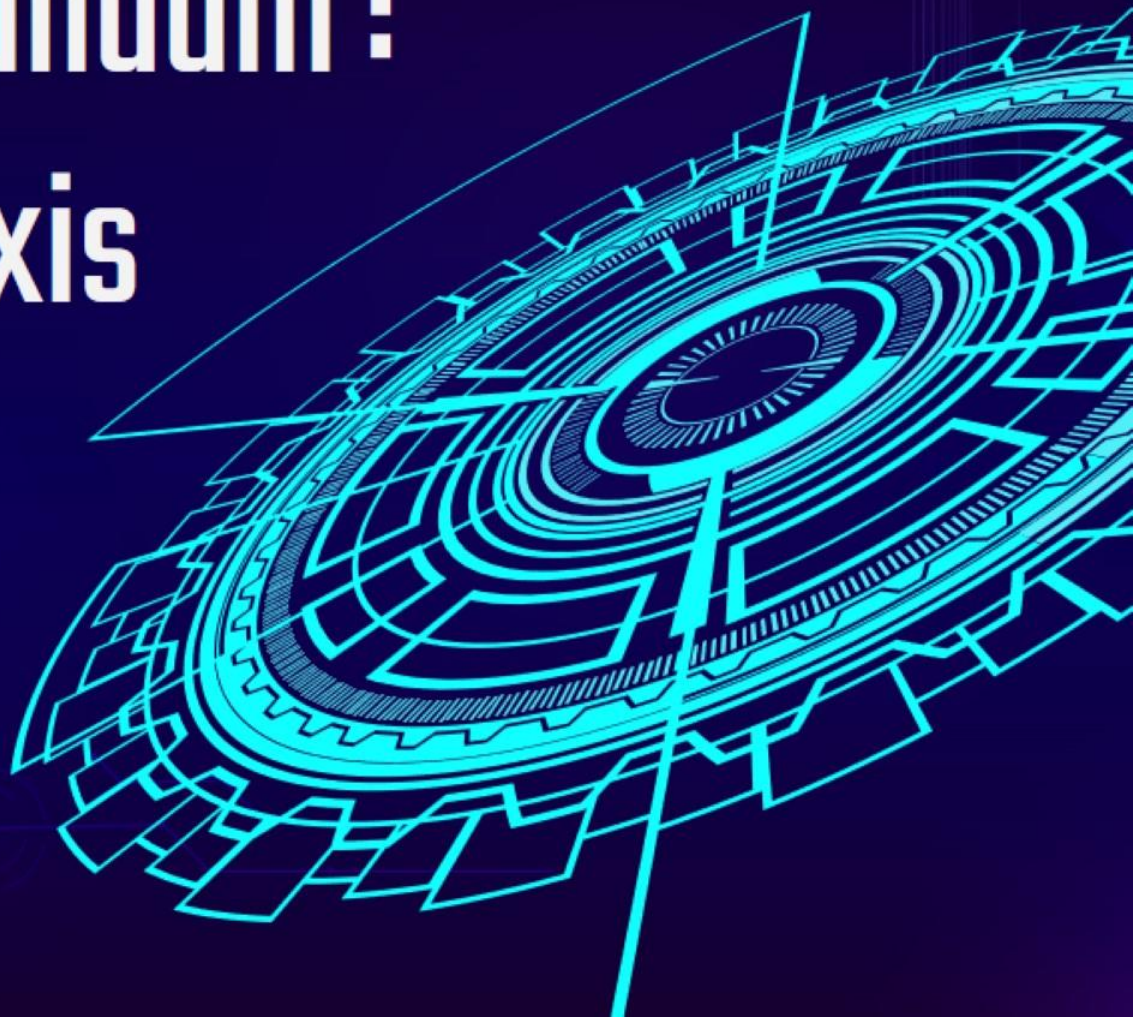# Mobile Suit Gundam :

