#### **Overall Goal:**

• The overall goal of the script is to make a fun game which is easy to code as well. A fighting game that keeps the player on the edge of their seats and makes them scream out of anger when they face failure. I will use a bunch of while loops, for-loops, if/else statements, functions and possibly some math to bring this game to life.

#### **Pseudo Code:**

- 1. Make a folder save Python files, and make another folder where all the extra files like pictures and sound effects will be saved.
- 2. Import pygame.
- 3. Import random.
- 4. Import os.
- 5. Start by defining functions each with its own characteristics for instance a function just for controls keys.
- 6. Start writing code for each of the characteristics, for instance, the health bar and how it will decrease when the ufo's or characters get hit, or how it will increase after a certain amount of time of not being hit.

# Wednesday, May 10: First Journal Entry

#### a) What did you work on since your last journal entry?

• This is the first journal and I am planning to add more stuff to my pygame, that is why I am still working on my pygame to make it even better and fit the criteria of this new assignment and turn it into a really cool and simple game.

#### b) What is your plan for the next couple days until your next journal entry?

• I will keep working on my pygame and keep making it better to eventually turn it into a nice game.

#### c) Any struggles/issues you anticipate that may come up. How can you resolve these issues?

• Since I am not well aware of the pygame module feature, I will probably run into problems like not knowing how to make the bullets bounce off the target and stuff like that. I will solve this by reading the pygame module manual and making my code efficient and easy to read along the way.

#### Friday, May 12: Second Journal Entry

#### a) What did you work on since your last journal entry?

• My last journal entry was on Wednesday and I have been since working on pygame. I have encountered several errors but keep asking my friends and Mr. Rai for help.

#### b) What is your plan for the next couple days until your next journal entry?

• I want to start making a screen move a little as the players move around.

### c) Any struggles/issues you anticipate that may come up. How can you resolve these issues?

• I would probably need a little help from youtube videos to see some example code on how to make the screen move. I believe as the code gets complex, I would need more help from youtube and I will grow into a better programmer.

### Wednesday, May 17: Third Journal Entry

### a) What did you work on since your last journal entry?

• I worked on making a health bar instead of making the screen move. I will work on making the screen move as well but for now I am writing code to make a health bar which keeps decreasing if either of the players gets hit.

### b) What is your plan for the next couple days until your next journal entry?

• To keep working on the health bar and if I complete it before the following journal entry I will start working on making the screen move.

#### c) Any struggles/issues you anticipate that may come up. How can you resolve these issues?

• I feel like I would find making a fighting game really difficult so I might just drop my current project and a new flappy bird project but we'll see.

## Friday, May 19: Fourth Journal Entry

# a) What did you work on since your last journal entry?

• We couldn't do much today because of the in-class assignment but in the last 20 minutes, i looked at my friend's code and we both worked on our game and health bar.

### b) What is your plan for the next couple days until your next journal entry?

• The plan, for now, is to complete this assignment as soon as possible because I have a really difficult math lesson all next week. So the plan is to finish this code during the long weekend.

## c) Any struggles/issues you anticipate that may come up. How can you resolve these issues?

• I don't have a solid idea of what my game is going to look like, and that's probably why I would encounter issues. But I am more leaning toward a fighting game.

### Wednesday, May 24: Fifth Journal Entry

### a) What did you work on since your last journal entry?

• I changed my whole idea and now I am working on writing code for a flappy bird game which will have sound effects and other variations to it.

### b) What is your plan for the next couple days until your next journal entry?

• I will keep working on flappy bird and my goal is to make the bird move until the next journal entry.

# c) Any struggles/issues you anticipate that may come up. How can you resolve these issues?

• I am having trouble making the ground picture perfectly fit on the display window so the plan is to keep working on it and get it done today.

## Friday, May 26: Sixth Journal Entry

### a) What did you work on since your last journal entry?

• I added the bird, ground, and background to the game. I also made the ground scroll. It's going good so far:)

#### b) What is your plan for the next couple days until your next journal entry?

• My plan is to add controls and obstacles(pipes) which will eventually lead the game to the end.

#### c) Any struggles/issues you anticipate that may come up. How can you resolve these issues?

• I was trying to add controls to the game to make the bird move but it kept giving me errors, it wasn't working so my plan for the rest of the days is to just keep working on controls and birds movements.

### Wednesday, May 31: Seventh Journal Entry

### a) What did you work on since your last journal entry?

• I am trying to make the bird move by adding controls.

## b) What is your plan for the next couple days until your next journal entry?

• My plan is to add controls and obstacles(pipes) which will eventually lead the game to the end still and add a few sound effects when the bird is hit by the pipes.

### c) Any struggles/issues you anticipate that may come up. How can you resolve these issues?

• Adding controls is still giving me errors so that is what I am working on right now.

# Friday, June 2: Final Journal Entry

#### a) What did you work on since your last journal entry?

• I took a break today because it was senior skip day but i am still working on the controls and sound effects

## b) What is your plan for the next couple days until your next journal entry?

• This is the last journal so the plan is to quickly complete the assignment and get it done with and start the final project.

### c) Any struggles/issues you anticipate that may come up. How can you resolve these issues?

• Still struggling with the controls but I am really close to getting it right so it's all going to work out.

#### **Final Reflection**

• I started off with an amazing plan to just make changes to my first pygame game which was the space shooter game but as I started making changes to it, I kept messing up and making the code even more messy. So I decided to make a completely different game, start anew with a clean file and even wrote a pseudo code for it. I started working on the flappy bird the code itself was really fun to write until I started getting more errors and less fun. I kept working with the errors and kept writing my Python script until it was time to make a sprite sheet for the bird instead of using a png picture. I tried making Sprite sheets for the bird but I came to realize that it's too much work and I thought to myself that I can make a better game with no Sprite sheets that would be less time-consuming too. So after spending a week writing Python script for flappy bird, I stopped working on it and started a completely different game: P.

I started writing a Python script for a snake game:D. I used to play the snake game on my grandmother's Nokia when I was back in Pakistan so writing a script and making that game from scratch felt precious and nostalgic to me when I actually tested it out and played it:). At first, it was working fine I played it a few times too but as I kept the script I ran into a problem that I still can't solve:(. I think something is wrong with my VS code window because it's giving me an error on line 352 and I don't even have that many lines. My whole script ends in 190 lines. So I just wrote the whole script despite it not working on my laptop.

I wrote this game following a youtube tutorial and I made changes to the game color theme, variable name and window size:D. It was an amazing experience recreating a game I used to play on my grandmother's phone and learning so much about pygame through the tutorial I followed. I look forward to learning much more about pygame, python and computer languages as I keep working toward my goal to be a successful software engineer/computer scientist:D.