DEV DIARY

Week 1

Team formation
- Angel
- Yang
- Ayaan

Spitballing ideas such as tone, genre, style and art of the game.

We discussed what we would use for the game engine.

First class

1) Feels game
2) top down, 2D
3) Pixel
4) unity

take out upgrades
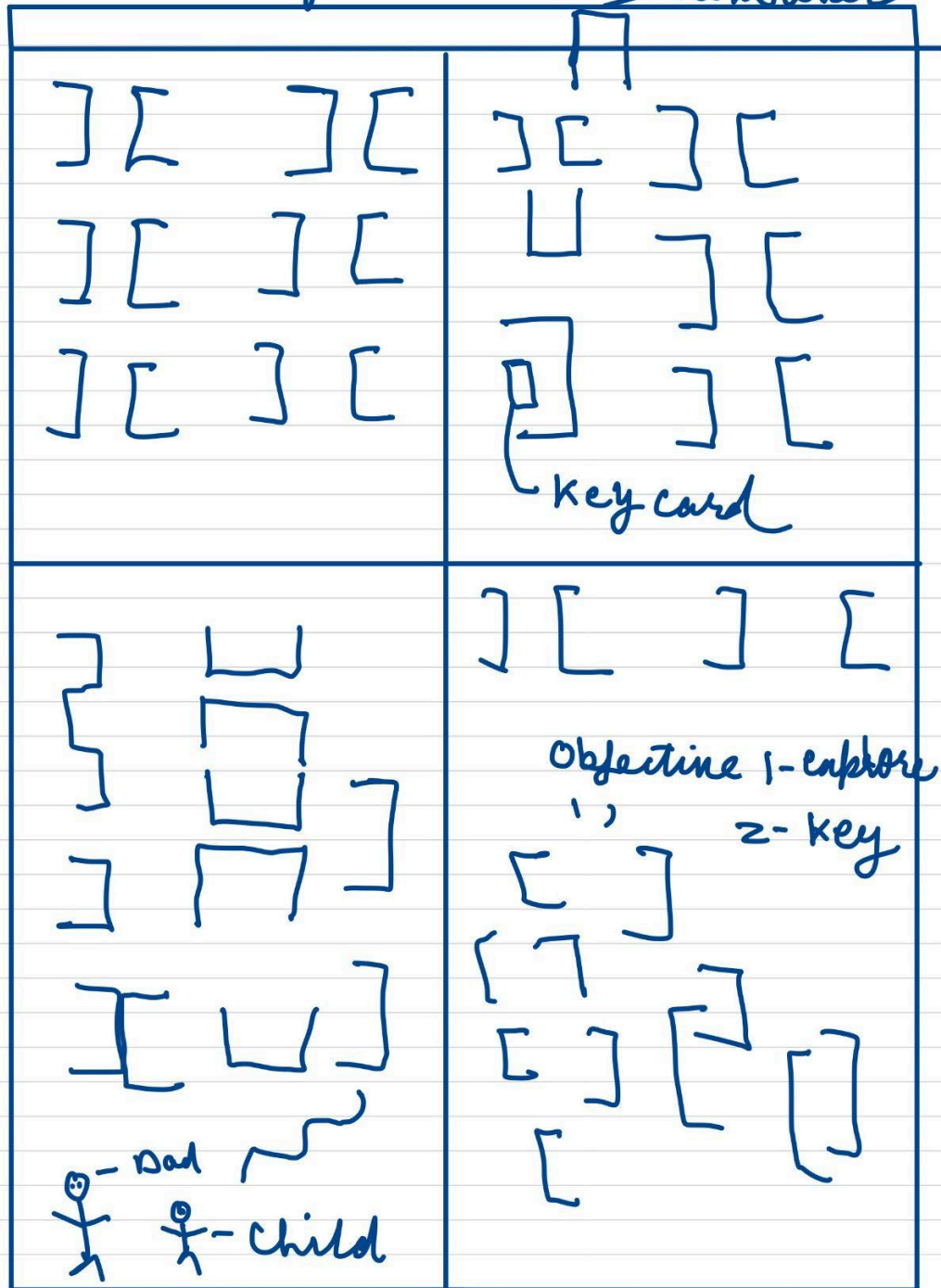bonus on traversal

Capitalist
system.

Change characters
from their POV

Pick gender
Eur – RPG
Story and environment – Sad
turn based ~ other idea – Stealth
has friendly sword fights with
a Ruler (fake sword)

upper levels have monsters
levels are floors in the building

Level design

Next level

Key card

Objective 1- explore
2- key

– Dad
– Child

Use a baseball bat to knock people out

Gameplay elements

1.) Puzzles

2.) Stealth

3.) Combat

Story

— Father brings child to work
      (Show around the environment)

— Child starts to explore
— Gets access to upper levels
— Discovers dark secrets
            Final Goals

— To experience story in a meaningful way

— Show varied gameplay
— Hidden Twist

Research
game mechanics that are similar

basically start the dev diary
look for games that are similar
to yours.

1.) Metal Gear

2.) Shadow of the Colossus

3.) Hotline Miami

4.) Pokémon
5.) Earthbound
the levels aspect
the story aspect.

Among other things we discussed level design, gameplay mechanics, story beats and what some of our inspirations were.

Towards the end we settled on a 2D game, with a top down camera angle and with a pixel art style.

It will consist of:
- A combat system
- Stealth system
- Navigational puzzles

The story will follow a child (12-14) who joins his father to accompany him to work. Once at the office the child starts to explore and discovers dark secrets regarding the company.

The game is a suspense/thriller genre and we want to showcase the negative effects of capitalism while also exploring a father son relationship.

We decided on what we will need such as assets, what programming is required, music,etc.

