Full-Stack Developer Problem

Objective

Create an interactive heatmap that represents all the IPv4 addresses in the world.

Requirements

- Parse data from GeoData - This zip contains data about IPv4 internet addresses and their locations. You should only need to use the GeoLite-City-Blocks-IPv4.csv for latitude and longitude information.
- Define a REST endpoint that returns a list of coordinates within a geographic coordinate bounding box. You may need to fine tune the resolution of this data in order to improve performance.
- Use the REST endpoint in a single-page JavaScript application to display the data to a user.

Helpful Resources - Not required, but a good place to start.

- Leaflet and Leaflet.heat - These and other libraries can be used to draw geographic and data on a map in the browser.
- MapBox - A service (with free tier) that allows pulling tile data for maps and building maps.
- Heroku - Hosting platform for your language of choice. Heroku can be a quick way to get a backend up and running to host your API.

Bonus

- Any tests that you write to verify behavior
- Front-end performance should be fast (what would happen if you had to do this for IPv6?)
    - Hint: In order to be as efficient as possible you might use protocol buffers.
- REST endpoint should be able to be recalculated given a redeployment of the data zip file

Submission

- Any code you wrote should be submitted
- A live server deployment to test what you've written