Development stage

Stage 1:

Following my dev plan, I began with my map, which I've decided (for now at least) should be a grassy land, inspired from "Plants vs. Zombies", which is where the enemies and towers will go.



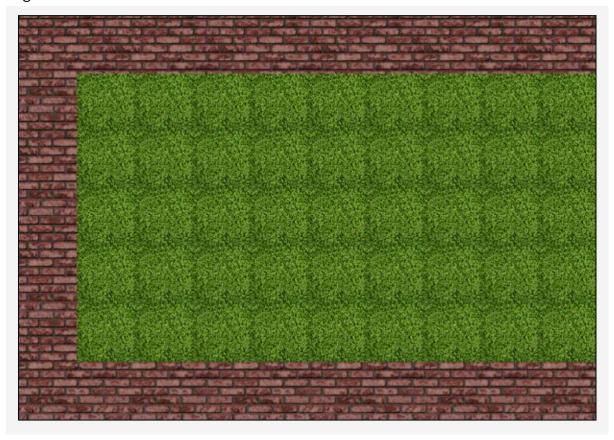
And to accommodate for the other UI elements I left space around the top, bottom, and left side of the grass, and set the background to a contrasting brick so that it would be obvious what's the gameplay and what's the UI. I did this by resizing the sprite and saving the world.

```
public arena(){
    getImage().scale(540,300);
}
```

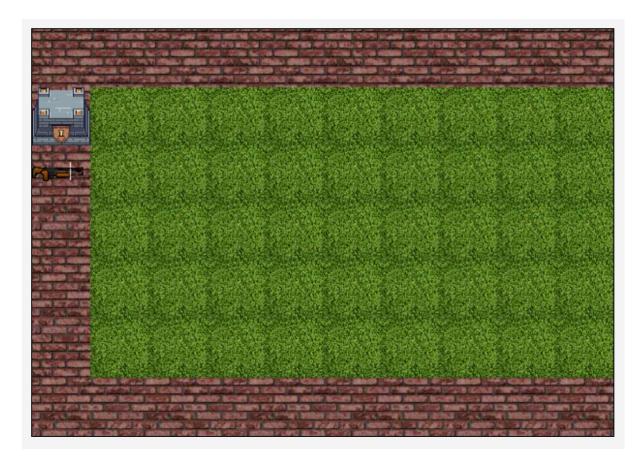
I chose to make the world a very specific size and scale as this meant that instead of having to code in the different towers and enemies "snapping" to a grid, they did it automatically due to the size of the world. I did this because at this stage in the program I'm heavily leaning more towards function and getting as many features in the game and with 'good enough' functionality rather than making sure everything is perfect. I'd much

rather have a somewhat playable game that I can tweak later on than one or two amazing features but the game is fundamentally unplayable.

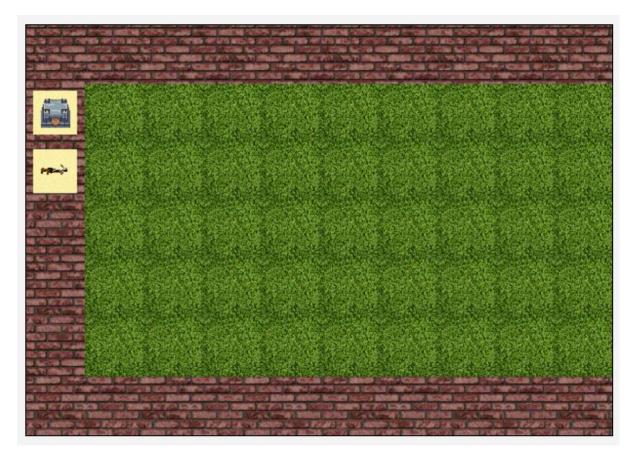
Having said this, I thought the current look of the grass was really ugly and just looked a bit lazy, because it kind of was, just having a jpg of grass in the middle of my game. But I also felt like I could find a better way to represent the grid, so I can use minimal text to inform the player of what's going on, SHOWING rather than TELLING. So, I made a new subclass so that I could go back to my original idea incase I didn't like this one, and made a grid that covered the same area, out of many smaller images of the same piece of grass.



Admittedly, this stage was quite small and relatively straight forward to do, but I decided to make it this way because I wanted to get a feel for how long things would take to do, and make sure that I wasn't stressing myself out by bombarding myself with tasks from the get-go. Having said this, I had a little bit of extra time in this stage so I decided to figure out what the icons for buying towers would look like on the left hand side. I originally began with just adding what the currency boosting tower and the projectile tower would look like on the left hand side.



However, I felt like this would look like a mistake in the game's code as they look as if they are meant to be on the grassy area but have bugged out of bounds. So, I decided to make them look more like icons for the towers rather than the towers themselves, and I think this has a much better look.



I put a shrunken down image of the tower on top of a tile of contrasting color which looks much better. I think this change is beneficial because it now feels much more intentional and looks more like what I want, that being an icon you click and drag onto the gameplay area to place down the tower.