Week 2

For week 2 Angel our head designer and programmer started to work on the game starting with getting off the ground by having a player character and the first 2 areas of the game. Using assets that he had previously created and assets from the following packs:

https://2dpig.itch.io/pixel-office
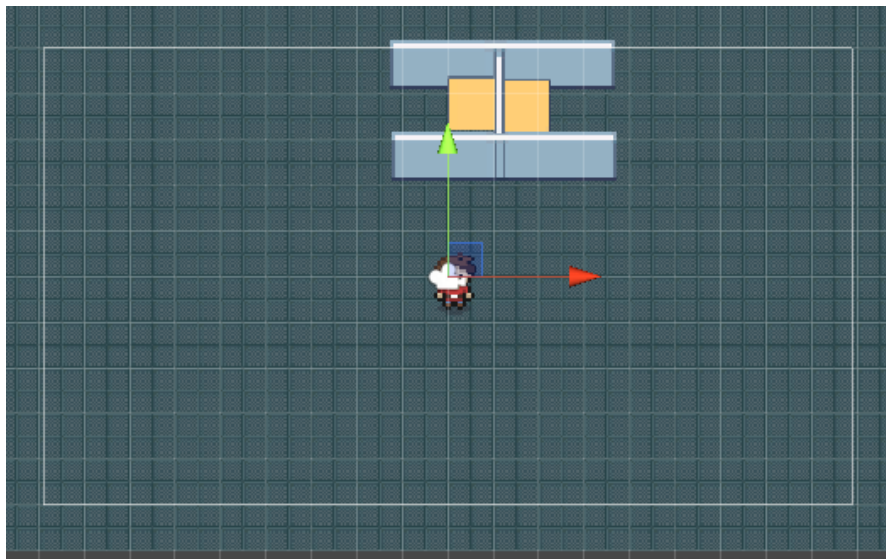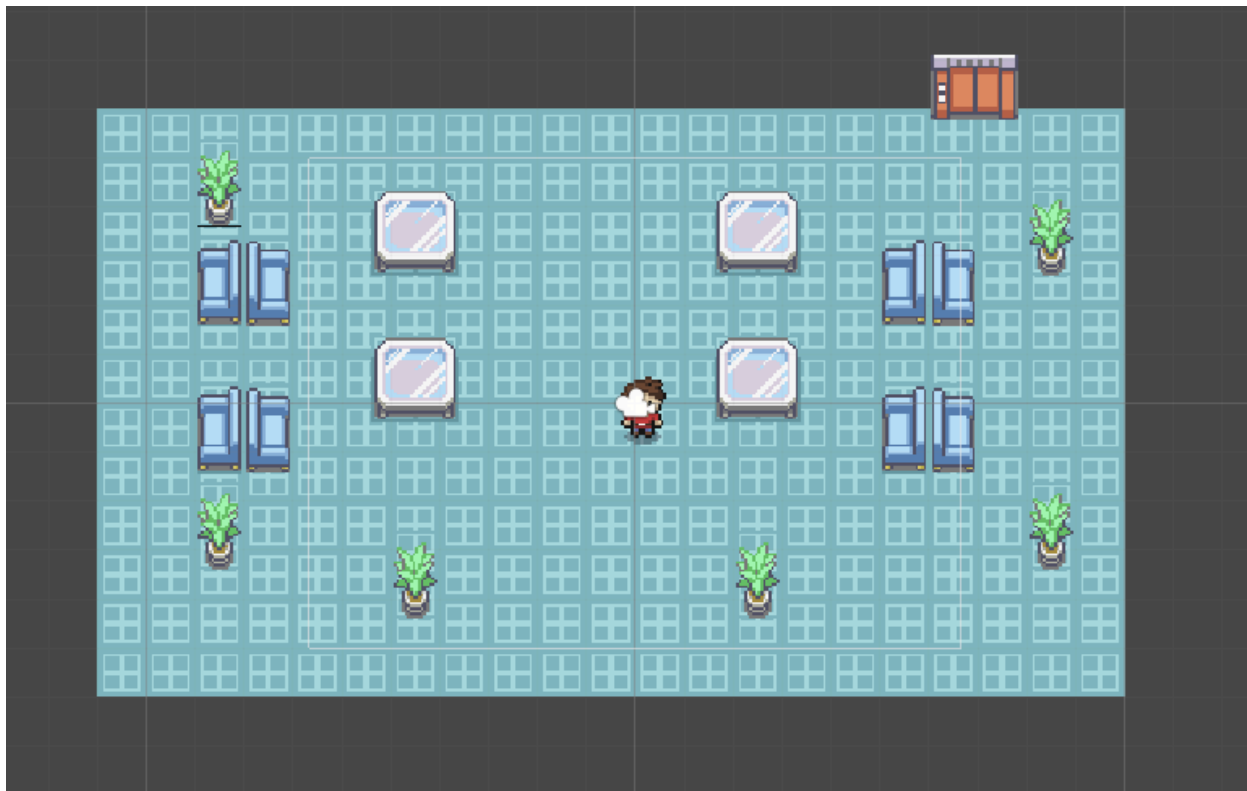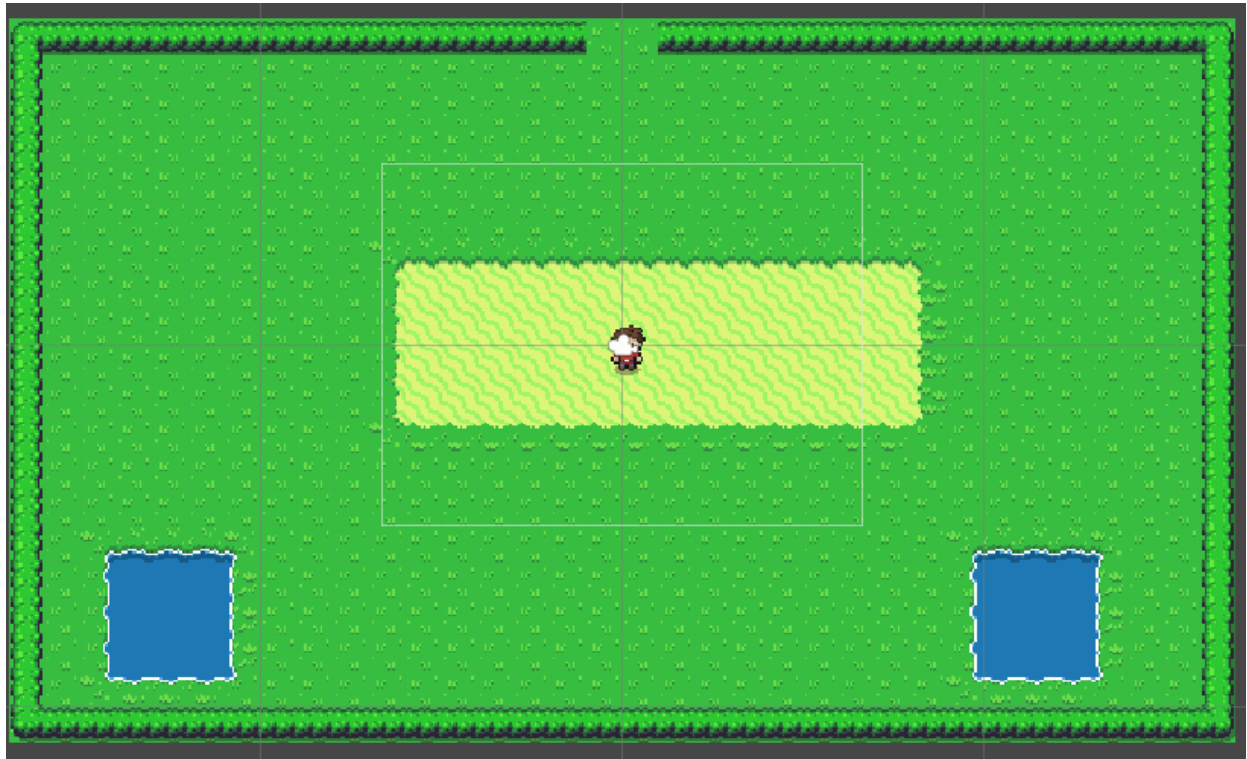
We had our head artist Yang make the tiles on the floor and walls that will be added later.
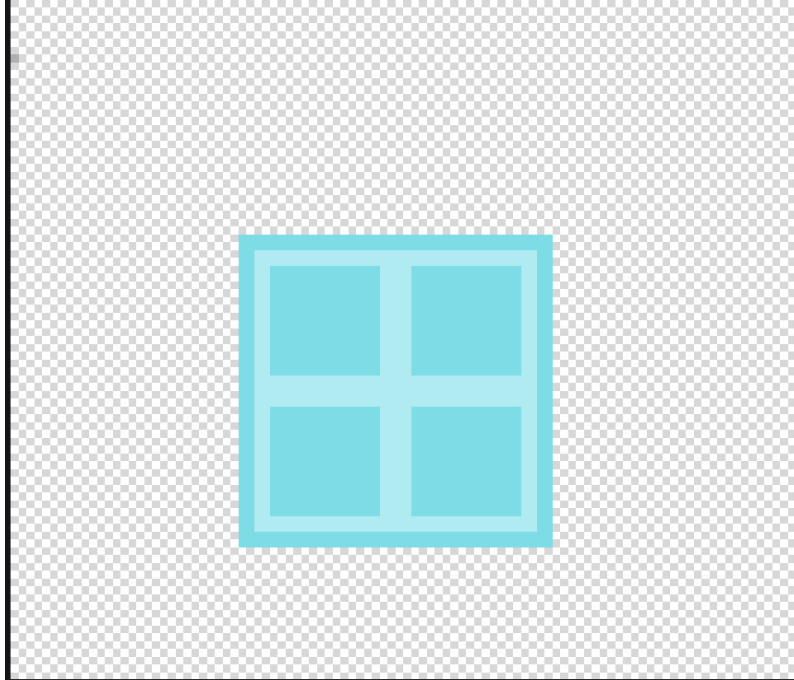
Week 3

