13.2.3 Create an HTML File and CSS File

Now that you have your API token and your branch is set up, Sadhana will let you get familiar with the documentation for using Leaflet. Then, she's suggested you jump in and create an HTML file and CSS file and add links to some stylesheets in the HTML file.

Let's get familiar with Leaflet. Leaflet has a few links and simple HTML code that we will add to an index.html page.

The Leaflet JavaScript Library

On the <u>Leaflet (https://leafletjs.com/index.html)</u> homepage, scroll midpage and click the <u>Leaflet Quick Start Guide</u> (https://leafletjs.com/examples/quick-start/) link:



The Leaflet Quick Start Guide provides steps for setting up a Leaflet map. To begin, scroll midpage to the "Preparing your page" section:



The "Preparing your page" section includes links and HTML code that we'll add to our <u>index.html</u> page. First, we'll create a folder structure for our earthquake map webpage.

Create an HTML Page

Open your Mapping_Earthquakes repository folder in Visual Studio Code (VS Code). Create a new folder called "Simple_Map." Inside the folder, create a new index.html file. Next, create a template for your index.html file.

REWIND

To create a template for an html file, type an! (exclamation point) and press Tab or Enter, and the empty file will be filled with the complete HTML5 boilerplate code.

In our <u>index.html</u> file, we'll change the document title and add the code from the "Preparing your page" section.

- 1. Change the document title in the <title> element in the <head> section (<title>Document</title>) to "Leaflet-Basic-Map."
- 2. In the section, just below the ctitle element, add the following Leaflet CSS script from the "Preparing your page" section:

```
<!-- Leaflet CSS -->
<link rel="stylesheet" href="https://unpkg.com/leaflet@1.7.1/dist/leafleintegrity="sha512-xodZBNTC5n17Xt2atTPuE1HxjVMSvLVW9ocqUKLsCC5CXdbqCmblAscrossorigin=""/>
```

3. In the body of our index.html file, add the Leaflet JavaScript script:

```
<!-- Leaflet JavaScript -->
<script src="https://unpkg.com/leaflet@1.7.1/dist/leaflet.js"
integrity="sha512-XQoYMqMTK8LvdxXYG3nZ448hOEQiglfqkJs1NOQV44cWnUrBc8PkAC
crossorigin=""></script>
```

The Leaflet CSS and JavaScript files we added to the <code>index.html</code> file are referred to as content delivery networks (CDNs). Using CDNs has a security risk. To avoid the security risk, it's a best practice to include an integrity value with the CDN. Each file we added has its own integrity value, which is a Base64-encoded cryptographic hash of a resource that prevents the CDN from being hacked.

NOTE

For more about the Subresource Integrity value, please see the documentation on the <u>Download Leaflet webpage</u>

(https://leafletjs.com/download.html) and Mozilla Developers'

Subresource Integrity webpage (https://developer.mozilla.org/en-US/docs/Web/Security/Subresource_Integrity).

4. Above the Leaflet JavaScript link script, add the following divelement with the id tag for the map, as shown in the "Preparing your page" section:

```
<!-- The div that holds our map -->
<div id="mapid"></div>
```

After adding the Leaflet CSS file, JavaScript file, and the (div) element with the id tag for the map, our index.html file should look like the following:

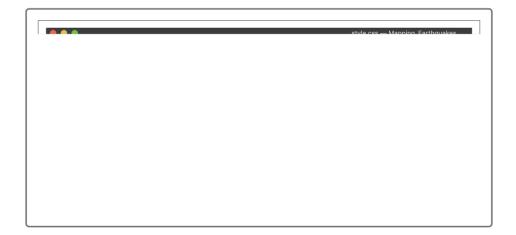
IMPORTANT

Make sure you copy and paste the Leaflet CSS file and JavaScript script from the website as they appear. Do not edit the script by deleting empty spaces. This will prevent that script from working on the index.html file, resulting in the map not being shown on the webpage.

Next, we will modify our #mapid to be set at a specific height using CSS code. To do this, we'll need to create a style.css file.

Create a CSS File

Before we create a style.css file, we'll need to create a folder for the file. In VS Code, create a new subfolder called "static" in our Simple_Map folder. In this folder, create another subfolder named "css." In the css folder, create a new file and name it style.css:



Next, add the following CSS code to our <u>style.css</u> file to set the style for our map on our <u>index.html</u> page and save the file:

```
html,
body,
#mapid {
  width: 100%;
  height: 100%;
  padding: 0;
  margin: 0;
}
```



At this point, your folder should look like the following:

Finally, we need to tell our <u>index.html</u> page to use the <u>style.css</u> file we created.

In the head section of our index.html page, add the following CSS link script below the Leaflet CSS and before the closing head element:

```
<!-- Our CSS -->
     <link rel="stylesheet" type="text/css" href="static/css/style.css">
```

Next, we'll create the code for a simple map.

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