RED ACRE

JavaScript Technical Assessment

Popeye decides to join Red Acre and he starts working on a Monday in the Balluta office. You are required to develop a Progressive Web App (PWA) to help him monitor his movements. The application consists of a React front-end client and a Node back-end service (express.js).

You are provided with two datasets in GeoJSON format, the first one (*popeye-village-balluta.geojson*) represents the route from his house in Popeye Village to the Balluta office and the second (*lunch.geojson*) represents the lunch break he had where he went to the closest supermarket to buy some spinach. Each point in the dataset is a sequence from the previous point.

The application must meet all the following criteria:

- Front-end must have a Map component to display the movements with the option of 1, 5 and 10 seconds interval for each movement.
- Front-end must have a list component containing the 3 routes Popeye does. One to go from his house to the office, one to go for lunch and one to return to his house.
- Back-end service must load the data from the files and stream the locations to the front-end using WebSocket.
- Latest Node and React versions must be used.
- Any map library can be used.
- Documentation and Unit-tests are required.
- You need to upload the repository to GitHub and share the link.
- You need to create a short video to demo the application in a working state.
- Assessment will be rejected if no readme file is provided with instructions on how to run the project.

Bonus:

- Once the service initiates, store the data in a mongo collection and use that collection to load the data and stream it to the front-end. (This should not overwrite the previous implementation which shall remain as a fallback).
- When the application initiates, the first trip to work starts after some time using a loader on the page.
- A timeline bar that the user can use to navigate to any point of time of the trip.
- Once you click on a trip to start from on the list, use the current user time to display the time of each trip.
- Add a car icon on the map to show the car moving during the first trip to work and back home and add a person icon to show the lunch break movement.
- Dockerize the application.