

## Software Engineer Case Study

Imagine - you wake up in the morning with an idea for a product that delivers daily weather reports to a user's browser. You have partnered with a web developer for the design. You need to develop an API that returns specific weather data and records analytic information on users that are using your service.

### Objective:

Create a Rest API for your weather product that will return weather data based on a users current location. Your service should make a GET request to <https://j9l4zglte4.execute-api.us-east-1.amazonaws.com/api/ctl/weather> which returns a JSON response with weather data for the existing location. Choose whatever language and architecture you are most comfortable with

### Demonstrate the Following

In addition to paying attention to your code structure, consistency of style, and documentation; please ensure that your landing page demonstrates all of the following functionality.

1. Your service should parse out and return city, state, and weather description & high and low temperatures for the next 3 days only from the provided endpoint
2. Your service should internally cache results and only make requests to the third party API when a location has not been previously requested
3. Your service should log individual user requests in a format that can be used for data analytics after the fact. For example, We would like to be able to track how many users from Kansas City requested weather on this service the past 7 days.
4. How would you implement your API in an AWS environment to provide a solution that is highly available, fault tolerant, and scalable?

### How to Submit

1. Include a public git repo URL for your code. Be sure that your repo has a README.md with instructions for running locally or a reference to a live version.