2020

MET4334 Game Engine Programming

ADVENTURE TEAM

ASSIGNMENT - PROJECT PROPOSAL

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IT114206/2B Group 1

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Game Overview

Title of the game

Adventure Team

Brief description of the game

Adventure Team is a two-player side-scrolling game. Players need to use the OSC console to connect to the game server to cooperate in the game. The game has two levels and one enemy boss level. The player needs to control the character to move to the right, and the player must use jumping to avoid enemies attacks and jumps on the enemy's head to attack the enemy.

Story

Adventure Team, an ordinary name, but they are a very brave team. They were commissioned to investigate an island. In ancient times, this island was once occupied by pirates but now there is no curse from anyone. The expedition team needs to investigate the reason for the curse of the Lost Island and collect the gold and silver treasures collected by pirates from all over the island.

Can the adventure team survive the island being attacked by cute but ferocious wild animals? Can the expedition work at full capacity and complete the commissioned tasks, and it is clear why people abandon their treasures and escape the curse of this island?

You are invited to join the adventure team!

Game Detail

Game objective

The purpose of the game is to cooperate with teammates to collect gold coins. Players need to dodge or attack the enemy in the level. Killing the enemy will also drop gold coins. There will be a lot of gold coins to kill the last enemy boss.

Game rules

The player must control the character to collect scattered gold coins, You can also get gold coins after defeating the enemy, but avoid being attacked by hostile targets such as enemies.

Player control

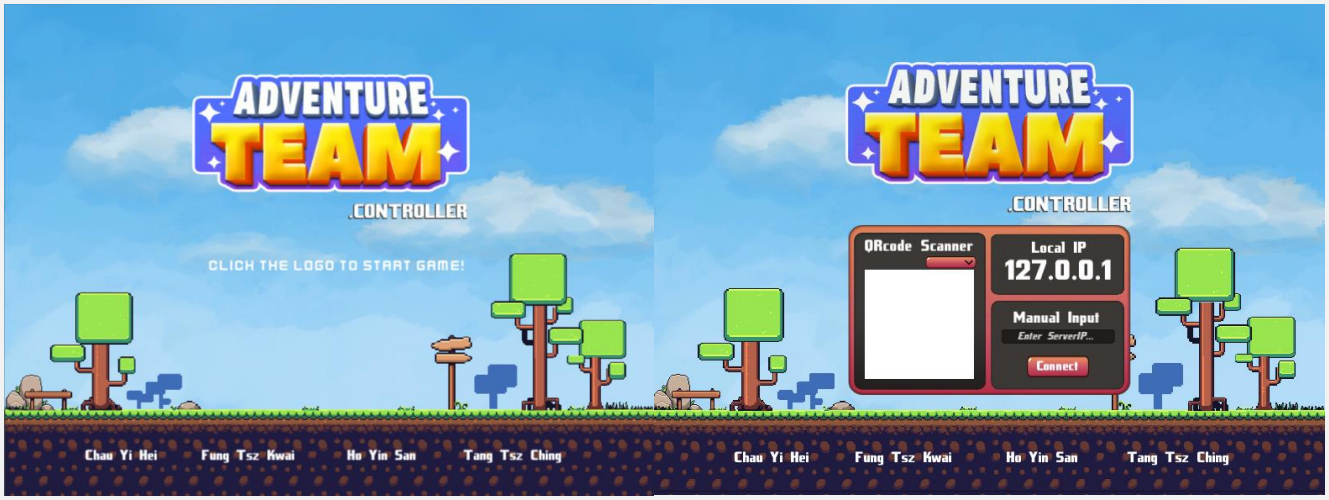
Setup : Keyboard and Mouse	
Move Left	A/ Left Arrow **and** Click Button
Move Right	D/ Right Arrow **and** Click Button
Jump	Space bar/ Up Arrow & Click Button

