

6. Server-Side APIs Challenge: Weather Dashboard

[Submit Assignment](#)**Due** Sep 6 by 11:59pm**Points** 100**Submitting** a text entry box or a website url

Your Task

Third-party APIs allow developers to access their data and functionality by making requests with specific parameters to a URL. Developers are often tasked with retrieving data from another application's API and using it in the context of their own. Your challenge is to build a weather dashboard that will run in the browser and feature dynamically updated HTML and CSS.

Use the [OpenWeather API](https://openweathermap.org/api) [_\(https://openweathermap.org/api\)_](https://openweathermap.org/api) to retrieve weather data for cities. The documentation includes a section called "How to start" that provides basic setup and usage instructions. You will use `localStorage` to store any persistent data.

User Story

AS A traveler

I WANT to see the weather outlook for multiple cities

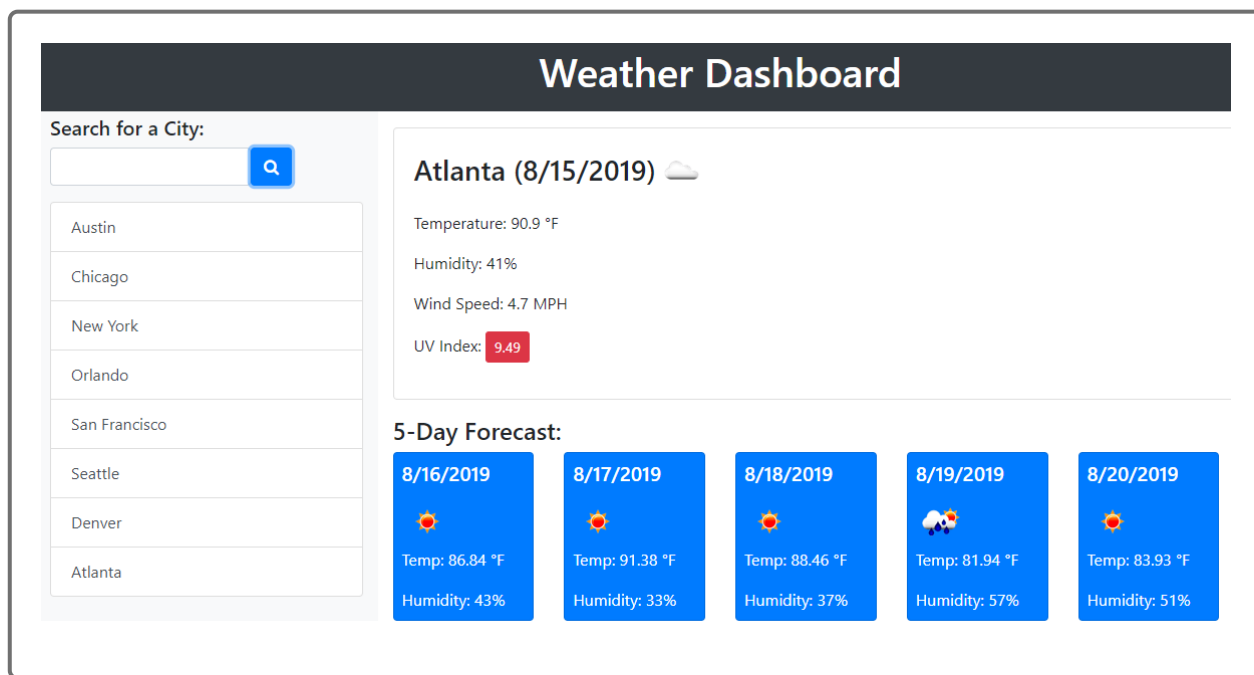
SO THAT I can plan a trip accordingly

Acceptance Criteria

GIVEN a weather dashboard with form inputs
WHEN I search for a city
THEN I am presented with current and future conditions for that city
and that city is added to the search history
WHEN I view current weather conditions for that city
THEN I am presented with the city name, the date, an icon
representation of weather conditions, the temperature, the humidity,
the wind speed, and the UV index
WHEN I view the UV index
THEN I am presented with a color that indicates whether the
conditions are favorable, moderate, or severe
WHEN I view future weather conditions for that city
THEN I am presented with a 5-day forecast that displays the date, an
icon representation of weather conditions, the temperature, and the
humidity
WHEN I click on a city in the search history
THEN I am again presented with current and future conditions for
that city

Mock-Up

The following image shows the web application's appearance and functionality:



Grading Requirements

This challenge is graded based on the following criteria:

Technical Acceptance Criteria: 40%

- Satisfies all of the above acceptance criteria plus the following:
 - Uses the OpenWeather API to retrieve weather data
 - Uses `localStorage` to store persistent data

Deployment: 32%

- Application deployed at live URL
- Application loads with no errors
- Application GitHub URL submitted

- GitHub repository that contains application code

Application Quality: 15%

- Application user experience is intuitive and easy to navigate
- Application user interface style is clean and polished
- Application resembles the mock-up functionality provided in the Challenge instructions

Repository Quality: 13%

- Repository has a unique name
- Repository follows best practices for file structure and naming conventions
- Repository follows best practices for class/id naming conventions, indentation, quality comments, etc.
- Repository contains multiple descriptive commit messages
- Repository contains quality README file with description, screenshot, and link to deployed application

How to Submit the Challenge

You are required to submit BOTH of the following for review:

- The URL of the functional, deployed application.

- The URL of the GitHub repository. Give the repository a unique name and include a README describing the project.

NOTE

You are allowed to miss up to two Challenge assignments and still earn your certificate. If you complete all Challenge assignments, your lowest two grades will be dropped. If you wish to skip this assignment, click Submit then indicate you are skipping by typing "I choose to skip this assignment" in the text box.

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