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CT30A2910 Introduction to Web Programming Project Documentation

HTML5 game "Imprisonment of jacob"

Github: https://github.com/OskarSan/ImprisonmentOfJacob

The website is run with the command "node site.js" and runs in port 3000.
This configuration is set in the site.js file.

A simple html5 game with phaser. The project is heavily inspired by the hit-game Binding of Isaac. Once started, use WASD keys to move the player and move to the "how to play" room for more information about the gameplay.

Suggested points from the project:

Feature	Suggested points
Common features	
Sufficient PDF report	1
Responsive application	3
Application works on multiple browsers	3
Application has clear directory structure and is well organized	2
Game specific features	
The game has start and end	3
Highscore is tracked for the duration of session (shows after first game loss)	2
Tile based mapping system created with the phasers tilemap . Results in	4

easily modifiable and customisable maps which eases future development. The maps are created beforehand and are fetched from JSON files	
More than one map/room	2
Clear "menu" with rules	2
Game uses physics engine (arcade physics in the bullets)	2
Player needs to use WASD and direction keys to control the player.	3
Player collides with the objects in the map: the tile id is fetched from the JSON file of the map and if the tile has collision feature the player collides with it	2
Enemies movement is not linear: Enemies move in a step by step manner towards the player	2
Enemies collide and deal damage to the player	1
Player takes knockback from the enemies	1
Player can shoot and kill the enemies	1
The enemies have variety (speed, health, size, color)	2
The game gets harder as it progresses: more enemies each room	1
Every fifth room is a boss room	1
The game has a working UI	2
When a player dies, the game restarts, showing a game over text, latest score and the overall high score of the session. These texts are then hidden once the player changes the room	1
Enemy and UI functionalities are separated to their own files for cleaner and more maintainable code	1
Game uses customised sprites	1
The players movement is animated	2
The bullet has an interesting flight pattern with bullet spread	1
Players, enemies and bullets stats are defined as variables which are set in the gameOptions for bullets and player, and in the constructor for the enemy. Good mannerism in coding and results in easier time developing the game further.	1
Total points requested	**47**