User Interface

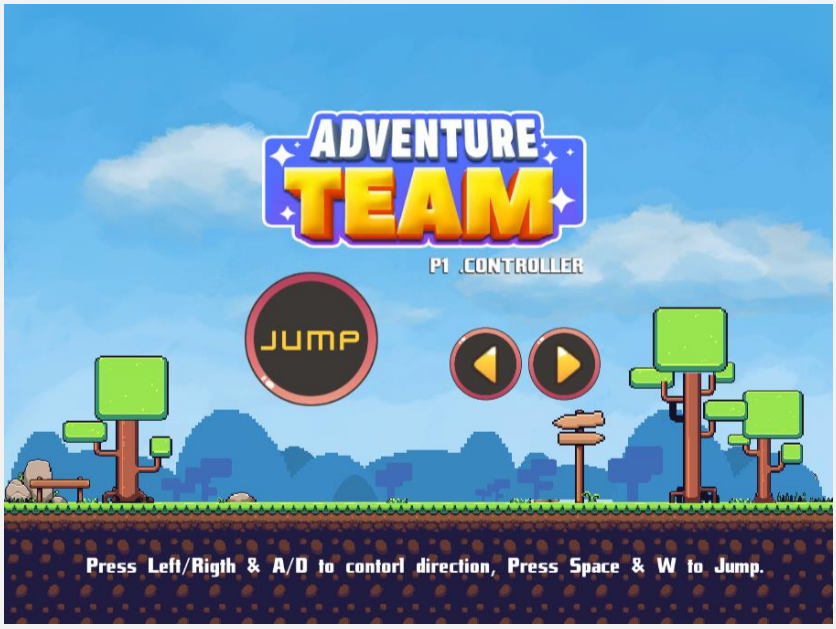
OSC Controller

Resolution: Default 800*600

Title Scene Design



OSC Controller Scene Design

