3D Tanks

Louis Orleans and Josh Gibbs

What we used

Node.js – Server side network framework used for server side multiplayer engine by Isaacs and others

Socket.io – Websocket library for server-client communication by Guillie and others

THREE.js – 3D WebGL Library used for rendering by mrdoob and others

Stats.js – Performance tracking by mrdoob and others

jQuery – JavaScript DOM interaction library used for web page by Scott González and others

What we wrote

Audio.js – Fast HTML5 audio looping for in-game sound by Josh Gibbs

Pathfinding – Pathfinding based on the Breadth-first search algorithm used for single player AI by Mike Pollind

Multiplayer – IO system for server-client communication by Josh Gibbs

Controls.js – User input system used to control players by Louis Orleans
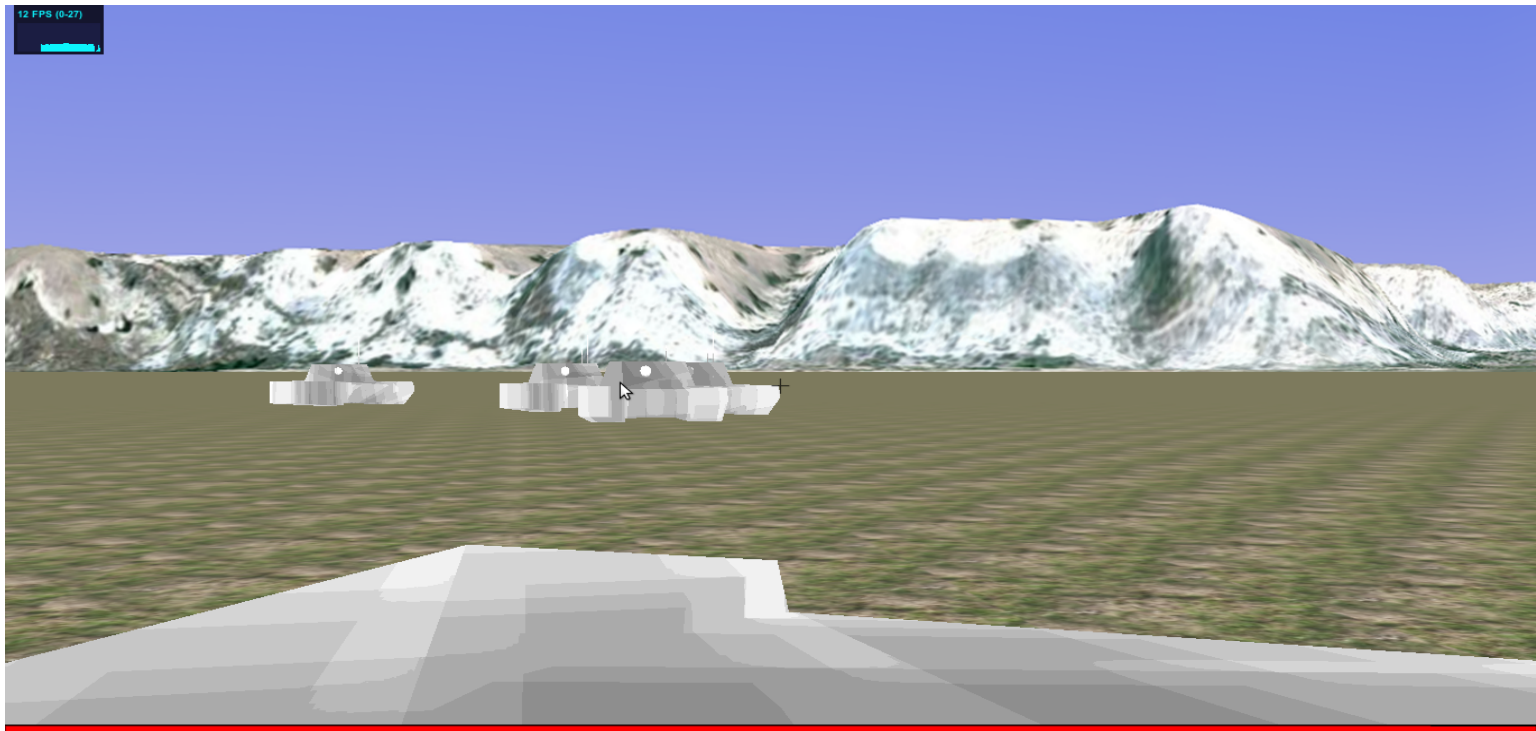
About the game

Objective – destroy the enemy tanks before they destroy you

Health – Represented by the red bar at the bottom

Multiplayer

The multiplayer environment is a free for all match against everyone on the server.

Single Player

The single player environment is a free for all match against the AI.

Controls

Left Click (hold) – Fire machine gun

Right Click – Fire artillery shell

Mouse Move – Look around (speed is dependent on mouse position)

W – Move forward

A – Turn left

S – Move backward

D – Turn right

Future plans

- Helicopter controls
- Particle system for collisions
- Randomly generated buildings
- Different game modes
- Chat system for multiplayer
- AI in multiplayer
- Highly accurate collisions
- Multiplayer lobby
- Leaderboard