block

Size = 3*3

HP = 5

Impact Resistance = 1

BigBlock: Larger square Block

Size = 5*5

HP = 7

Impact Resistance = 2

TallBoy: Basic rectangle Block

Size = 5*2

HP = 5

Impact Resistance = 1

ThickWall : Strong wall with high HP and Impact Resistance

Size = 4*3

HP = 9

Impact Resistance = 3

#RollingRock : Great Defence, but zero Impact Resistance.

Size = 3*3

HP = 15

Impact Resistance = 0

#SteelNode : Small in size, but has strong defence and high Impact Resistance.

Size = 2*2

HP = 15

Impact Resistance = 4

6. Levels

6.1 Training Level

To teach the players the basic rules of the game, and to introduce the types of bullets and blocks. Two rounds will be played, so both the players will have the chance to act different roles.

Training Level
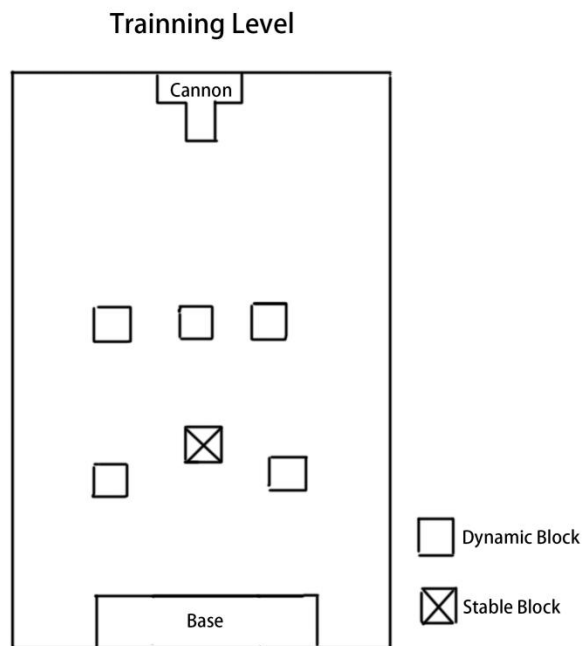
6.2 Maps

Bounce Wall: Bullet will bounce back in an angle instead of explode.
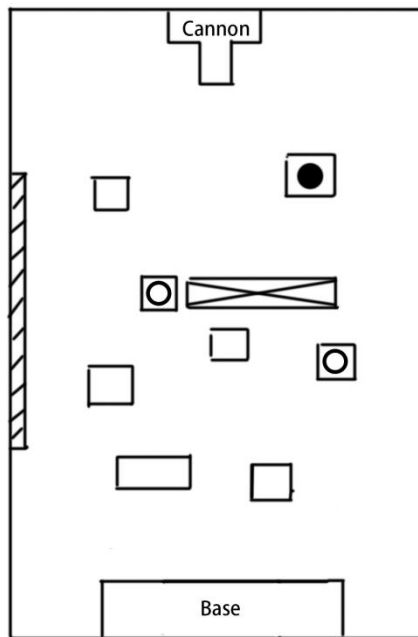
Map #1
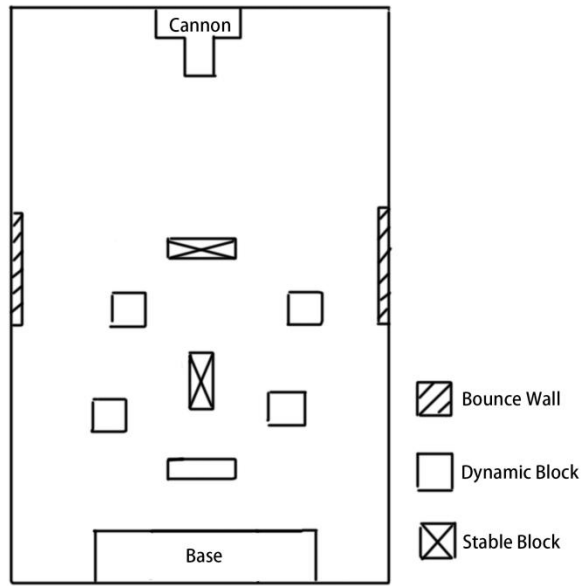
Map #2
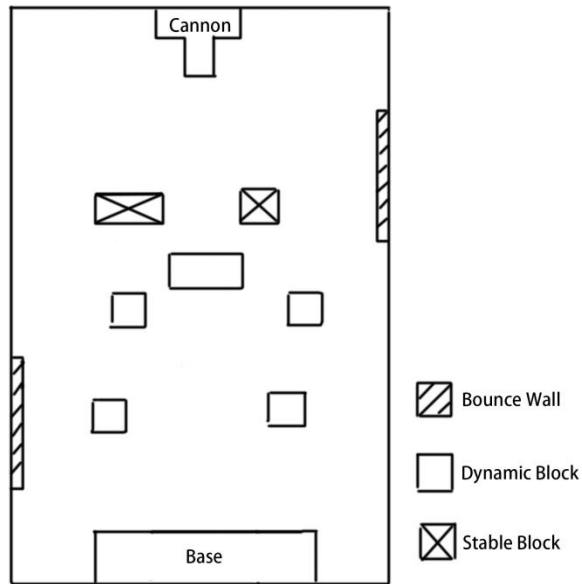
Portal: Bullets hit the input of the portal will transport to the output with a random direction towards the Base. Bullets hit the output of the portal will do nothing but explode. When muti output portals occurs, the transportation of the bullet is at random as well.