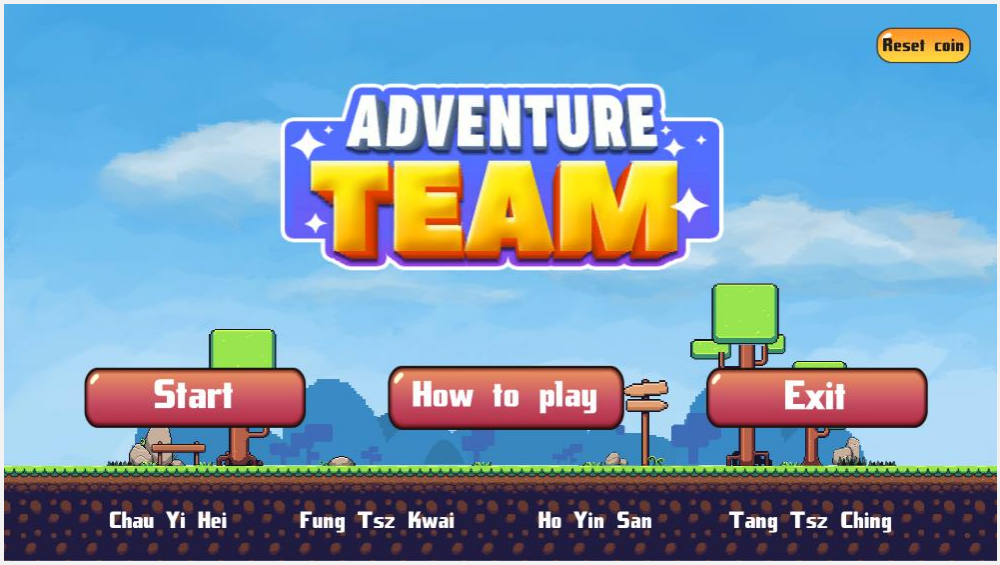


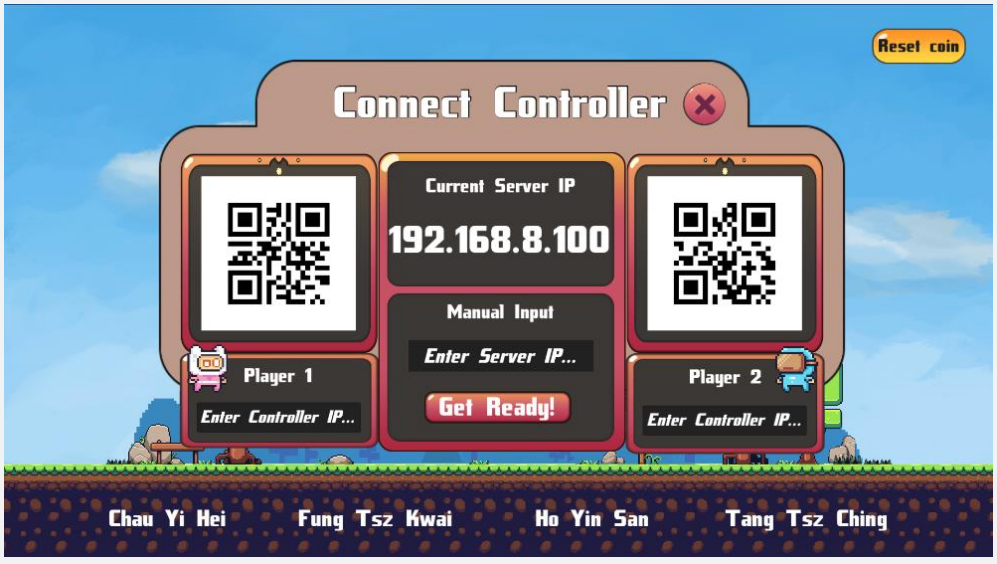
Result

Game

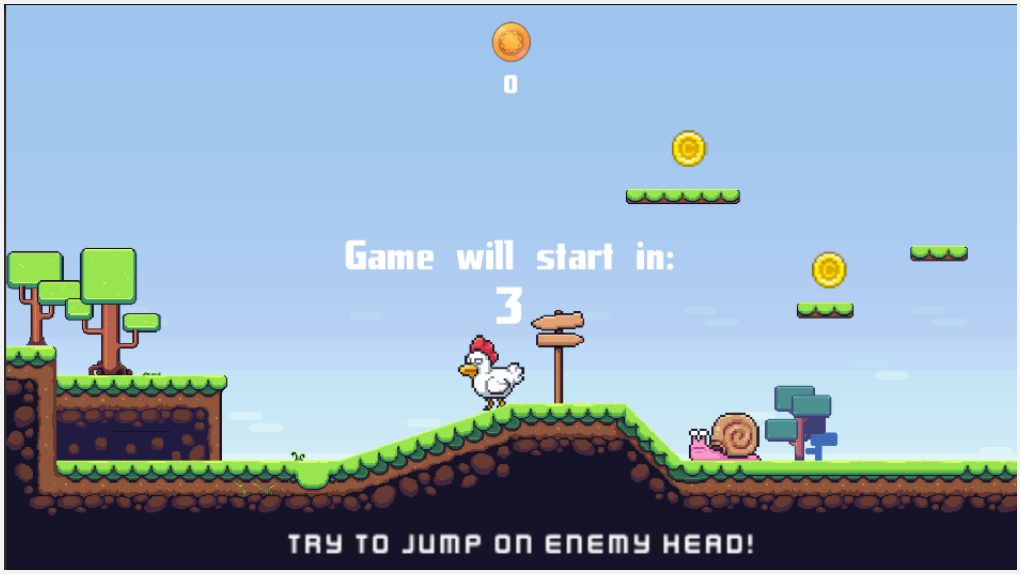
Resolution: Default 1920*1080

