Before this winter term, the game had characters that could move around and use a basic attack. However, there were a few bugs and there was not a good system for animation. Also, I realized as I was working on it that the structure of the program needed to be improved so I could add more features later. Here is the progress I made this week:

Monday

Fixed bug where characters could slip through the walls

Allowed characters to use a larger variety of attacks

Set up structure allowing for simple animation for attacks

Tuesday

Implemented animations and hitboxes (the location where an attack can collide with a character) for a variety of attacks

Fixed a bug where hitbox only lasted for one frame

Wednesday

Fixed a bug where using moves once repeatedly hit an opponent

Set up a system allowing moves to knock characters backward (knockback)

Thursday

Implemented knockback and moves stunning opposing characters for a short amount of time

Implemented a second way to input attacks (for easier testing)

Friday

Made the input angles for movement and attacks more intuitive

Created a stage class (allowing for the potential for different battlegrounds)

Created a projectile class

Implemented a system for detecting collisions between two characters

Next week, I plan to figure out a way to detect collisions with hitboxes that aren’t rectangles, as pygame can’t do that. I also plan to implement more options for the characters in game, such as shields and movement boosts, as well as a character select screen and a stage select screen.