

CT30A2910 Introduction to Web Programming
Project work
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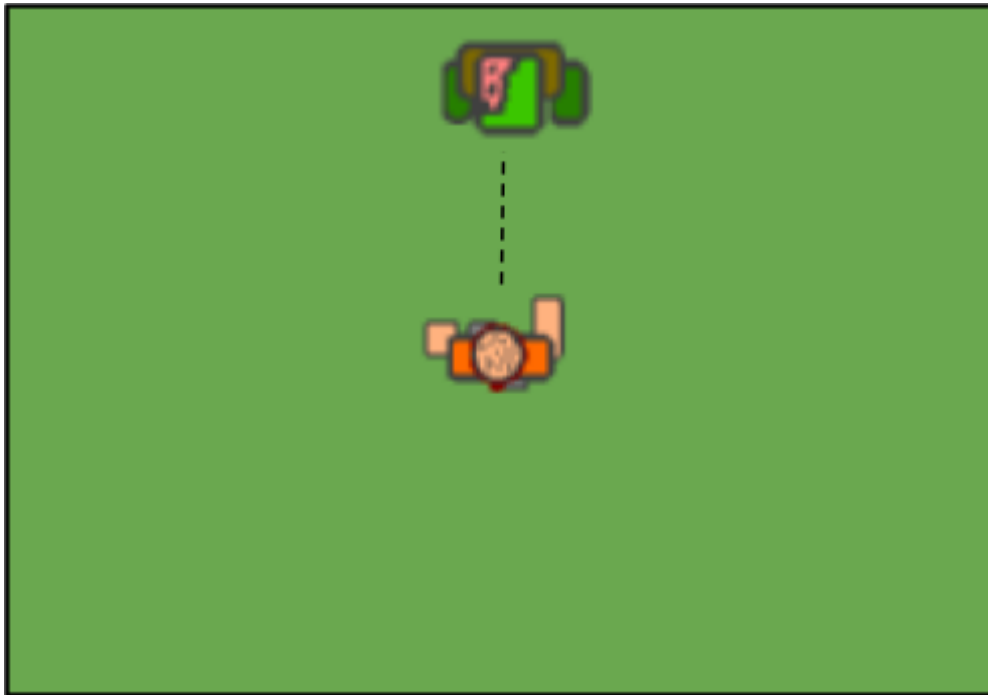
HTML5 & Phaser 3 Game: Jahti

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1. Ideas

I wanted to generate a game where a player fights a horde of zombies and at the end faces a boss. The story revolves around the main character's son being kidnapped and the hunt to find and return him home.

The gameplay will be from a top-down view of the player in a 2D world. The player's movement is controlled with the arrow keys and the mouse will be used to point the character. The player will be able to eliminate opponents by pointing and clicking. This will release a projectile that on impact will disable the opponents.



2. Execution

The game will be an HTML5 game built using Phaser 3 -library. The game consists mainly of two scenes: game scenes and cutscenes. The game scenes will all be extended from the "GameScene" -class extending the Phaser.Scene class. The GameScene has all the major methods crucial to the gameplay such as player and enemy movement, collision handling between all objects, health bar, and sound. Other game scenes just add or replace functionalities. In total, there are three maps all of which are their own scenes.

The first scene acts as a tutorial with a fairly slow pace. The scene doesn't add any extra functionality to the GameScene. The second scene adds a second collectible: hearts, which will top up your health bar. the collectibles both have a one-in-five chance of dropping. The second scene also has a static group: walls, containing wall sprites that each have ten health points that only get affected by the projectiles. Also, the zombies get faster, and instead of one hit, they get destroyed after the second hit.

The last level is a boss level where after three zombies are destroyed, Mr. Death spawns. He has 100 health points, which can be seen from the health bar in the left bottom corner that is done by just updating the length of a red rectangle according to the boss's health. If he is to hit you it'll end the level instantly. In this level, there are only fire rate collectibles due to zombies being easier than on the second level.

3. Features

Feature	Implementation	points
Well written report	I would consider this a decent report	2/2
Application is not responsive	The application is not responsive, The game has no controls for mobile due to it being designed for the desktop. This leads to no need to build it responsive	-2/-2
Application works on Firefox, Safari, Edge and Chrome	Works in all three.	2/2
Health bars	Both the player and the boss have different styles of health bars.	3/3
Style	The game is made using self-made textures and art.	3/3
Shooting physics	Projectile physics added	2/2

Feature	Implementation	points
There is a clear plot in the game. It has a start and end.	The game follows a character trying to rescue his son. Along the levels, you get to know the main protagonist better and fight him in the end.	4/4
User can get their name in the scoreboard		3
There are different (more than 1) objects to collect	There are hearts and fire-rate objects to collect.	2/2
There are moving parts in the game area (other than the player and enemies, so e.g. some floors fall apart)	There are breakable barriers on the second level that slow down the zombies.	3/3
There are more than one map	There are three playable levels in total	3/3
Gamer needs to use both keyboard and mouse to meaningfully control the player character	The movement is controlled using the arrow keys and the shooting is controlled by the mouse.	4/4

There are enemies that can hurt the player	There are zombies and a boss that can hurt the player.	3/3
There is music and sound effects when the player shoots/jumps or anything like that	There are multiple sound effects and boss music (homemade) that play accordingly.	3/3