Title Scene Design

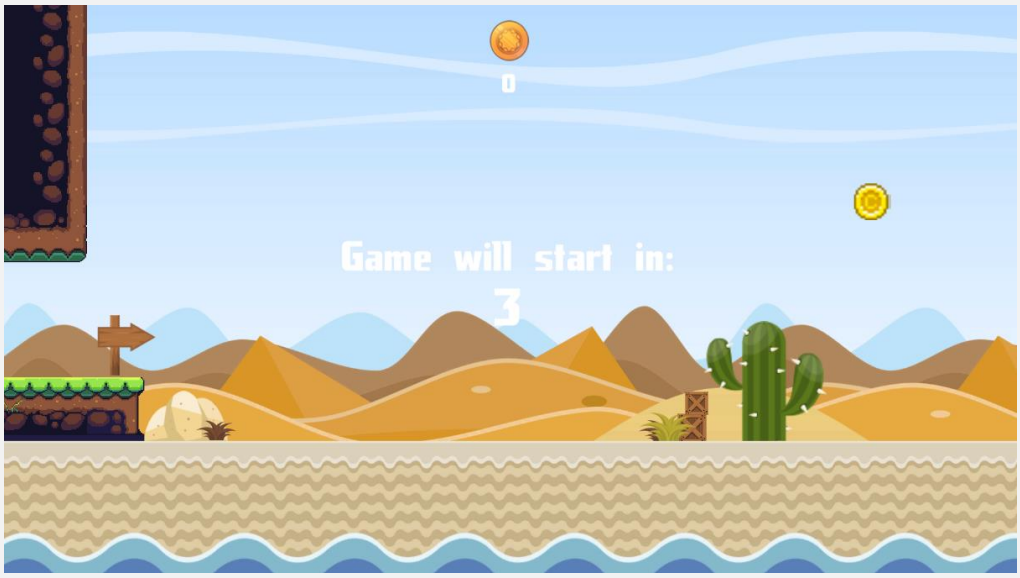




Level 1 Scene Design

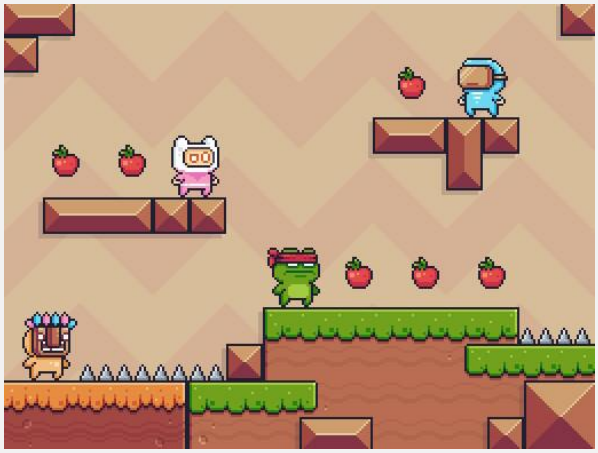
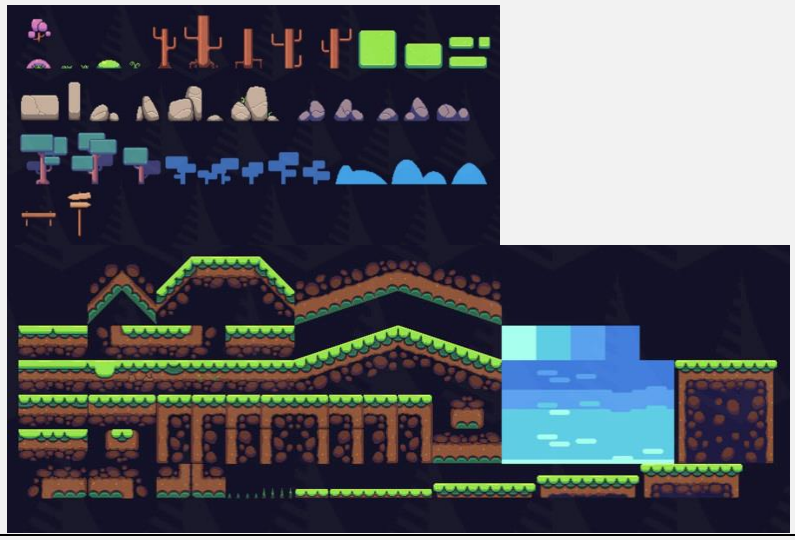


