TEA BACKEND CODING CHALLENGE

Design REST API endpoints that handle Authentication and CRUD operations for generated time series weather data. The service will only be responsible for :

1-Creating end users by admin users

2-Returning weather data for requested time range and location.

End users can only read time series weather data and admin users can read and write time series weather data.

Requirements

- User credential (username and password) submission endpoint that is exposed at /login (POST).
- User create endpoint is exposed at /user (POST).
- User information endpoint is exposed at /user/{user_id} (GET).
- Updating user information endpoint is exposed at /user/{user_id} (PUT/POST).
- Deleting the user endpoint is exposed at /user/{user_id} (DELETE).
- Weather information endpoint is exposed at /weather (GET) and can be filtered by given parameters (condition, time range, location, average etc.).
- All endpoints will accept JSON and/or return JSON responses.

Notes

- We expect that /login endpoint returns a token and user information or proper error message in the response.
- We expect that at least user id, username, name, password and role (admin user and end user) parameters as user information.
- For user endpoints, depending on the request type, we expect that user information or success/error message in the response.
- All User IDs should be UUIDs.
- We expect that at least location, timestamp (ISOString format), temperature and weather condition (sunny, cloudy, rainy, windy, snowy, etc.) parameters as weather information.

Rules

- Time series weather data count can be changed between 1.000.000 and 10.000.000 data. This can be real data from the web or generated randomly.
- Duration and scalability of responses will be very important.
- You can use the language/technology you are comfortable with.The aim of this test case is to understand your problem solving abilities.
- The source code must be sent to us by email.
- Documentation/comments in the code is a plus.