

README

1. `index.js`

This JavaScript file contains the logic for fetching pin data and plotting them on the map. Here's a breakdown of its key functionalities:

- Initialization:
 - It initializes a Leaflet map object, sets its view, and adds a tile layer using OpenStreetMap tiles.
- Fetching Pin Data:
 - It fetches pin data from the server using the `/pins` endpoint.
- Plotting Pins:
 - After fetching pin data, it iterates over each pin.
 - For each pin, it checks if latitude and longitude are valid and not null.
 - If valid, it converts the latitude and longitude from degrees, minutes, and seconds to decimal degrees using the `getCoordinates` function.
 - It then creates a Leaflet marker for each pin and binds a popup with detailed information about the pin.
- Coordinate Conversion:
 - The `getCoordinates` function converts latitude and longitude from degrees, minutes, and seconds to decimal degrees.

2. `index.html`

This HTML file is responsible for rendering the pin map on a web page. Here's a brief overview:

- HTML Structure:
 - It contains a `

` element with the id `map`, which serves as a container for the Leaflet map.
- External Resources:
 - It includes links to external resources such as Leaflet CSS and JavaScript files.
- JavaScript Inclusion:
 - It includes the `index.js` file, which contains the JavaScript logic for plotting pins on the map.

3. `server.js`

- This Node.js file sets up an Express server to serve the web application and handle API requests.
- It serves static files from the public directory, including index.html and index.js.
- It establishes a connection to our MySQL database containing pin data.
- Upon receiving a request to the /pins endpoint, it queries the database for pin data and returns it as JSON.
- The retrieved pin data is then formatted and sent to the client-side JavaScript (index.js) for plotting on the map.

Usage:

- Ensure that Node.js, npm and MySQL are installed on your system.
- Make sure that the user 'Raydiant' exists for MySQL and the database 'Raydiant' also exists. Password can be found in the upload.py file.
- Make sure the path to the pdfs directory is update in the `main.py` file
- Run `npm install` in the main directory and then run `python3 main.py`
- Access the web application at <http://localhost:3000> in your browser to view the pin map.