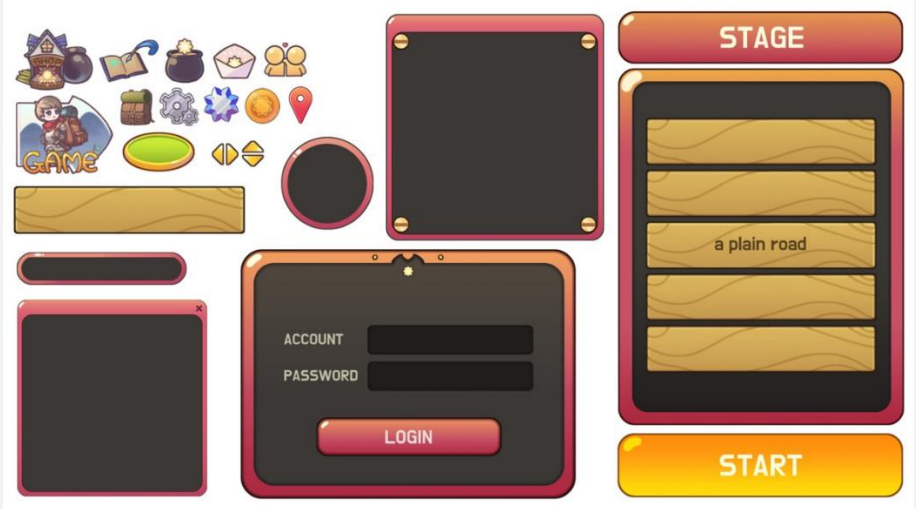
Level 2 Scene Design

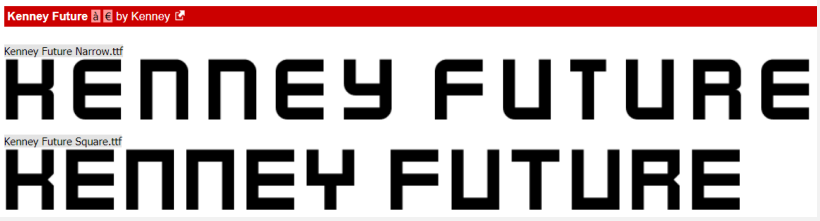


Boss Level Scene Design

Asset list

2D Graphic	
Player & Environment Image	https://assetstore.unity.com/packages/2d/characters/pixel-adventure-1-155360 
Enemy Image	https://assetstore.unity.com/packages/2d/characters/pixel-adventure-2-155418
Environment Image	https://assetstore.unity.com/packages/2d/environments/nature-pixel-art-base-assets-free-151370 

Environment Image	https://opengameart.org/content/2d-platformer-desert-pack
Background Image	https://opengameart.org/content/sky-backdrop
Item Image	https://opengameart.org/content/rotating-coin
UI Image	https://assetstore.unity.com/packages/2d/gui/icons/simple-ui-icons-147101 

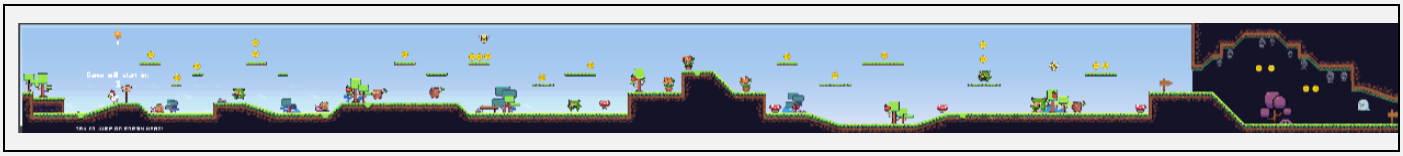
Font	https://www.dafont.com/tank-junior.font
Font	https://www.dafont.com/kenney-future.font 

Audio	
Music	https://opengameart.org/content/happy-synths-loop-with-slight-christmas-feeling Level 1 & Level 2 BGM
Music	https://opengameart.org/content/5-chiptunes-action Boss Scene BGM
Music	https://opengameart.org/content/happy-arcade-tune Title Scene BGM
Sound effect	https://taira-komori.jpn.org/game01tw.html Button ,Coin, Player dead Sound
Sound effect	https://www.freesoundeffects.com/free-sounds/ghost-10089/ Level 1 enemy (Ghost)
Sound effect	https://taira-komori.jpn.org/arms01tw.html Player attack sound (Boss)

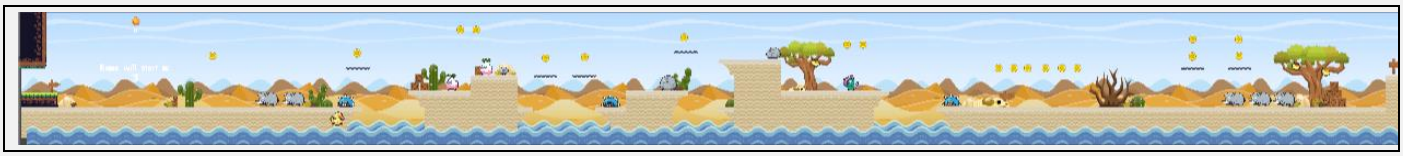
Tools	
A* Pathfinding Project Package	https://arongranberg.com/

