Sources:

All of the audio came from freesound.org, I made all of the sprites and animations myself, and I used circle blast and the PIXI documentation as reference for how to do animations in PIXI and sound with Howler.

What went right:

I got most of my original plan done to what I believe is an acceptable quality given the amount of time we had, and having to balance this with other classwork. The game functions well and has enough content to take a decent amount of time to play through it all.

What went wrong:

I didn't have enough time to implement the camera class so that you could have levels that are longer than one window width, and I also didn't have enough time to get any playtesting done so that I could balance everything a little bit better. I also would have liked to work a little bit more with the overall aesthetics especially animations, I would add an idle and attack animation for each unit instead of just a single frame. If I had worked with someone instead of doing it solo I probably would have been able to add the things that I wanted to.

Future Improvements:

If I had more time to work on this I would focus on getting some playtesting first so that I could balance the units and upgrades better because now certain units and upgrades are just better than others or make losing very difficult.

Requirements:

Completely different gameplay than anything that we made for class.

Uses local storage to save which levels you have completed.

Sound effects play when enemies hit each other based on which unit is attacking.

Each method is commented describing its function and some methods have inner comments describing the processes as well.

Interface is colored differently based on the function, clickable buttons are white, labels are light gray and locked buttons are a darker gray.

Code is split into 3 different files, one for the initial setup of the game, one for handling all of the screen states and UI, and another for handling all of the game objects and their logic.

No known errors.

Above and Beyond:

10 different levels with different enemy types and spawn rates as well as different amounts of health on the enemy castle.

5 different types of units each with their own strengths and weaknesses that can be unlocked along the course of each level. This strengthens gameplay by adding strategies and different ways to beat each level.

Simple AI for the units, they know when they can move, when to stop and when to attack, also the spear units can attack multiple enemies at once.