For week 3 Ayaan started looking for appropriate music for the game. We decided on soundtracks needed for the following:

Combat
freeroam
Sad
Stealth

Angel implemented the dialogue system in the game:

```
                      ⬡ Unity Script (1 asset reference) | 7 references
⚙↑    6    ⊟public class dialogueManager : MonoBehaviour
      7      {
      8          public static dialogueManager instance;
      9
     10          [SerializeField]
     11          private Text DialoText;
     12          [SerializeField]
     13          public Text NameText;
     14          [SerializeField]
     15          public GameObject dialogbox, namebox;
     16
     17          [SerializeField]
     18          public string[] Dialoglines;
     19
     20          [SerializeField]
     21          private int currentline;
     22
     23          private bool JustStarted;
     24
     25          private string QuestToMark;
     26
     27          private bool MarkQuestComplete, ShouldMarkQuest;
     28
     29
                      ⬡ Unity Message | 0 references
     30      ⊟        private void Awake()
     31          {
     32              instance = this;
     33          }
     34      ⊟    // Start is called before the first frame update
     35
     36          // Update is called once per frame
                      ⬡ Unity Message | 0 references
     37      ⊟        void Update()
     38          {
     39      ⊟            if(dialogbox.activeInHierarchy)
     40              {
     41      ⊟                if(Input.GetButtonUp("Fire1"))
     42                  {
     43      ⊟                    if (!JustStarted)
     44                      {
     45
     46                          currentline++;
     47
     48                          //if currenline >= the length of the script set it false to hide it and sets the ability for the player to move again
     49                          //if not the continue to go through the script
```

Declaring all the variables to use.

```
                        //if currenline >= the length of the script set it false to hide it and sets the ability for the player to move again
                        //if not the continue to go through the script
                        if (currentline >= Dialoglines.Length)
                        {
                            dialogbox.SetActive(false);
                            GameManager.instance.dialogueActive = false;

                            if(ShouldMarkQuest)
                            {
                                ShouldMarkQuest = false;
                                if (MarkQuestComplete)
                                {
                                    QuestManager.instance.MarkQuestComplete(QuestToMark);
                                }
                                else
                                {
                                    QuestManager.instance.MarkQuestIncomplete(QuestToMark);
                                }
                            }
                        }
                        else
                        {
                            CheckIfName();
                            DialoText.text = Dialoglines[currentline];
                        }
                    }
                    else
                    {
                        JustStarted = false;
                    }
                }
            }
        }

     2 references
        public void ShowDialog(string[] newLines,bool isPerson)
        {
            //makes the lines from the character into the lines in the UI
            Dialoglines = newLines;
            //Makes the currentline into zero to start the Dialog
            currentline = 0;

            CheckIfName();

            DialoText.text = Dialoglines[currentline];
```