Level Design

Level 1



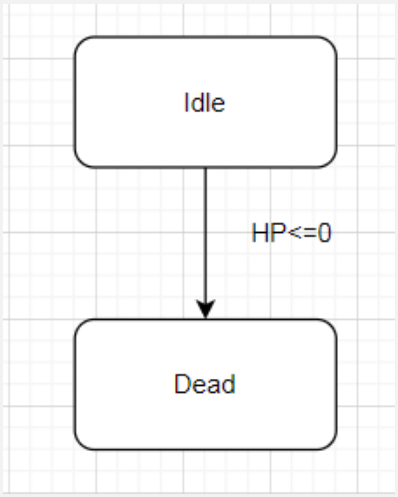
Level 2



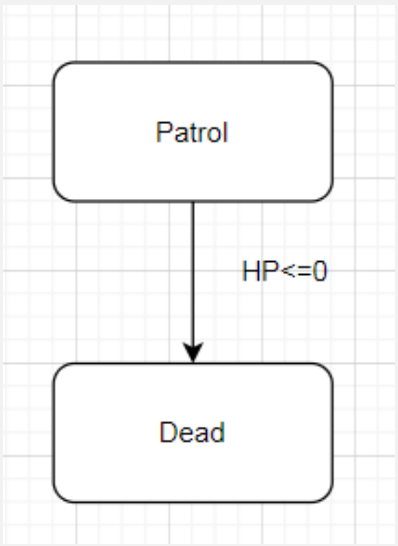
Boss Level

FSM for AI

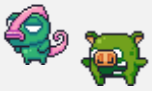
No Action Enemy

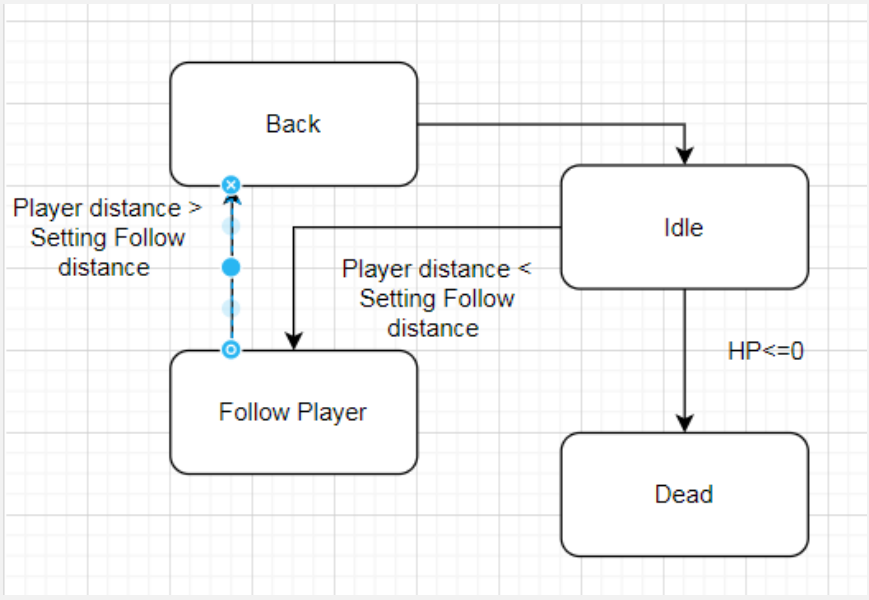


Patrol Enemy

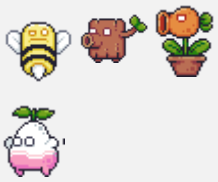


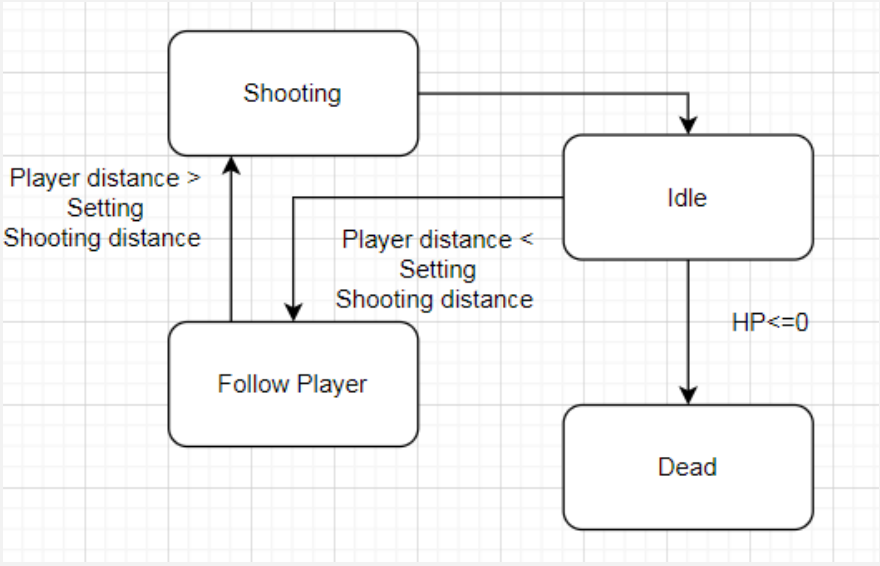
Sensing player distance Enemy



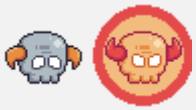


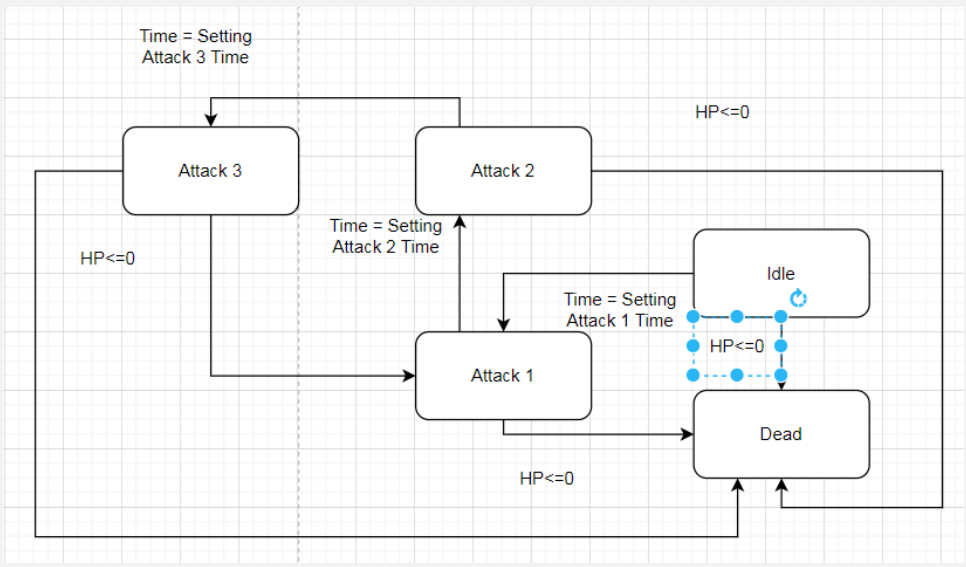
Can Shooting and Sensing player distance Enemy





Boss : change attack by time





Production

Tasks / milestones

- 28 October 2020
  1) Decide Project Group Member List
  2) Submit Initial Idea
- 25 November 2020
  1) Game Demo Playtest
  2) Decided to change the game to OSC control
- 9 December 2020
  1) Submit Game Project
  2) Submit demo video
  3) Submit project proposal

Project schedule

	Week1 11/11&before	Week2 12/11-18/11	Week3 19/11-25/11	Week4 26/11-2/12	Week5 3/12/-9/12
2D Art	Collection of Graphics	UI design	Collection of Better Graphics Level 1 Map Design	OSC control UI design Level 2 & Boss Scene Map Design	Embellish Map Add item: coin
Animations		Player Movement Animation	Level 1 Enemy Animation	Add Enemy Animation	Fix Animation Adding FX Add Boss Animation
Audio	Collection of Audio		Collection of Better Audio		Adding item Audio
Scripts		Enemy AI	Fix U-net change character	Player OSC control Add Enemy AI	Add Enemy AI collect Coin function save coin record
Misc.	Game idea Game prototype		Game Demo	Update after playtest U-net system change to OSC control	Game Demo Video

