

Assignment for Software Developer Job

Thank you for your interest in Software Developer role at NeuralQuark Computing. We appreciate your time and effort in submitting your application and would like to invite you to the next step of our hiring process.

As part of our assessment, we would like to give you a technical assignment to evaluate your skills and abilities. The assignment is designed to assess your expertise in web development, API calls, using libraries, and various basic things every developer should know.

For this assignment, you are tasked with building the following web application:

Tides Information

Description: You are tasked to develop a mini web application that allows users to fetch their current location and determine the nearest coast with the next high tide and low tide time. This web application is a simple single-page interface. As soon as the user opens the web application, they will be shown the nearest coast to them. Below the coast name and location, they should see the next high tide and low tide times.

Functionality:

Location Services: The web application must be able to fetch the user's current location to determine the nearest coast.

Tide Times: The web application should display the highest tide and lowest tide times of the nearest coast. You can use any API that provides tide times for a given location.

User Interface: The web application should have a clean, responsive, and user-friendly interface.

Data Display: In addition to the next high and low tide times, enhance the display by showing the current time, the time until the next tide event, and perhaps a simple visual representation (e.g., a timeline or icons for high/low tides using CSS or a library like Chart.js).

Novel features (Most Important): Think of way to make app more useful to user. Come up with some novel feature and implement it in the app. The feature should be useful to user and something that will come handy to them.

Additional Features: To demonstrate your skills further, incorporate the following:

- Store the user's last known location in local storage (using JavaScript's localStorage API) for faster loading on subsequent visits, with an option to clear it.

- Use at least one external library (e.g., Leaflet.js for a mini map showing the coast location, or Moment.js for handling date/time formatting).
- Ensure the application handles different time zones correctly based on the user's location.

Timeline for project completion is 3 days.

Note:

All assignments and features implemented by all candidates will be compared against each other's and based on that the best candidate will be selected. So, try to give your best among the competitors.

Aim of this assignment is to get insight of your skills and provide offer to eligible candidate.

Hence the code you do for this project will belong to you only and we will not assume its ownership.

You are free to use the web application you develop for your purpose.