This helps with the quest system and the dialogue system it checks to see if there is a name or not then it

won't activate the top dialogue just the bottom portion of it.

```csharp
2 references
public void ShowDialog(string[] newLines,bool isPerson)
{
    //makes the lines from the character into the lines in the UI
    Dialoglines = newLines;
    //Makes the currentline into zero to start the Dialog
    currentline = 0;

    CheckIfName();

    DialoText.text = Dialoglines[currentline];
    dialogbox.SetActive(true);
    JustStarted = true;

    namebox.SetActive(isPerson);

    GameManager.instance.dialogueActive = true;
}

2 references
public void CheckIfName()
{
    if(Dialoglines[currentline].StartsWith("n-"))
    {
        NameText.text = Dialoglines[currentline].Replace("n-","");
        currentline++;
    }
}

3 references
public void ShoulACtivateQuestAtEnd(string QuestName,bool MarkComplete)
{
    QuestToMark = QuestName;
    MarkQuestComplete = MarkComplete;

    ShouldMarkQuest = true;
}
```

This code helps organize the dialogue and n- is for when its the players name.
So it would go like n-Angel and display the name at the top of the box and the rest of the
message at the bottom of the box.
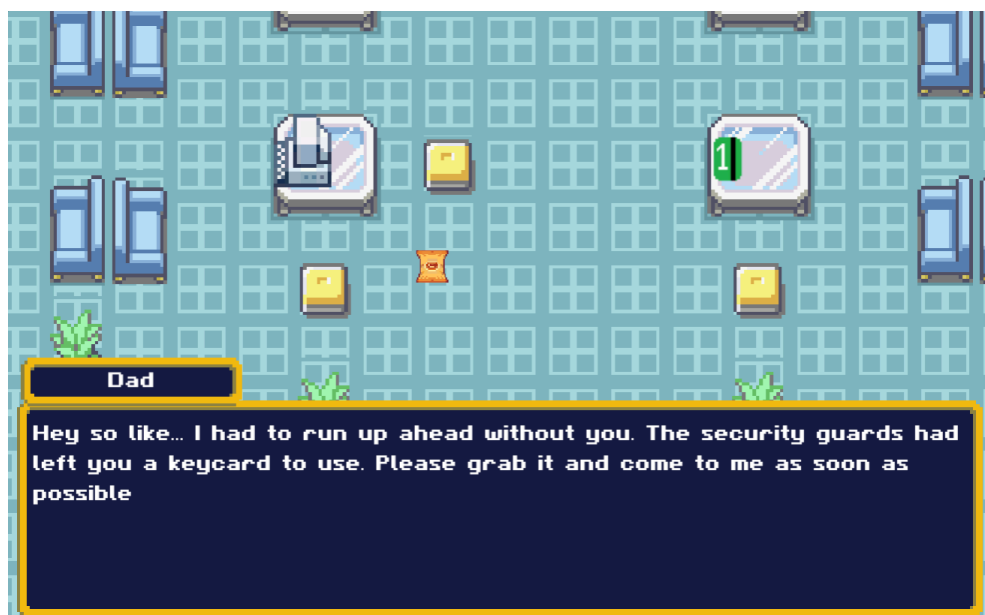
How the finished product looks.

Week 4

Angel implements the UI system and makes the items interactable such as health pickups and key cards

The packs used for the UI:
https://wenrexa.itch.io/holoui
https://opengameart.org/content/zelda-like-tilesets-and-sprites

The following is the code used for pickups/interactables:

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class PickUpItem : MonoBehaviour
{
    private bool CanPickup;

    private void Update()
    {
        if(CanPickup && Input.GetButtonDown("Fire1") && PlayerController.instance.canMove)
        {
            GameManager.instance.AddItem(GetComponent<Item>().ItemName);
            Destroy(gameObject);
        }
    }

    private void OnTriggerEnter2D(Collider2D collision)
    {
        if(collision.tag == "Player")
        {
            CanPickup = true;
        }
    }

