

inPress Coding assignment

Senior angular developer

Create a weather application using Angular, RxJS, and NgRx. The application should have the following features:

Weather API Integration:

Integrate with a weather API of your choice to fetch weather data.(openweather,...)
Use RxJS Observables and operators to handle asynchronous data fetching.
Implement caching mechanisms to reduce API requests and improve performance.
Support offline functionality by caching previously fetched weather data.

Display Weather Data:

Display the current weather information, including temperature, humidity, and weather condition.

Search Functionality:

Allow users to search for weather information by city name.
Implement an input field with a search button.
Fetch and display the weather data for the searched city.

Error Handling and Logging:

Handle errors that may occur during API requests.
Display appropriate error messages to the user.
Integrate a logging service (e.g., Sentry) to log errors and exceptions.

State Management with NgRx:

Use NgRx to manage the application state.
Define actions, reducers, and effects to handle fetching weather data and updating the state accordingly.
Use selectors to retrieve specific weather data from the state.

Unit Testing and Test Coverage:

Write unit tests using Angular's testing frameworks (e.g., Jasmine, Karma).
Aim for a high level of test coverage to ensure code reliability and maintainability.

Performance Optimization:

Optimize the application's performance by lazy-loading modules, using code splitting, and optimizing network requests.

Implement memoization techniques to cache expensive calculations and computations.

Internationalization and Localization:

Implement internationalization (i18n) and localization (l10n) support to provide multi-language support in the application.

Responsive Design:

Design and layout the application with a responsive and mobile-friendly interface.

Ensure the application is visually appealing and usable on different screen sizes.

Continuous Integration and Deployment:

Deploy the application to a hosting platform (e.g., Firebase, Netlify, Heroku).

Please provide the completed assignment as a GitHub repository or a zip file containing the source code, along with any necessary instructions for running the application locally.