Map #3

Cannon

Base
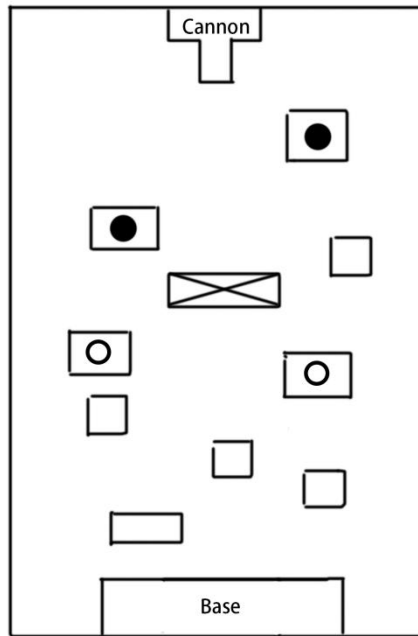
- ● Portal In
- ◉ Portal Out
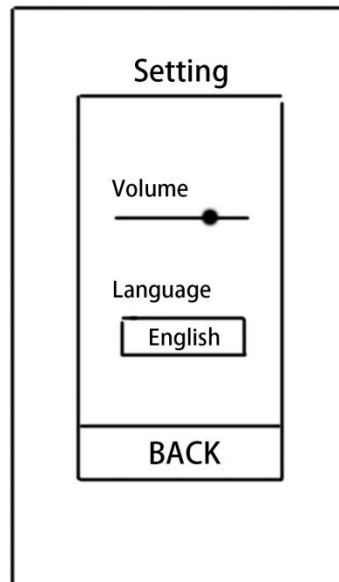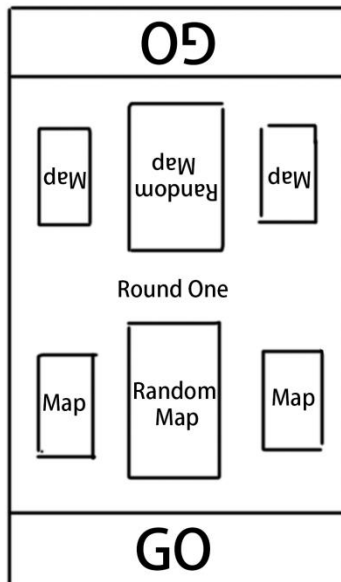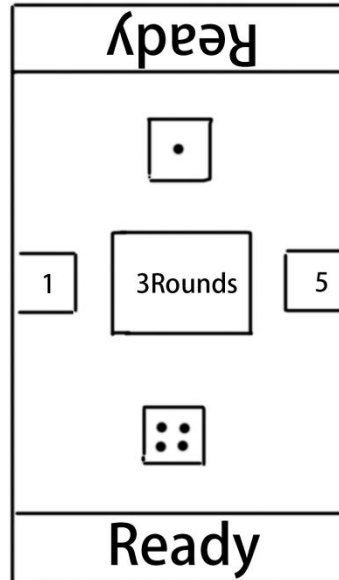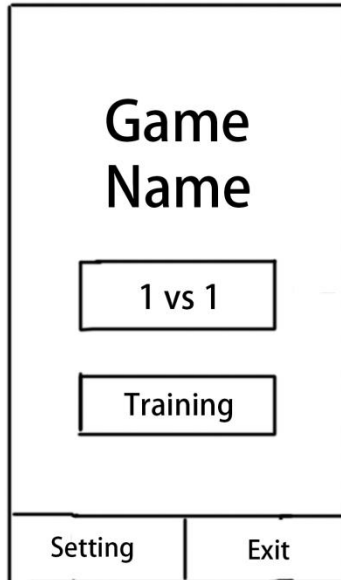- ☐ Dynamic Block
- ☒ Stable Block

Map #4

Cannon

Base

- ▨ Bounce Wall
- ● Portal In
- ◉ Portal Out
- ☐ Dynamic Block
- ☒ Stable Block

7. Interface

7.1 Visual Interface

Screen 1 (Main Menu):

Game Name

1 vs 1

Training

Setting | Exit

Screen 2 (Ready):

Ready

(dice showing 1)

1 | 3Rounds | 5

(dice showing 4)

Ready

Screen 3 (Map Selection):

GO

Map | Random Map | Map

Round One

Map | Random Map | Map

GO

Screen 4 (Setting):

Setting

Volume

Language

English

BACK

7.2 Audio

BGM for both the menu and in game combat.

Sound effects: bullet lunch, drag object, explode, click button, base attacked, game over, explode, hit an object, goal.

7.3 Game Art

2D, flat painted, Sketches

Reference: Diep.io