    private void OnTriggerExit2D(Collider2D collision)
    {
        if(collision.tag == "Player")
        {
            CanPickup = false;
        }
```
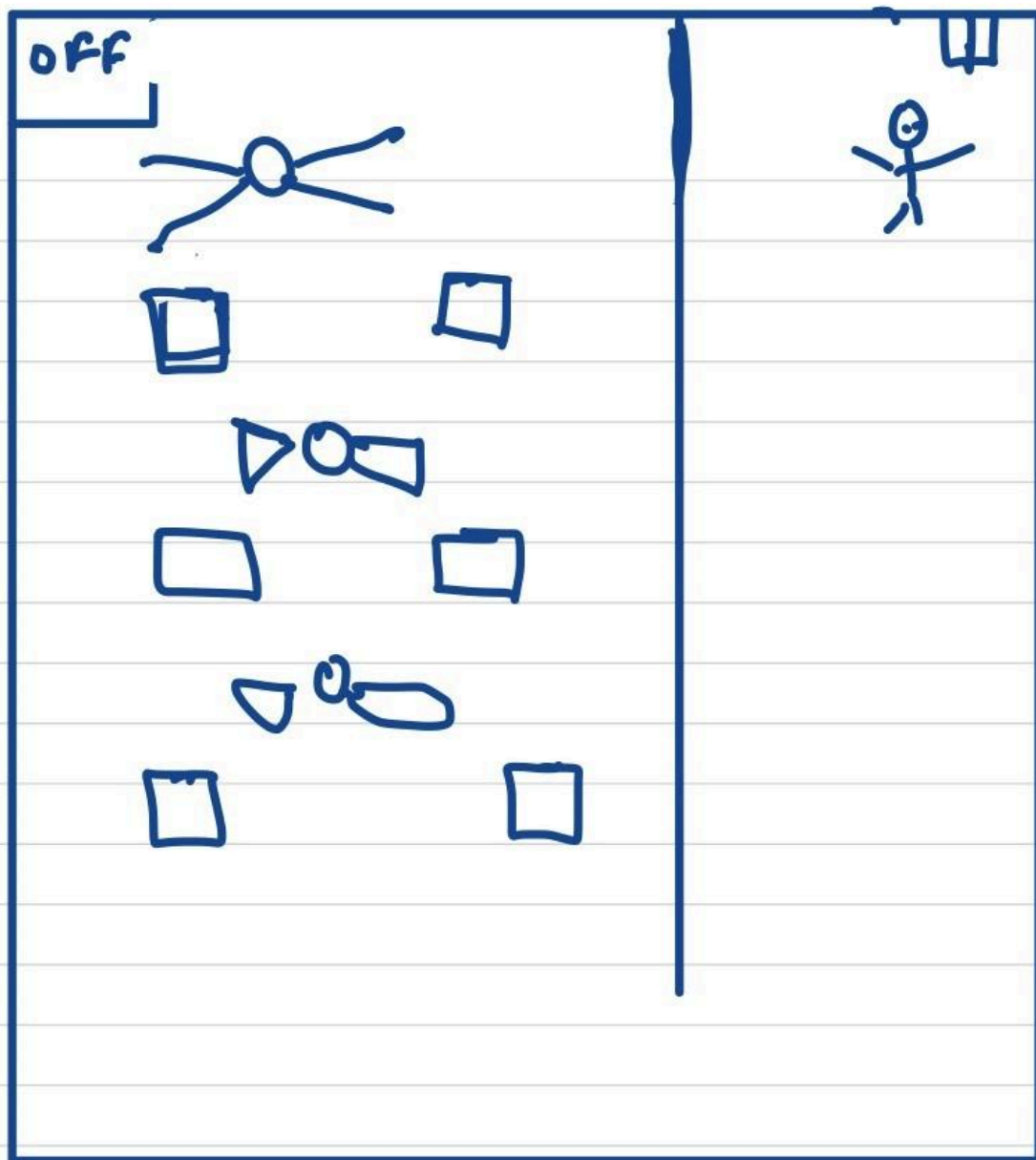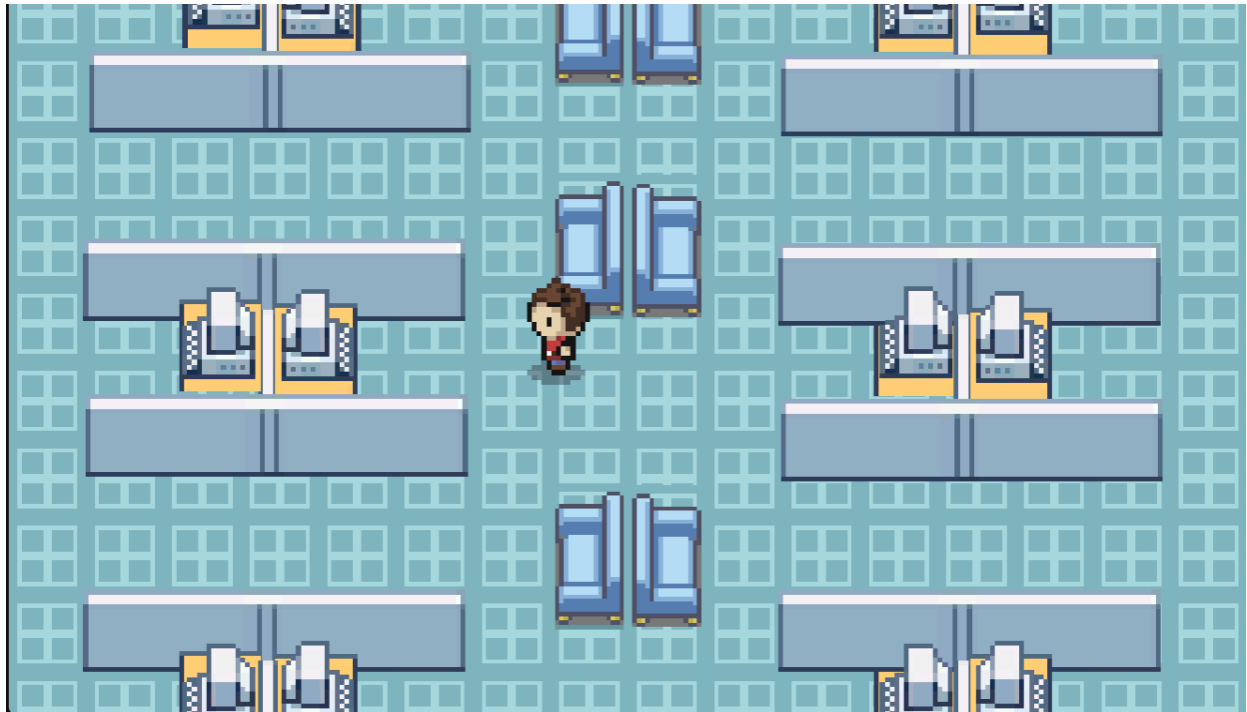
```
    }
}
```

We have started working on the game design with the first 3 levels already made and the 4th levels