Anjie’s Arcade GDD

# Overview:

The main premise of the game is an Arcade Room with different game machines that the user can play. Each machine is a different game that the player can attempt freely and reach different high scores. The player can interact with different objects around the room. This includes NPCs and machines that will give different reactions based on what’s being interacted with.

# Story:

The player is as themselves when the game begins and is placed at the entrance of the Arcade where they are then able to enter the room. Inside is a room filled with colour and games and a lively environment. Upon entering the room there is different sections where they can go, such as Cozy Corner, Game Central and Drinks Galore.

# Focus Areas:

## UI:

One of the project focusses is UI where different levels of UI animations and transitions will elevate the whole game experience. From research the main success point was having UI that only appeared when it was needed. One of the aims is to have more immersive UI elements such as floating stats, scores and menu buttons in order to achieve this. As well as this having smoother transitions between scenes is also a key focus for the game. This includes scene transitions between the main arcade lobby and going into the minigame scenes.

Majority of the UI will be non-diegetic as it is mainly menus and displaying information such as scores and collectible pop ups, as such they will only appear when necessary learning from my research.

## Minigames

The main premise of the game is the Minigames that can be played. Within the arcade will be a minimum of 3 playable games that the player can play independently of each other. Each game will be different and have different aims and goals. They will have their own scoring system within them, and the player can view those in the Arcade Room. Research shows having visible scores above each game means a better visual appeal.

## 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 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.

Learning from research, having bright visuals with UI integrate with the world makes for a more immersive experience.

# Gameplay:

The premise of the game is that the player (You) is welcomed by a Main Menu set in front of an arcade. The player can then enter the room and have access to a multitude of features such as different minigames and interactable objects. Each minigame will have its own aims and goals and scoring system that the player can play with.

# Game Experience:

Walking around:

The player will be able to walk around at a steady pace in the main Arcade Lobby. The player will have a simple UI shown to them with a pause button and the current high scores they hold. The score screen will be toggleable, so the player doesn’t have to see it all the time.

Music and ambience:

The Arcade atmosphere will match the theme of the rooms which are more quiet relaxing vibes with the arcade machines making subtle noises, there will be light music also playing and around the bar area that the player can go to. The Lighting in the room will be mostly dark with bright spots such as LED lighting effects and brighter neon aspects around various areas and brighter in more busy areas of the rooms.

Minigames and interactions:

The minigames are the main focus as the player will spend most of their time. Each game will have its own machine that the player can walk up to and access, they will much more visible and brighter compared to other objects within the room.

# GAME WORLD:

## A drawing of a building Description automatically generatedOutside street

The Opening scene to the game will place the player outside a door set in a bright city alleyway filled with lights and vibrancy. The drawing is a rough plan of what the player will see when they enter the game. The player can go as far as the alleyway ends and cannot go out onto the main street.

## Indoor arcade room

The Arcade area will be split into 3 sections, each section is a different room the player can explore. The main focus will be the minigame room as that’s where the arcade machines are and where majority of the gameplay will happen. The rooms will be filled with various furniture and decorations to give the space more liveliness and immerse the player into the space more. The added lighting will also add to this similar to that of real arcade machines.

# Mechanics:

## Movement:

* Main player movement
  + Walking: The player will be able to walk around in all directions using WASD controls and arrow key controls.
  + The camera will follow the player and rotate with left and right keys.

## Interact:

The player will be able to interact with different things using a key on the keyboard. For example, the following things can be interacted with in the game.

This mechanic will also use spatial UI to show the player what can and can’t be interacted with and will be visible in the world space.

Minigames:

This allows the player to access a minigame by interacting with it, they can do this by moving towards a game machine and pressing the interact button that will be indicated by UI.

Objects:

Certain objects within the lobby will be interactable and when done so some text will pop up with funny comments and information about the object that’s been interacted with.

NPCs:

Within the Arcade Room and lobby there will be characters that the player can talk to. The dialogue between them will be minimal as the main focus is to get the player to play the games instead of talking to NPCs most of the time.

# UI

## A screen shot of a video game Description automatically generatedMain Menu:

The following is a rough mock up of how the main menu screen would work. The panels would contain the needed game elements and changeable settings such as overall audio and a controls screen. When play is clicked the UI will disappear and player can enter the arcade room in front of them.

