

Weather Search App

Take Home Assignment – David Eftink (10/3/2021)

Overview

The Weather Search App is built with Node JS, and uses the Web API <https://openweathermap.org/api> to retrieve the current weather data by City, Zip Code, or Geo Location coordinates.

Node JS Implementation Details

The following Node JS package modules are used in the Weather Search App.

- Express – Web Application Framework
- Embedded JavaScript (EJS) – Templating Language for HTML markup
- Axios – Promise-based HTTP client for Web API requests

Local Port Number 3000 is used by the application.

Weather Data Web API Usage

API URL

<https://api.openweathermap.org/data/2.5/weather>

API Key

appid=cf002751564a4c78f5f7ed479f1b9ba3

Request By City

q={city name,state code,country code}

Request By Zip

zip={zip code}

Request By Coordinates

lat={latitude}&lon={longitude}

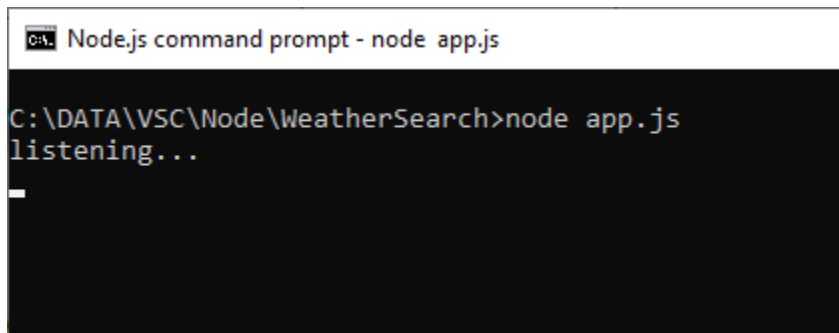
Units of Measure

units=imperial

User Instructions

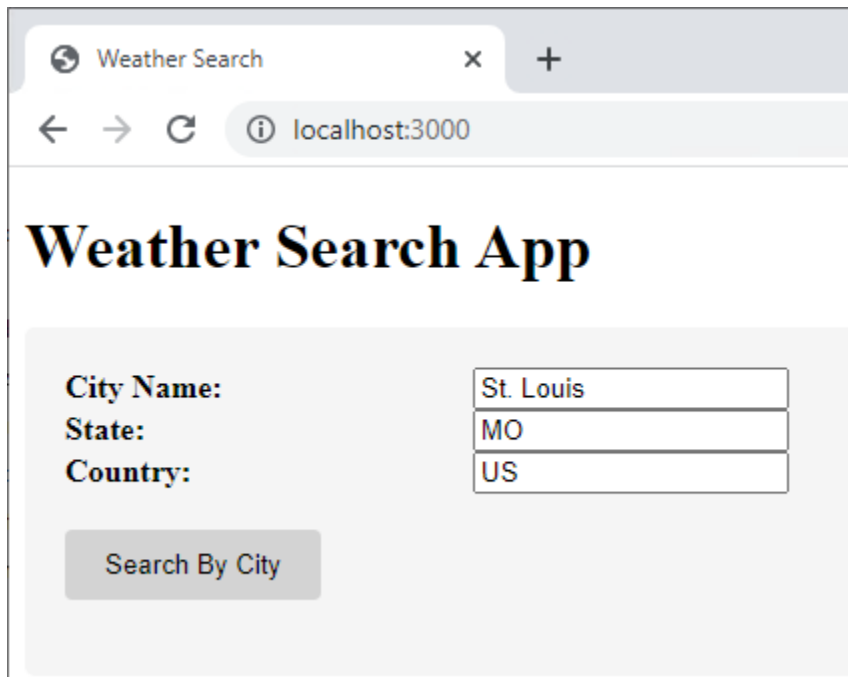
Starting the Application

1. Run from a command-line: **node app.js**



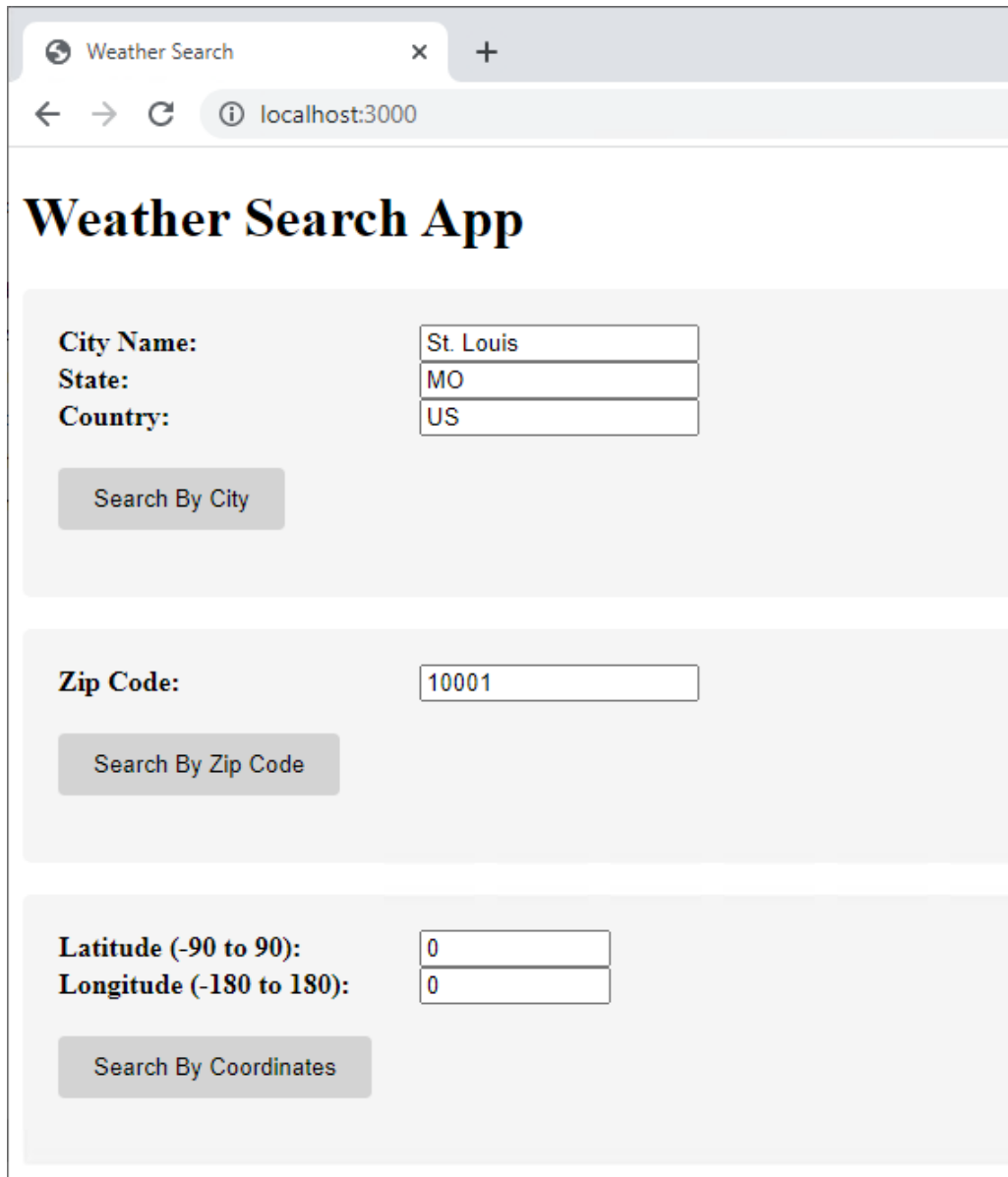
```
C:\DATA\VSC\Node\WeatherSearch>node app.js
listening...
```

2. Launch a browser, and go to: **localhost:3000**



Using the Application

1. Enter data in the input fields, and use one of the buttons to search by City, Zip, or Coordinates.



The screenshot shows a web browser window with the title "Weather Search". The address bar displays "localhost:3000". The main heading of the application is "Weather Search App". Below the heading, there are three distinct search sections, each with a light gray background and rounded corners.

City Search Section:

- City Name:
- State:
- Country:
- Search Button:

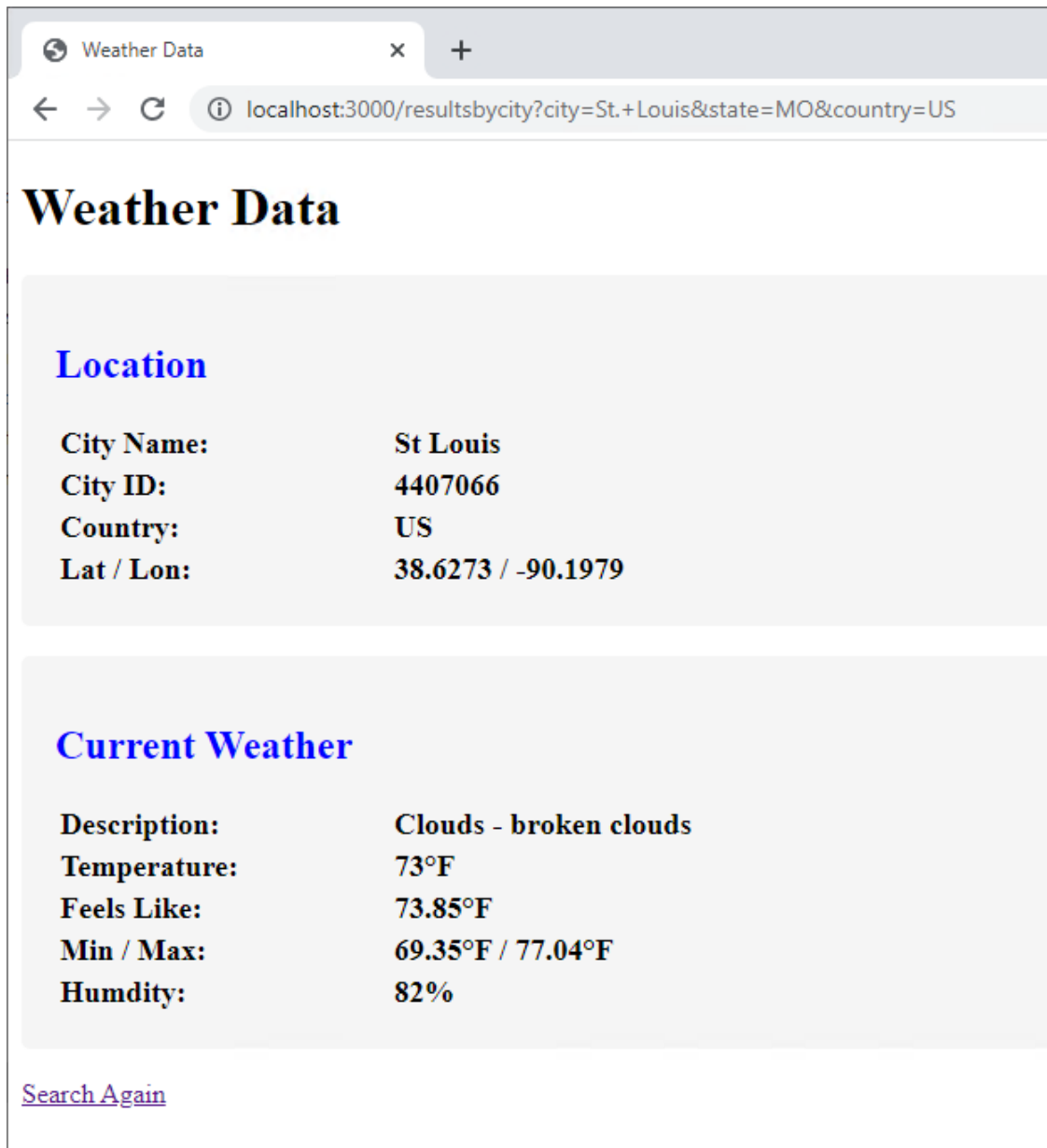
Zip Code Search Section:

- Zip Code:
- Search Button:

Coordinates Search Section:

- Latitude (-90 to 90):
- Longitude (-180 to 180):
- Search Button:

2. The Weather Data Results will be displayed if the request is successful.



The screenshot shows a web browser window with a single tab titled "Weather Data". The address bar displays the URL "localhost:3000/resultsbycity?city=St.+Louis&state=MO&country=US". The main content area features a large heading "Weather Data" in bold black text. Below this, there are two distinct sections, each with a blue heading. The first section, "Location", contains a table with four rows of data: City Name (St Louis), City ID (4407066), Country (US), and Lat / Lon (38.6273 / -90.1979). The second section, "Current Weather", contains a table with five rows: Description (Clouds - broken clouds), Temperature (73°F), Feels Like (73.85°F), Min / Max (69.35°F / 77.04°F), and Humidity (82%). At the bottom of the page, there is a link labeled "Search Again" in blue text.

Weather Data

Location

City Name:	St Louis
City ID:	4407066
Country:	US
Lat / Lon:	38.6273 / -90.1979

Current Weather

Description:	Clouds - broken clouds
Temperature:	73°F
Feels Like:	73.85°F
Min / Max:	69.35°F / 77.04°F
Humidity:	82%

[Search Again](#)

3. If the data request fails, then the error message will be displayed.

