CGRA151 Project Report

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Name of game/artwork: Basic Bullet Hell

Vision

1. Game concept:

Standard Shmup idea, ship moving forward' constantly with waves of enemies coming in from the top of the screen

- 2. Game play: Player controls the ship, and can fire at the enemies to destroy them.
- 3. Visual design: basic simple polygon ships, a scrolling background if time allows, otherwise simple background designs and maybe simple stages instead.

Achievement

I was able to implement a player-controlled ship that could be considered moving forward, waves of enemies come in from the top of the screen, the enemies shoot at the player, and the player can shoot back. The player can take damage and die, as can the enemies, there are also random pickups, some that increase health and others randomly change your weapon. The game is not balanced at the moment and can be particularly hard.

Technical Challenges

First major challenge was tracking null pointer exceptions using processing's limited stack trace and debugging tools. Another would have been the math for the collisions if I didn't recall that I had some from another course id done in the past and the maths doesn't change. A few challenges came from ordering of method calls and one case of concurrency errors, which was overcome by iterating backwards.

Reflection

My plan came together fairly well and by the time I started and got going on this project I knocked it out in basically one sitting, ideally I would've allowed myself more time, however other courses required large portions of time. There are still many functional bugs and problems still that I would have liked to sort out, and do more on the front end (menus and such).