design confirmed. Ayaan who is the map designer drew the maps and will be implementing the stealth system in the game, with Angel doing the Ai and Yang doing the animations.

The following are the drafts for level 2 and 3 respectively:

OFF
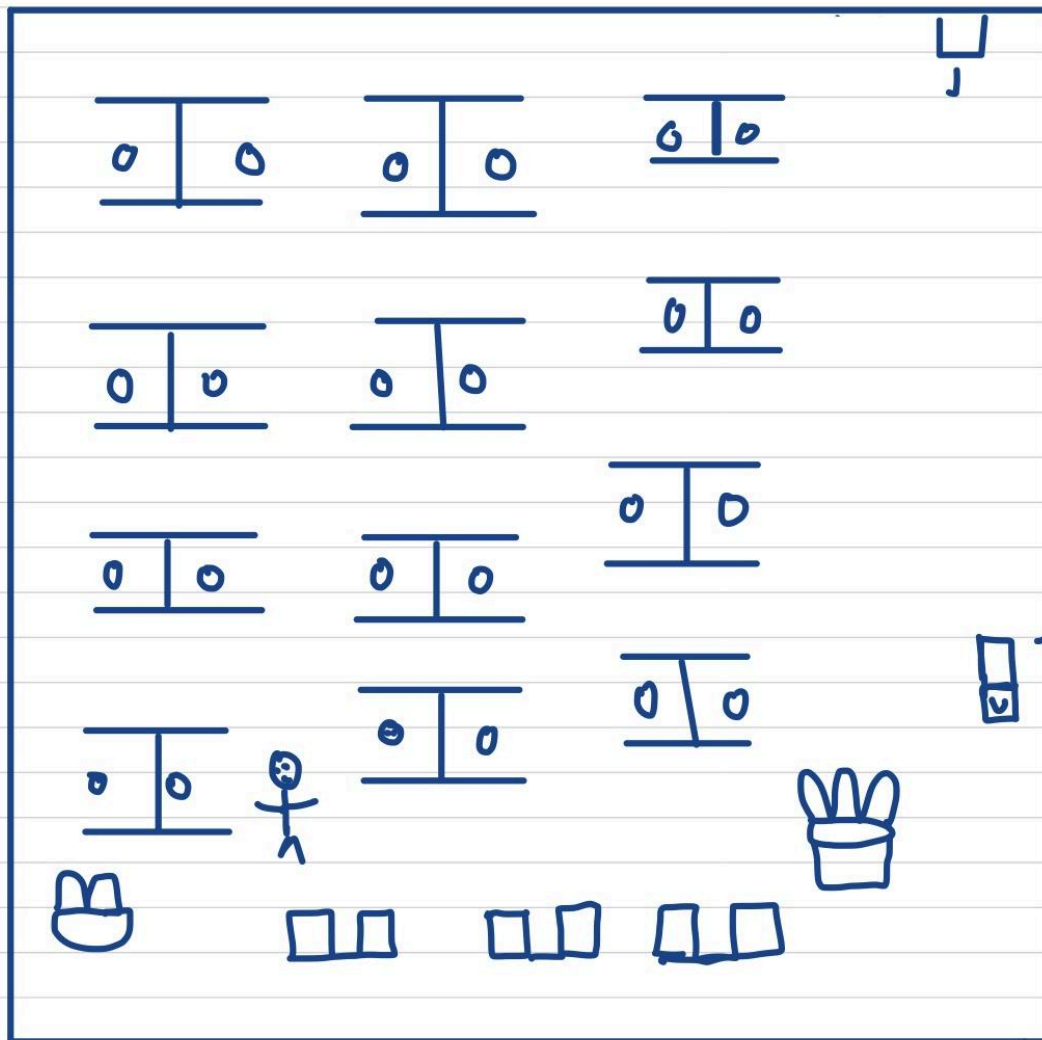
What level 2 looks like.

Week 5:

Angel added the combat system