Marketing strategy

Target market

Casual gamer

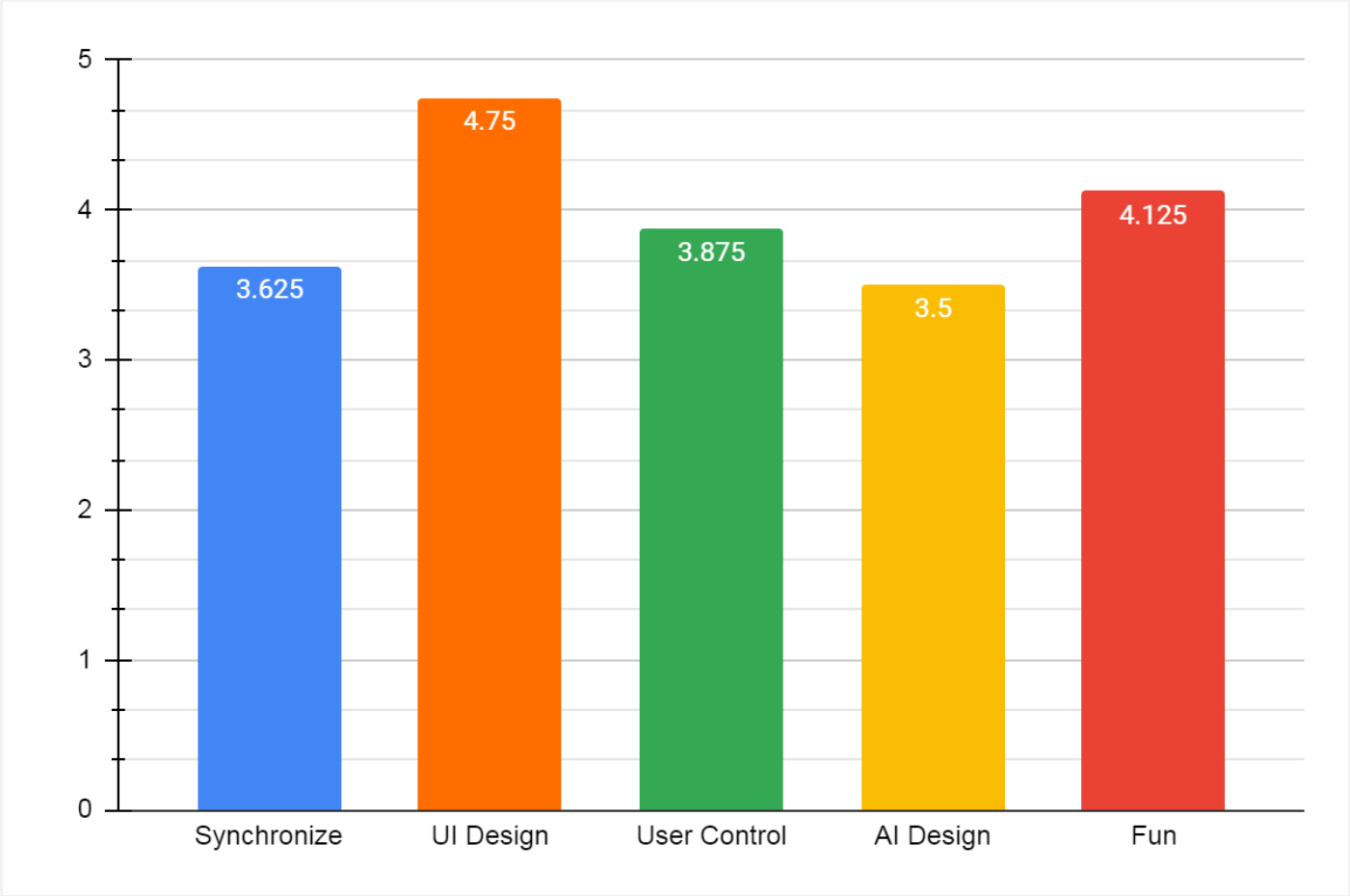
Promotion strategy

Sell on STEAM.

Also, we can in cooperation with the Gashapon company, there is a game exchange serial number in the Gashapon, and the person who purchases the Gashapon can get the game serial number and download the game in STEAM to play.

Update after playtest

After the Playtest, other groups rate our game demo on Game synchronize, UI Design, User Control, AI Design and fun level. Also, we get some suggestions from other groups and teacher to let us to improve the game.



The high line on the table is what we have completed.

Suggestions from other groups	
Group 2	1.can add hidden wall on the top 2.can add items 3.can add melee attack or range attack 4.can add coins
Group 3	1.please fix bug of unable to jump after touching the flower 2.please fix bug of unable to change scene after touching the bat 3.please fix bug of another player's direction change is not shown
Group 4	1. Insufficient cooperation between players
Group 5	1. (Co-op) Boost Jump on teammate 2. (Prank) Jumping on other to slow them
Group 6	1. Enable players to frame each other 2. Add a transparent wall to the left of the map
Group 7	1. Add more level design(Death traps) 2. Sync Message
Group 8	1. fix the bugs 2. game flow too short, much longer will be better 3. Increase player cooperation
Group 9	1.jump button change space bar? 2.More interaction of players