ANJIES ARCADE TDD

# FOCUS AREAS

## LEVEL DESIGN

ARCADE ROOM:

The main arcade room for the game will be divided into 3 sections, each of which have different themes and atmosphere. The models and lighting will represent how the rooms feel as well as the music in each section.

The bar corner will have subtle music with tables and bar, the music will play when the player is in within range of the collider box.

The cozy corner will have more comfortable items such as sofas and bean bags as well as a table for board games and more relaxing items.

The minigame corner will be where the player spends most of their time, it will include the arcade machines that have all the main gameplay. There will be bright neon lighting and game noises in the background. There will be various machines and board games and other visible games like darts and dice on tables.

## UI

MENUS:

The main menus will use canvas and panels to navigate through the options such as the settings and controls screen. Each button will have its own function

SCENE MANAGEMENT:

The scene management will be controlled in one script that holds all the functions for switching between the scenes including the transitions for them. It will use Unity’s built in Scene Manager library.

HUD:

For the main player HUD there will be an empty object attached to the player which will manage all the UI as it will be controlled in world space to give the UI a floating effect instead of stuck to the screen. The players interact indicator will also appear next to the object instead of the screen in the 2D canvas space.

# Main character

MOVEMENT:

The characters movement will use the horizontal axis to allow the character to move forward and backward. The player will have the main camera attached to them and can rotate the camera left and right to change the direction in which they are moving and to also change the camera direction.

INTERACT:

This feature will primarily be used as a means to access the main functionalities of the games, it will use colliders to detect when the player is realistic range to interact with an object. Once in range a UI popup will appear to indicate this to the player and allow them to press a button to start the interaction.

# MINIGAMES

For all 3 minigames the mechanics will be very similar and so can be condensed to improve code efficiency and not repeating same logic over and over.

Collectibles:

The collectible functionality will be the same for each minigame. The items will use colliders to determine if it has been touched by the main player, doing so will increase a score integer that is stored on the player. This will display the players current score on the UI.

## Maze

MOVEMENT:

## FLY AWAY

MOVEMENT:

ENEMIES:

## ENDLESS RUNNER

MOVEMENT:

The movement for the character will start at a set speed, a timer will be used to determine how fast they go, the longer the player stays alive the faster the player moves which increa

# AUDIO AND VISUAL DETAILS

GAME SOUNDS AND MUSIC:

Music for the game will be attached to an empty object in the scene that will handle all the background audio. Each room in the main arcade room will all have its own collider, depending on which room the player is stood in a different soundtrack will play to represent the room they are in

# Game Engine

## Unity

The game will be made in Unity 2022.3.4f1

# Hardware/Software requirements