```
public void DealDamage(int target,int movePower)
{
    float AttackPower = activateBattlers[currentTurn].Strength + activateBattlers[currentTurn].WeaponPower;
    float DefensePower = activateBattlers[target].Defense + activateBattlers[target].ArmorPower;

    float DamageCalc = (AttackPower / DefensePower) * movePower * Random.Range(.9f,1.1f);
    int damgeToGive = Mathf.RoundToInt(DamageCalc);

    Debug.Log(activateBattlers[currentTurn].CharName + " Is dealing" + DamageCalc + "(" + damgeToGive + " ) damage to " + activateBat

    activateBattlers[target].CurrentHP -= damgeToGive;
    Instantiate(TheDamgeNumber, activateBattlers[target].transform.position, activateBattlers[target].transform.rotation).SetDamage(
    UpdateUIStats();
}
```
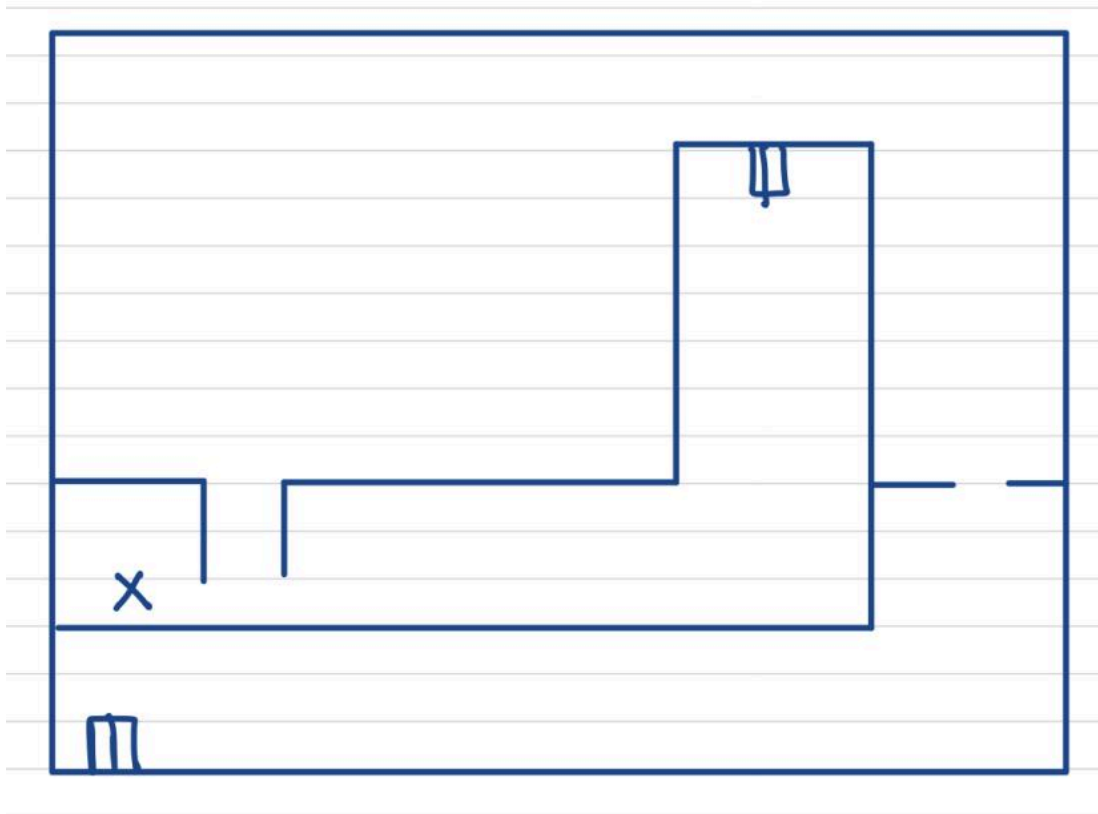
For how damage is calculated

Week 6:
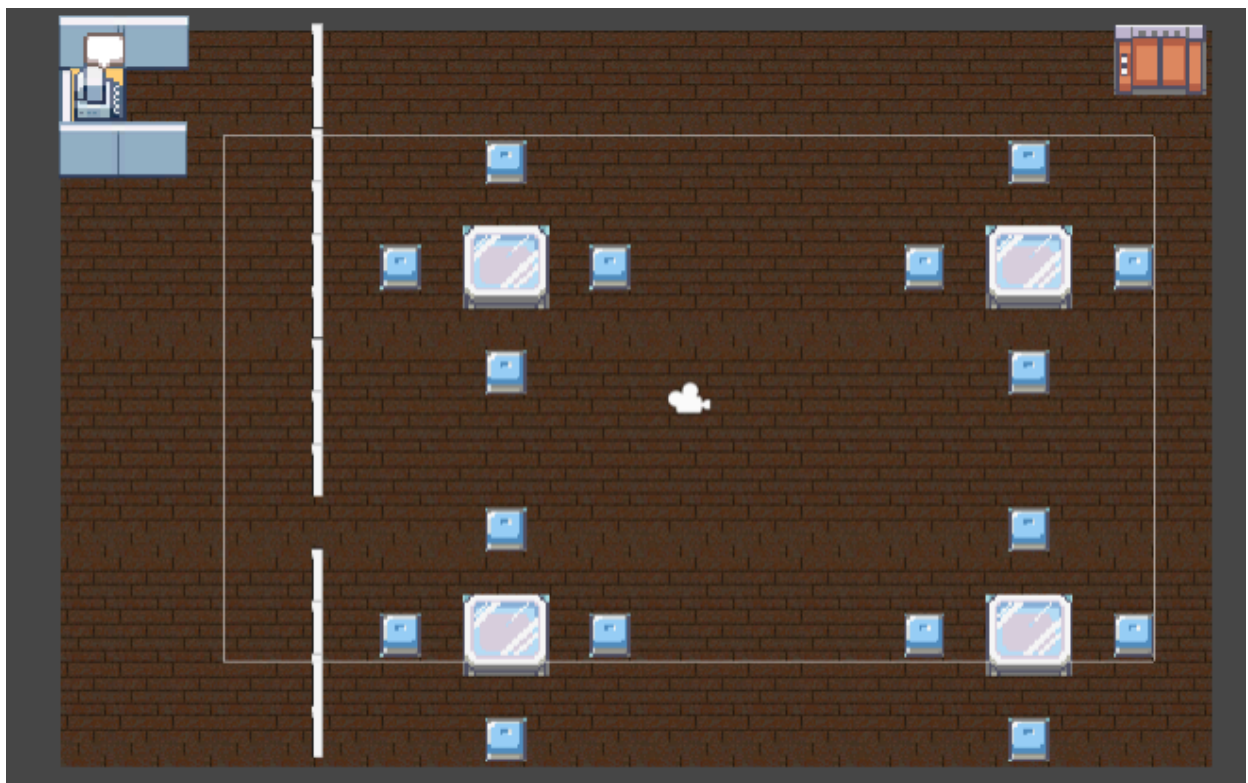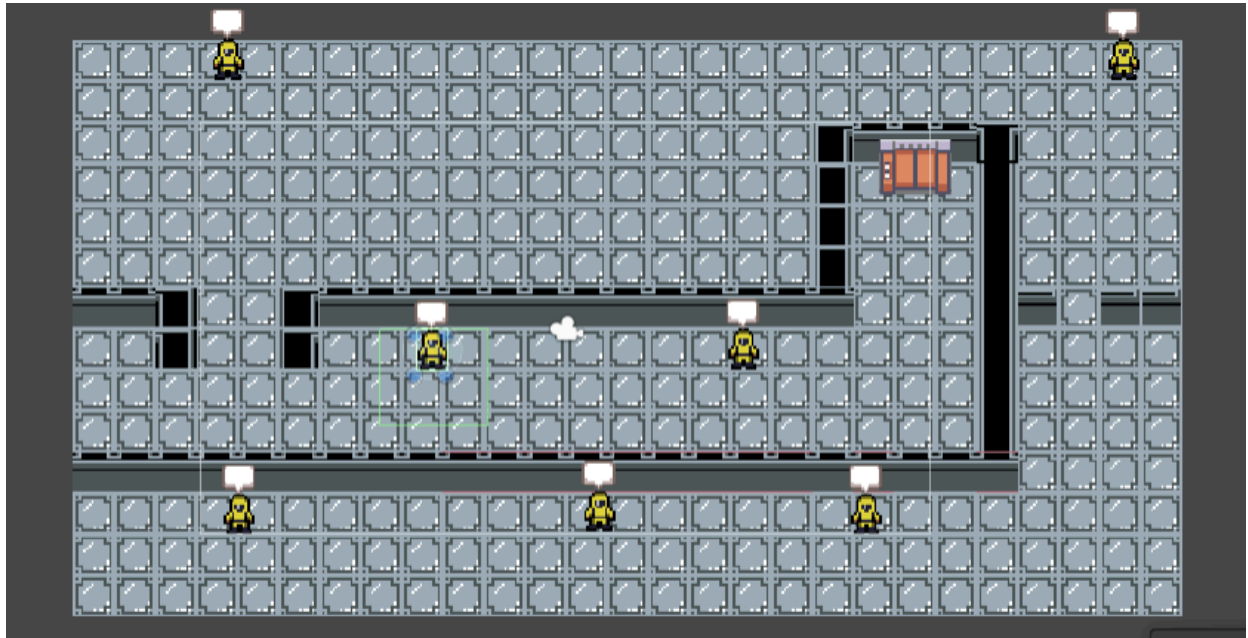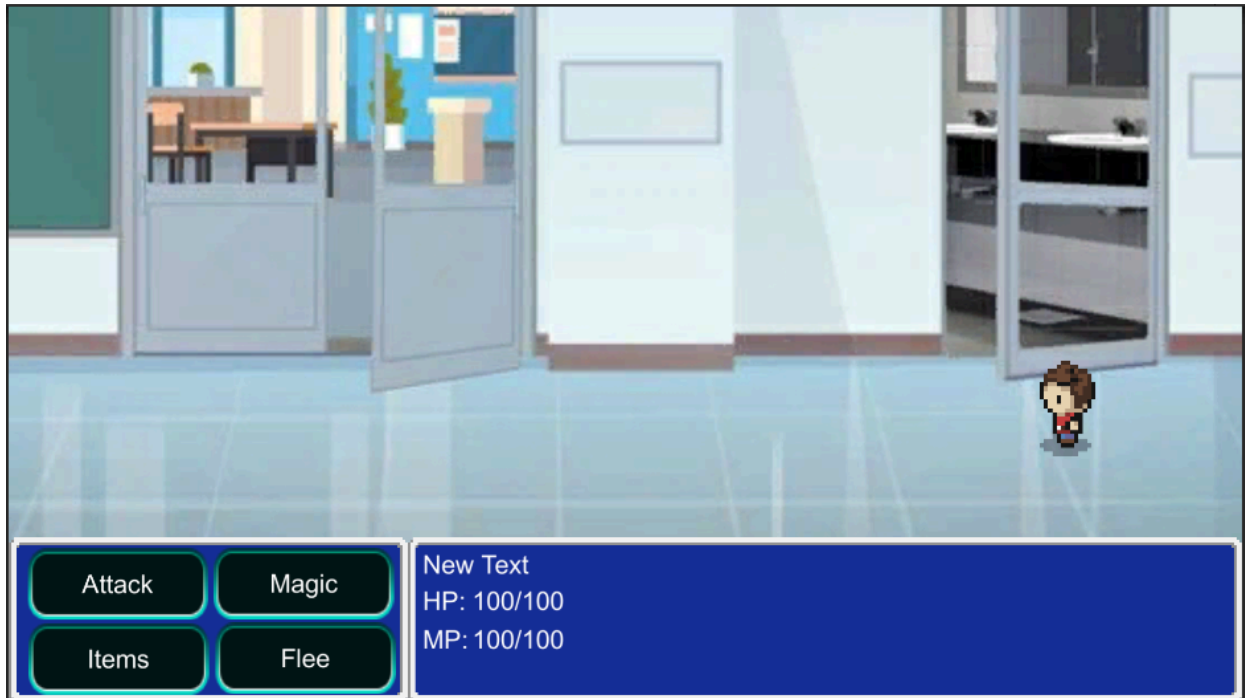
Added more levels to the game

For the level with the laboratory we had to use an asset pack

https://murphysdad.itch.io/sci-fi-facility

Yang designed a background for the combat arena.

Ayaan has written some dialogue for the game.

David: Woah what is all this? Testing medication without consent? Dropping harmful substances in rivers?

David: Dad why are you doing this? I can't believe my eyes.

David: I need to confront him on this.

[David goes to the 4th floor but his dad is not there, There is a stealth section here.]

David: Damn, whats going on here? Why is this floor so secure and is that a lab?

David: I should check it out.

[Guys in hazmat suits working on something, it's a secret laboratory]

David: So this is what everyone is working on? Compound 11?

Guards: There's an intruder apparently someone with no authorization is on this floor

[David finds a serum and gets spooked, some of the serum falls on his skin and it changes him]

[he passes out for a bit]

David: Ughnn what happened?

Guards: Get him!

[David gets scared, and the guards all get pushed back]

David: Aaaaaaaa What was that? Was that me?

David: I'm sorry I didn't mean to hurt you.

Guards: NO RESPONSE.

David: Need to get out of here.

[Should we have him leave the floor or stay on the floor in a secure room?]

David: Damn floors on lockdown, elevators wont work, Gotta find the staircase.

[Finds staircase]

David: Finally

David: Where is dad? Whats happening to me? What was that serum?

Dad: You're too young to understand David. I built all this with my bare hands for you. I chose to make sacrifices for our family.

David: I don't understand.

Dad: Theres a lot I………… we have done.

Dad: We have developed cures that weren't even possible until a few years ago .

David: At what cost!

Dad: It was worth it.

Dad: I am not going to stay here and debate you, I think you should be tested on and so that we can find out what happened to you.

David: No, I won't let that happen.

Dad: Son its for your own good.

David: NO!

[Another psychic blast, pushes everyone away but David passes out]

[David wakes up in another part of the building, Ratmans HQ]

