

PRONTO CHALLENGE

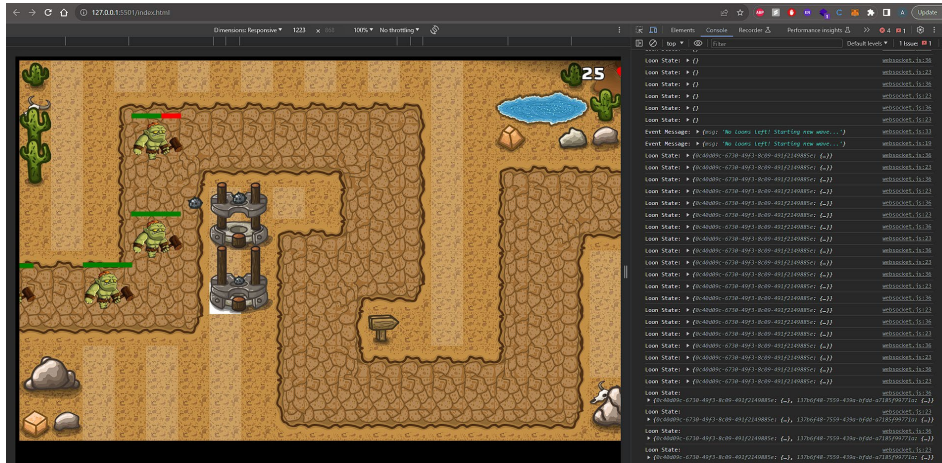
ADITYA SINGH RAJPUT

1- How I tackle the challenge?

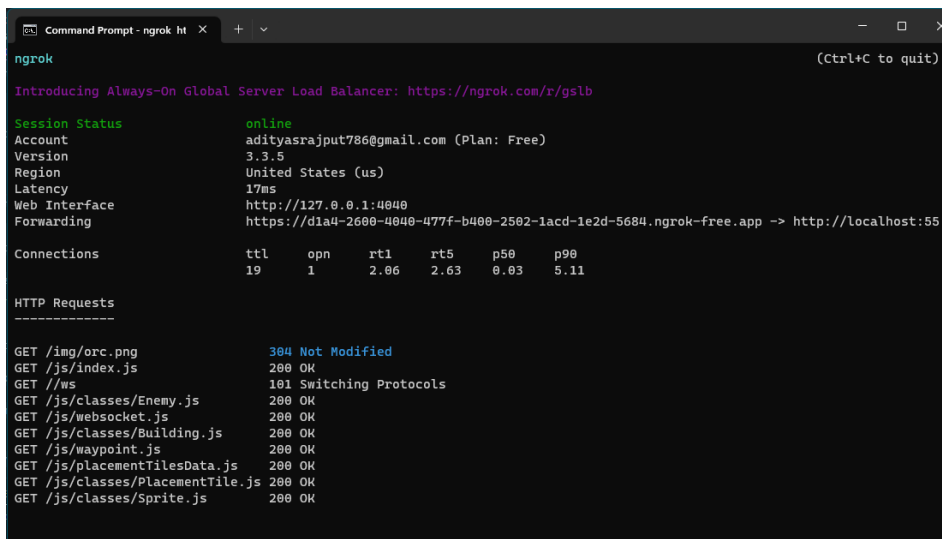
- a. Initially, I connected to a websocket server and logged in my console that a 'User is Connected' and 'Websocket connection is established'.
- b. I used Insomnia to check if I was receiving real-time updates from the server, but that wasn't very useful. So, I shifted to 'ngrok.'
- c. Ngrok exposes your localhost and provides you with a URL to test and debug your code. It was my first time working with ngrok, and I was able to successfully connect it to the server.
- d. I then proceeded to work on the frontend implementation of the game and made some progress.
- e. Initially, three random red dots (loons) were appearing, and I could place as many large blue dots (turrets) as I wanted.
- f. However, they were not shooting the red dots, and the red dots were disappearing from the canvas.
- g. After rigorous testing and debugging, I decided to change my workflow because I wasn't getting my expected output.
- h. I thought, "Let's first create a fully functioning game, and I'll address the backend connection later."
- i. So, I started coding the game from scratch. I downloaded some free game assets from "itch.io" because initially, my game was just a black canvas with white paths, orange projectiles, and blue turrets and red loons.
- j. To make it more visually appealing, I downloaded some images and assigned each of them to different objects.
- k. Finally, when the game was working and looking good locally, I moved on to the next part which was the backend connection.
- l. I began by installing npm packages like 'ws' and 'socket.io' to establish a successful connection.
- m. After that, I wrote 'server.js' and 'websocket.js' with some basic implementation just to see if I was connected or not.
- n. At the beginning, I encountered some errors like '426 upgrade required.' I went through this and tried to understand what it meant.
- o. I then connected my game files with 'websocket.js' and 'server.js' to see any changes in the console and inspect element. It was working perfectly and informed me when a wave was coming or the loons' position.

2- Below are some Images for reference.

a. Game running locally.



b. ngrok information



c. Game running on ngrok server.