After Fall of Axis

Created by: Deadline Fighter

OUR TEAM

Brian Chan

Team leader
Programmer

Anson Wong

Game & Graphic Designer

Mark Li

Programmer

TABLE OF CONTENTS

INTRODUCTION

Our Objective

2D soul like shooter game

Extremely challenging gameplay experience

Aim to entertainment hardcore player

Restore abilities and limitations of classic giant robots

Anti-war reflection through story

Main Character

Pilot

Name: Sousuke Sagara

Provenance: Full Metal Panic series (1998)

Organization: Mithril

Call sign: urzu

Rank: sergent

Machine

    Name: Arx-7 Arbalest

    Provenance: Full Metal Panic series (1998)

    Height: 15.2 meters

    Other: Lambda Driver

Equipment

Fixed armament:

12.7mm Chain Gun

Anti-tank Dagger (throwable)

GRAW-2 Monomolecular Cutter

Optional armament:

"Boxer" 57mm Shotcannon

ASG96-B 57mm smoothbore gun

40mm submachine gun

Lambda Driver activated (special mode)

Shotcannon become chargeable for shield piercing

Melee attack chargeable for special attack (re_
ammo)

Auto-react energy shield

(The above functions increases player's temperature)

Enemy

Name : F91 Gundam (mass production type)

Provenance: Mobile Suit Gundam F91 (1991)

Height: 15.2 meters

Organization: local defense forces

Armament: Beam Rifle

      Variable Speed Beam Rifle (shield piercing)

      Beam Shield

Name : Gunbuster

Provenance: Gunbuster (1988)

Height: 34 meters

Organization: none

Armament: Laser

    Missle

    Electrical collider

Functional Features

Functional features

1. Player Controller

2. Story

3. Health Point system

4. Temperature system

5. Weapon selection system

6. Weighting system

7. Boss fight

Functional features

Player Control

Player will control the main character, Arx-7.

Functional features

Story

Slides will be shown automatically after clicking
the start button
The player can also skip the current slide manually
by clicking the left mouse click

Buster machines 1, 2, 3 and the great battleship Exelion set off for the final battle in thousands light
year away from galaxy

Light of human and heart covered earth after the miracle

Functional features

Health Point System

HP(Health Point) will be not displayed in game

HP will decrease when the character is hit by projectile, such as bullet, and turn the character in red as a sign that HP has been decreased

Enemy disappear when it's HP equal or below zero

If the player's HP reaches zero, then the game will show the death screen and return to the game title

Functional features

Temperature System

Player's temperature will be displayed on the top left corner in the game

The temperature will increase when the player is in special mode and hit by the enemy

Once it reaches the maximum temperature value, it will overheat, and the player cannot control for a few seconds as a penalty