Ratman: you okay?

David: Who are you?

Ratman: That's not important, whats important is that you saw what they are doing and your dad is at the center of it all.

David: I don't understand.

Ratman: Xenon corps is the one calling the shots everywhere, they have done countless damage to the environment, peoples health and now they are going to create war.

David: I………

Ratman: that serum you found? Compound 11 its being developed for soldiers.

Ratman: Your father is going to kickstart the war economy.

To explain what we have so far in the story is that David (subject to change) is made aware of his fathers company Xenon Corps and their bad practices. While exploring the building some new serum being developed by them gives David powers.

Week 7

After receiving feedback from various people playing our game that the stealth and battle systems do not have much breathing room, we have decided to evolve the battle system and the stealth system in a way. The battle system is only triggered when facing green blobs which are the monsters. The regular guards will now chase after you if you go near them hence making the stealth more exhilarating. This was a great way to compromise on having both the battle system and the stealth system. The reasoning for the battle system is also given in the story now.

Among other things we have also decided to add 'E' to interact with objects and people.

These security guards were made by Yang along with the animations. These will chase you around the map.

Week 8

Ayaan implemented all the dialogue in the game.

Angel fixed problems with the game such as typos in the dialogue and the colliders that prevented the player from moving freely.

Another asset created by Yang for the final level.

Through another playstesting session we changed one of the computers' colors so that the player can see that that specific computer is special and progresses the story.

Grievances

Sections of our story were affected since none of us knew how to implement cutscenes as shown below:

Daniel: Dad might be around here I should find him, but I need to be careful, everyone is on high alert.

[Finds dad after a mixture of combat and stealth]

Daniel: Dad what is going on? What are you doing here?

Dad: You're too young to understand Daniel. I built all this with my bare hands for you. I chose to make sacrifices for our family.

Daniel: I don't understand.

Dad: Theres a lot I………. we have done.

Dad: We have developed cures that weren't even possible until a few years ago .

Daniel: At what cost!

Dad: It was worth it.

Dad: I am not going to stay here and debate you; I think you should be tested on and so that we can find out what happened to you.

Daniel: No, I won't let that happen.

Dad: Son it's for your own good.

Daniel: NO!

[Another psychic blast, pushes everyone away but Daniel passes out]

[Daniel wakes up in another part of the building, Ratmans HQ]

We had to write around some of these bits. And adapt the story in a way we could implement it in our game.

A more fleshed out inventory and battle system