

Researching Maps - Leaflet

So, Leaflet is an Open-Source JavaScript library for mobile-friendly interactive maps (also works on desktop) with no external dependencies

If you want to use a hosted version of Leaflet, (which is basically linking to Leaflet from your HTML file) you can put both in your HTML file for the Map:

```
<link rel="stylesheet" href="https://unpkg.com/leaflet@1.9.4/dist/leaflet.css" integrity="sha256-p4NxAoJBhIIN+hmNHrzRCf9tD/miZYoHS5obTRR9BMY=" crossorigin="" />
```

and

```
<script src="https://unpkg.com/leaflet@1.9.4/dist/leaflet.js" integrity="sha256-20nQCchB9co0qIjJZRGuk2/Z9VM+kNiyxNV1lvTLZBo=" crossorigin=""></script>
```

Otherwise, if you want to store the leaflet JavaScript and CSS locally you can find the source at this link: <https://leafletjs.com/download.html>

Once downloaded you will see these files:

Name	Type	Compressed size	Password ...	Size	Ratio
images	File folder				
leaflet.css	Cascading Style Sheet Do...	4 KB	No	15 KB	77%
leaflet.js	JavaScript File	42 KB	No	145 KB	72%
leaflet.js.map	Linker Address Map	77 KB	No	221 KB	66%
leaflet-src.esm.js	JavaScript File	108 KB	No	415 KB	75%
leaflet-src.esm.js.map	Linker Address Map	163 KB	No	846 KB	81%
leaflet-src.js	JavaScript File	110 KB	No	440 KB	76%
leaflet-src.js.map	Linker Address Map	164 KB	No	846 KB	81%

This is how Leaflet describes these files:

Leaflet.js - the minified Leaflet JavaScript code

Leaflet-src.js - the readable, unminified Leaflet JavaScript, sometimes helpful for debugging

Leaflet.css - the stylesheet for Leaflet

Images – This is a folder that contains images referenced by leaflet.css. It must be in the same directory as leaflet.css

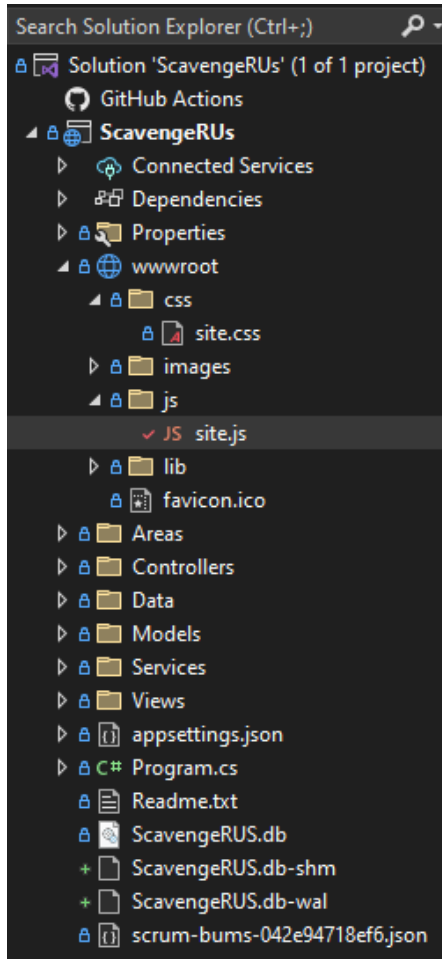
I haven't tested this yet, but you would either have to;

put the actual code inside leaflet.js into our own site.js file and reference that (copy paste)

```
<link rel="stylesheet" href="site.css" />
```

```
<script src="site.js"></script>
```

OR what I think would be EASIEST is placing leaflet.js right next to our site.js file here (wwwroot -> js -> leaflet.js) and (wwwroot -> css -> leaflet.css) for the CSS



My only problem with this is I'm not sure how the API would react to this.

So, you can;

place leaflet.js physically next to site.js and leaflet.css physically next to site.css (You would also have to take the images from leaflets images file and put those in the sites images folder since the CSS needs to reference some of them)

OR you can use a hosted version within the HTML and linking leaflet to the HTML file itself

OR you can take the code from both leaflet.js and leaflet.css and copy paste them into our site.js and site.css

Leaflet does have some very nice features like the ones we were looking for; customizable pins and real-time location tracking

Additionally, below is a screenshot of all the features that come with Leaflet.

Features

Leaflet doesn't try to do everything for everyone. Instead it focuses on making *the basic things work perfectly*.

Layers Out of the Box

- Tile layers, WMS
- Markers, Popups
- Vector layers: polylines, polygons, circles, rectangles
- Image overlays
- GeoJSON

Interaction Features

- Drag panning with inertia
- Scroll wheel zoom
- Pinch-zoom on mobile
- Double click zoom
- Zoom to area (shift-drag)
- Keyboard navigation
- Events: click, mouseover, etc.
- Marker dragging

Visual Features

- Zoom and pan animation
- Tile and popup fade animation
- Very nice default design for markers, popups and map controls
- Retina resolution support

Customization Features

- Pure CSS popups and controls for easy restyling
- Image- and HTML-based markers
- A simple interface for custom map layers and controls
- Custom map projections (with EPSG: 3857/4326/3395 out of the box)
- Powerful OOP facilities for extending existing classes

Performance Features

- Hardware acceleration on mobile makes it feel as smooth as native apps
- Utilizing CSS features to make panning and zooming really smooth
- Smart polyline/polygon rendering with dynamic clipping and simplification makes it very fast
- Modular build system for leaving out features you don't need
- Tap delay elimination on mobile

Map Controls

- Zoom buttons
- Attribution
- Layer switcher
- Scale

Browser Support

Desktop

- Chrome
- Firefox
- Safari 5+
- Opera 12+
- IE 9-11
- Edge

Mobile

- Safari for iOS 7+
- Chrome for mobile
- Firefox for mobile
- IE10+ for Win8 devices

Misc

- Extremely lightweight
- No external dependencies