???-???-???-???-??? Development Report

This game was made using the bullet hell game genre as a base. Because of the boring and mainstream nature of the game, I decided to add in some sound effects to make it more entertaining no matter how little it was.

Planning Stage

With my assumption that Pygame was going to work similar to that of Phaser, I assumed the following files:

* Start Page
* Entities Page
* Level Page(s)
* Assets Page (Sounds and Graphics)
* Tutorial Page
* Credits Page
* Game Over Page

However, as I started developing the game, I noticed the failed assumptions I made. Python’s variable recognition system does not work too well with my approach towards the game, so some variables could be reused throughout the development process while others required alternative measures. The classes could sometimes be linked to one another while most other times it failed. This led me to create all classes within the same file, which would make managing and maintaining the game further much more difficult than it should. This is the final outline of the game:

* Player Class
* Mob1 Class
* Bullet Class
* hpPlus Class
* function newmob()
* function moreHp()
* function drawHpBar()
* function draw\_rect()
* function goscreen()
* function pausescreen()

As you can see, it is very unconventional and very hard to keep track of so this posed as a challenge during the development stage.

Development Stage

Due to the vague amount of knowledge I had with Python much less Pygame, I had to go through a multitude of tutorials to learn the basics and different approaches towards my game. I ended up following 3-4 tutorials in total and soon started to understand the gist of Pygame. As such, the original plan of the game was constantly modified to fit the outline of the basics I learned. I first tried to organize the classes and split them into different files. However, some variables could not be called over, so I decided it’d be in my best interest to include everything within one file. Even so, on some occasions some global variables would be considered local on some functions. Without finding a proper solution, I decided to copy lines of code over and over again regardless of how tedious it is. Prior to the tutorials I found, I did not understand the Sprite in Pygame. However, as I started getting used to its usage I understood that it can be treated as entities in the game. What this means is that it is intended to be used as an element in designing entities within the game like enemies, players, powerups; anything that requires movements and has collisions involved. Hitboxes can also be configured by drawing shapes behind the image and centering them.

Reflection

In all, I would like to assume that the project was a success though it did not reach the original milestone as set by my expectations. If anything, the biggest obstacle in this project development was the lack of knowledge from self-learning. I also realized that my basics within programming have been somewhat forgotten from not doing it regularly so I should have regular practice with it, no matter how small.