## PAUSE MENU

The pause menu will include options such as settings and a page to view controls. Pausing the game will also stop time flow within the game so the player does not lose the game or have to restart while the pause menu is open. From research it was found that unnecessary elements create a negative effect to the player so chosen so the UI will be limited until it is needed. The menu will look similar to the main menu with its design and floating elements. Depending on the minigame it may look different such as a 2D setting the menu will be flat 2D like the game it corresponds to. Each panel will only have what information is needed and when the player is suited to see it.

## HUD

From research , having a minimalistic HUD works well within games as it doesn’t clutter the screen and provide unnecessary information at the wrong times. As such for the main HUD the player will only see their player’s name and the minigames available. In one corner of the screen there will be base controls such as Moving and Interact.

## TRANSItiONS AND LOADING SCREEN

For each minigame there will be a short loading screen with a bar to indicate length of loading time. This will also be used for any scene changes in the menu aspects of the game. These will be followed by scene transitions to give the game a more smooth and stable aspect.

The UI itself will have transitions instead of simply appearing and reappearing when needed, this will include loading screens instead of sharp scene changes and softer screen changes.

# Minigames:

After researching different minigames such as the Hypixel server, having each minigame being simple in structure and gameplay makes for better replayability.

## Endless Runner:

This minigame is a simple endless runner that gets fast as the game goes on. Throughout the level will be collectibles and a timer will also run alongside the player so they can keep track of how long they lasted

Mechanics:

* Running will be the main feature in this minigame, as time goes on the player will get faster and faster making it more difficult to dodge obstacles.
* Dodging will be something the player does however this is done by moving left and right as the player runs forwards.
* A timer will also be a feature as it gives the player incentive to beat their previous score.

Collectibles:

* The main collectible in the minigame will be coins. Each coin that is collided with will give the player a point.

UI:

The UI for this minigame will use non-diegetic UI to show the necessary information such as when a point is scored a popup animation will appear indicating them of this. From research this was found to be a good method to implement UI as it doesn’t clutter the screen for the player and keeps things simple.

A timer will also be present to the player, it will periodically disappear to not distract the player from the game and will appear when certain milestones are hit.

## Maze:

This minigame is a simple maze that the player must navigate around, throughout the maze will be collectibles that adds to the players score and different landmarks and pointers to help the player navigate throughout.

Mechanics:

* The maze will use the same moving function as the main character in the lobby and use WASD keys to move around the 3D maze and find the coins.

Collectibles:

The main collectible for this game will be Coins, they will be scattered around the map for the player to find. All the coins must be found as well as finding the exit door to finish the level.

UI:

This minigame won’t have as much UI as there isn’t as much information or controls that need to be displayed to the player, as such this game will only have popups for when collectibles are collected and when the level is complete. There will be some hot bar buttons such as pause and go back.

## Fly AWAY!

This minigame will be a 2D chasing game where the player needs to move around the map to avoid enemies and survive as long as they can.

The following is a rough sketch of how the game will look. The player will be centred in the screen, and they have to dodge the enemies to survive.

A green and pink circles

Description automatically generatedMechanics:

There will be a health system in the game where the player will have 3 set lives and each time they are hit, they will lose a life.

The player will use WASD keys to move around the map and a steady speed.

Enemies:

The enemies in this minigame will fly around and toward the player if they get close enough to target. When the player is out of range they will stop and keep moving forward. The player must manage their movement and avoid being hit whilst also collecting collectibles around them to progress the game.

Collectibles:

Collecting an item will make the player slightly slower for a short period of time before going back to normal speed. This is to give the player more sense of danger instead of being able to just endlessly fly around without getting hit.

UI:

The UI for this minigame will be non-diegetic as the only UI visible to the player will be the points added popup. As it is a 2D game it will appear shortly on the screen before disappearing to reduce distraction and provide focus on the game.

# Audio:

## Arcade sound effects

* + Beeping machines
  + Music
  + Glasses from bar

## Game sound effects

Each minigame will have their own sound effects that relate to them.

Endless Runner:

* Running sounds
* Collectible sound

Maze:

* Music playing in levels.
* Collectible sound effects.

Fly Away:

* Enemy sounds
* Background music
* Collectible sounds

# Bonus Material:

In future the game could have different Minigames that are more complex in nature and can include more advanced Arcade lobby interactions such as a dialogue system between NPCs and even multiplayer capabilities.