

## Module 13 Roadmap

---

### Looking Ahead

In this module, you will use the Leaflet.js Application Programming Interface (API) to populate a geographical map with GeoJSON earthquake data from a URL. Each earthquake will be visually represented by a circle and color, where a higher magnitude will have a larger diameter and will be darker in color. In addition, each earthquake will have a popup marker that, when clicked, will show the magnitude of the earthquake and the location of the earthquake.

---

### What You Will Learn

By the end of this module, you will be able to:

- Create a branch from the main branch on GitHub.
  - Add, commit, and push data to a GitHub branch.
  - Merge a branch with the main branch on GitHub.
  - Retrieve data from a GeoJSON file.
  - Make API requests to a server to host geographical maps.
  - Populate geographical maps with GeoJSON data using JavaScript and the Data-Driven Documents (D3) library.
  - Add multiple map layers to geographical maps using Leaflet control plugins to add user interface controls.
  - Use JavaScript ES6 functions to add GeoJSON data, features, and interactivity to maps.
  - Render maps on a local server.
- 

### Planning Your Schedule

Here's a quick look at the lessons and assignments you'll cover in this module. You can use the time estimates to help pace your learning and plan your schedule.

- Introduction to Module 13 (15 minutes)
- The Earthquake Mapping Project (30 minutes)
- Create Your First Map (1 hour)

- Don't Mess with the main Branch (1 hour)
- Map Geographical Features (2 hours)
- Map GeoJSON Data (2 hours)
- Map Earthquakes (2 hours)
- Application (5 hours)

## Unit: Visualizations

### Module 12: Plotly and Belly Button Biodiversity

Complete



### Module 13: Mapping Earthquakes with JS and APIs

Use JavaScript's Leaflet library along with the Mapbox API to create visualizations of earthquake data from the U.S. Geological Survey.



### Module 14: Exploring Bike-Sharing Data with Tableau