Temperature will decrease when the player is stop moving

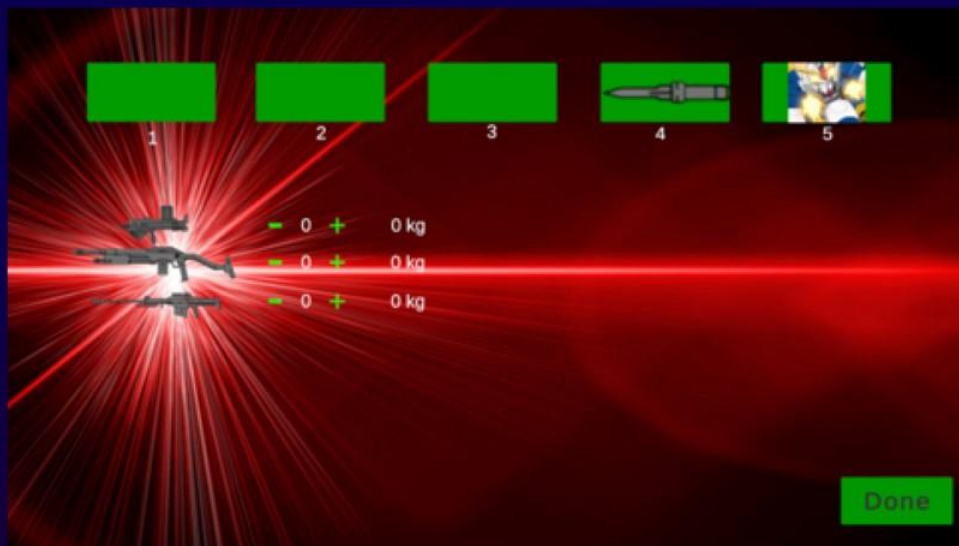Boss has the same feature as the player

Functional features

Temperature System

Functional features

Weapon Selection System

Player will select weapons after reading the game background story

Functional features

Weapon List

Chain gun and dagger are default weapon, player still have three extra weapon options to choose, every weapon has different damage and weight

Functional features

Weighting System

The weighting will affect the player's movement speed

When the player select more weapon and ammo into the battle, the weight of the player will increase accordingly

The player can also reduce the weight by using the ammo

Weighting will show below the temperature bar

Functional features

Boss fight

```
Skill:   2 types of laser
         Super inazuma kick
         Grabing
         Buster missile (trackable)

The boss will attack with a second cool down
```

Non-Functional Features

Non-Functional Features

1. Frames rate

2. Usability

3. Response time

4. Required resources

5. Platform

6. Loading

Non-Functional Features

1. Frames rate
   addressable , 60fps as default for satisfying most
   desktop users

2. Usability
   keyboard only , addressable control keys in setting

3. Response time
   keep player response time below 10 milliseconds with
   intensive attack and combo.

Non-Functional Features

4. Required Resources
        425 MB Hard Disk storage and 2048 MB RAM

5. Platform
        64-bit Windows system

6. Loading
        Least than ten seconds to load the whole game

Development

Development

PROBLEM

1. New to Unity

1. New to painting software

1. Loss of drawings

Problem 1: New to Unity

As we are all new to unity, all the coding and editing need
time to study. Also, the programming language using in unity
is C#, which is also new to us. As the result, our project
process is slow at the beginning.

Problem 2: New to painting software

As the designer is new to drawing software, practicing is needed for accustomation and improvements
Production is behind schedule
Limitation of drawing skill and unfamiliar with tablet
Could not produce some of planned features

Problem 3: Loss of drawings

Our team have lost many drawings include the body parts of the character, draft drawing due to our designer upgraded his computer without backup

It costed 1 month for recovery and redrawing all the missing frames and figures

1. Dividing human resource

1. Feature reduction

1. Cloud

SOLUTION

Solution 1: Dividing human resource

Using new development tool is the problem we facing
at the beginning of project, so we divided our
teammates into two groups.
One group study about controllable character,
another group study about Non-player character.

Solution 2: Feature reduction

As we cannot meet the schedule we reduced some planned feature, such as removing the second controllable character, leaving only one character(Arx-7) for player to control and change the second character(F91) into enemy side.

Solution 3: Cloud

After the data loss mentioned before, we started to upload everything into Google cloud for preventing any extra lost of data again.

Reference

Characters and weapons: Arx-7 from *Full Metal Panic* (1998)
F91 from *Mobile Suit Gundam F91* (1991)
Gunbuster from *Gunbuster* (1988)
explosive animation from *Alex Redfish*
https://drive.google.com/drive/folders/1kHRGlmTKCoyKE_cBk7NGzv1C8iw4p50A

background: *Full Metal Panic* (1998)
mobilegamegraphics https://mobilegamegraphics.com/
sound effects: *Zapsplat* https://www.zapsplat.com/
Fesliyan Studio https://www.fesliyanstudios.com/
music: M9, Shissou from *Full Metal Panic* (1998)
Gunbuster march, Fly high from *Gunbuster* (1988)
Judau in space, main theme from *Gundam series*
bullet images: *Freepik* https://www.freepik.com/free-vector
Unity tutorial: *Brackeys* https://www.youtube.com/user/Brackeys
Code Monkey https://www.youtube.com/channel/UCFK6NCbuCIVzA6Yj1G_ZqCg
Unity API https://docs.unity3d.com/ScriptReference/

THANKS

Does anyone have any questions?

CREDITS

END