Project 3: HTML5 game

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For this project I tried to create a top down zombie survival game using phaser. Currently the goal of the game is just to survive as long as you can while slaying a hoard of zombies spawning across the map. I've only toyed with game engines only a few times and even then only briefly, so working with phaser did prove to be quite a challenge. The main two features that I used as a base for the game were phasers top down combat mechanics and average focus. Combining these two gave a baseline for how the shooting mechanics work and allowing the camera to follow crosshair at all times. Although the examples weren't bundled together properly so I had to combine their code into a working prototype. After getting the main mechanics down I need to make a map for the playable area. At first I tried to make a map using individual sprites that I made but laying them across the map took forever which made me seek an alternative solution, tiled. Tiled being a mapping editor that was pretty easy to add and modify with phaser, although it did take some time to learn the basics of it. After making a proper arena like map I started coding the zombie enemys that were supposed to be following the player, but again a problem arouse and that was how to deal with pathing issues. To solve that I had to use a navmesh plugin which would sort the walkable tiles and barrier tiles from tiled into a map that the zombies could use to track the player accurately, although they still do get stuck in walls sometimes. Having all the main components finished I added a health bar, a survival timer for the player and a score text to show how many zombies they have killed. Wanting more variety in the game added a melee weapon option for more risqué play and saving ammo (Although no animations for it). The last features added were ammo drops and sound effects for different features.

Overall the project took me a couple of weeks to finish but even then I'm not really satisfied with the project. Main thing missing from the game is a menu system which I

did not get to work at all with scenes, always some problem arose that didn't allow me to progress on that front. The game also has a numerous bugs such as the zombies clumping together at times even though they should have colliders with each other. Sometimes one enemy becomes unkillable if multiple enemies are on the map. Bullets go through walls, enemies spawn on walls at times, the ammo box sprite does not work for some reason.

But even with so I did find it pretty interesting to work with a gaming engine. I made all the sprites seen in the game myself alongside the map, got sound effects from mixkit to compliment the gameplay, organized the assets and separated few of the classes. The game should works fine on chrome and edge. I did create a second map but due to not getting scenes to work you would have to add it manually to the code. With the amount of time I've spent on this project I would at least ask for a passing grade even if the final product could be a lot better.

Controls for the game:

Q/E: Weapon switching

WASD: Movement

Mouse: Crosshair movement

M1/M2: Shooting/swinging

R: Quick restart