

## Assigned Tickets

To do:

- Tutorial level, assigned to both Jake and Justin
- Create Basic Enemy, assigned to both Jake and Justin

In progress

- Main menu, assigned to Justin

Finished:

- Project report 1, last week
- Main Shotgun Mechanics assigned to Jake; **Committed on 10/31/2021**

## Github

[https://github.com/jel2658/IGP\\_Project](https://github.com/jel2658/IGP_Project)

## Comments, Concerns

Main menu is reliant on all of the buttons being at least partially implemented, which requires working on other tickets first.

The tutorial level should be easy to complete- designing it will be initially the most difficult portion of the ticket.

The main shotgun mechanics were fun to work on and problem solve. It went down a list of basic ideas of where will the player be launched and how, to what will the reaction upon the player be for the shotgun. The first problem was the fact that there was no flat rate to the solution was to create a, to be, shotgun sprite that rotates around the player and points towards the mouse where it will then calculate the force and position the player will be sent from that object. The second main problem was the reaction upon the player. With the player just floating around the screen it made the blasts feel very flat and weak so If there was rotation to simulate recoil then it may feel more powerful. The only problem was that I have ever worked with rotation and physics. After learning a quaternion angle and the actual way addTorque works, I was able to get a dynamic way of adding torque based off of the current radians of the launch position to add recoil and a way to rotate the player back to their feet after firing a shot.

### Link to shotgun demonstration

<https://drive.google.com/file/d/11IHPEX69GdtyuVaoh1mGEqqO1rTvMOXp/view?usp=sharing>