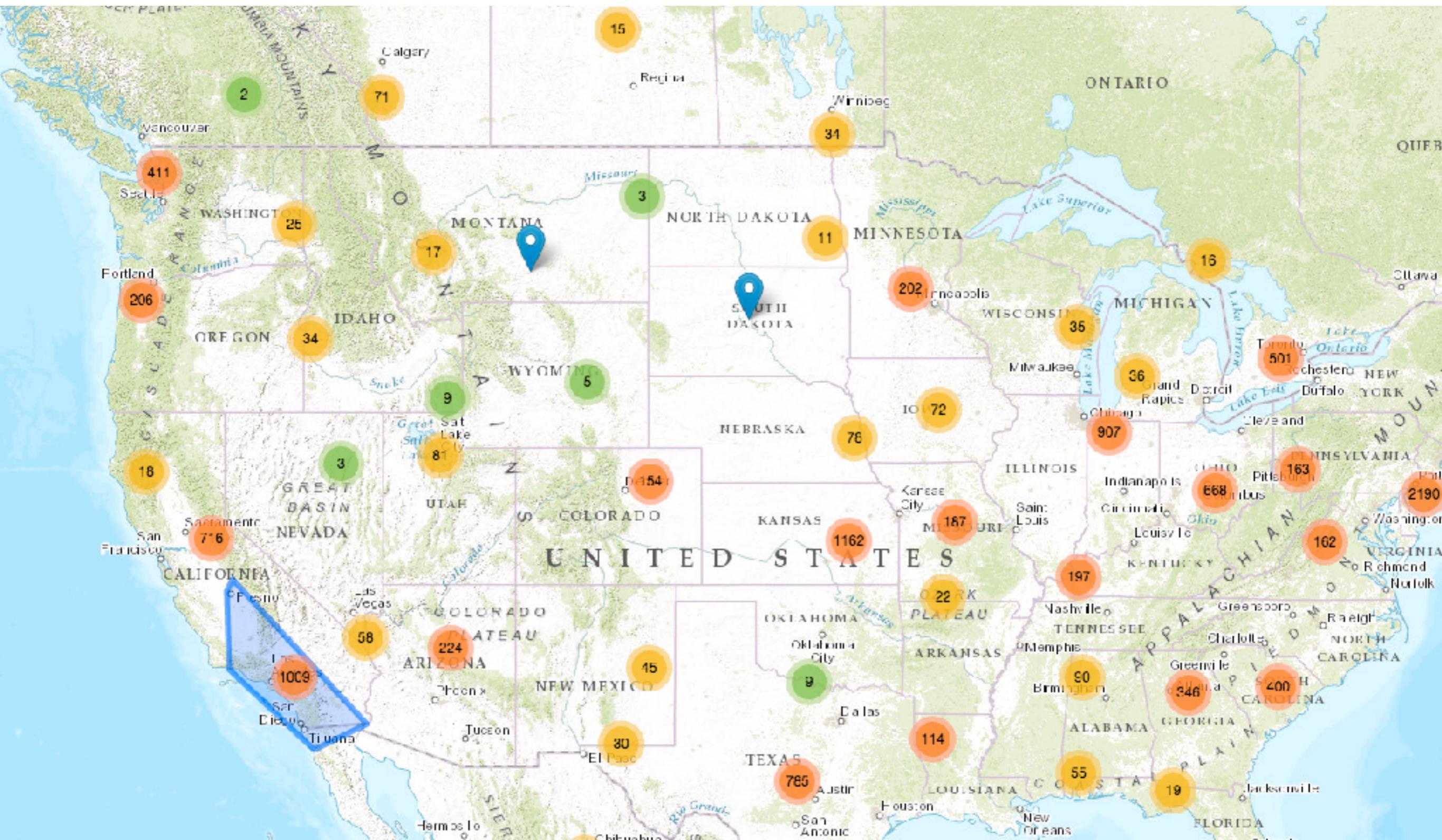




An Open-Source JavaScript Library for Mobile-Friendly Interactive Maps



Lightweight **38KB**

# Overview

simplicity  
performance  
usability

Web Technologies

Extended functionality:  
plugins



A professional woman with blonde hair, wearing a dark blazer over a pink shirt, sits at a desk. Her hands are clasped together near her chin, and she is looking directly at the camera with a slight smile. A laptop is visible on the desk in front of her.

# Hello World

**Prepare your map**

**Setting up the map**

# Prepare your map

## Preparing your page

Before writing any code for the map, you need to do the following preparation steps on your page:

- Include Leaflet CSS file in the head section of your document:

```
<link rel="stylesheet" href="https://unpkg.com/leaflet@1.3.1/dist/leaflet.css"
      integrity="sha512-Rksn5RenBEKSKFjgIJa41vrjkw4EVPlJ3+0ii65vTjIdo9btlAacEuK0iQ50Fh7c0I1bkDwLqdL
      crossorigin="" />
```

- Include Leaflet JavaScript file **after** Leaflet's CSS:

```
<!-- Make sure you put this AFTER Leaflet's CSS -->
<script src="https://unpkg.com/leaflet@1.3.1/dist/leaflet.js"
      integrity="sha512-/Nsx9X4Hebav0BvEBuyp3I7od5tA0UzAxs+j83KgC8PU0kgB4XiK4Lfe4y4cgBtaRJQEIFCW+oC
      crossorigin=""></script>
```

- Put a **div** element with a certain **id** where you want your map to be:

```
<div id="mapid"></div>
```

- Make sure the map container has a defined height, for example by setting it in CSS:

```
#mapid { height: 180px; }
```

# Setting up your map

```
var map = L.map('map').setView([39.984, -0.044], 13);

var CartoDB_DarkMatter = L.tileLayer('https://cartodb-basemaps-
{s}.global.ssl.fastly.net/dark_all/{z}/{x}/{y}.png', {
    attribution: '&copy; <a href="http://www.openstreetmap.org/
copyright">OpenStreetMap</a> &copy; <a href="http://cartodb.com/
attributions">CartoDB</a>',
    subdomains: 'abcd',
    maxZoom: 19
}).addTo(map);
```

# More Basics

## Markers, circles and polygons

```
var marker = L.marker([39.994038, -0.073870]).addTo(map);
```

## Popups

```
marker.bindPopup("<b>UJI</b><br>This is Espaitec 2.")
```

## Events

```
function onMapClick(e) {
    alert("You clicked the map at " + e.latlng);
}

map.on('click', onMapClick);
```

# Advanced Features

Tile Providers

Mobile

Plugins

Clustering

Realtime



# Tile Providers

## Leaflet-providers preview

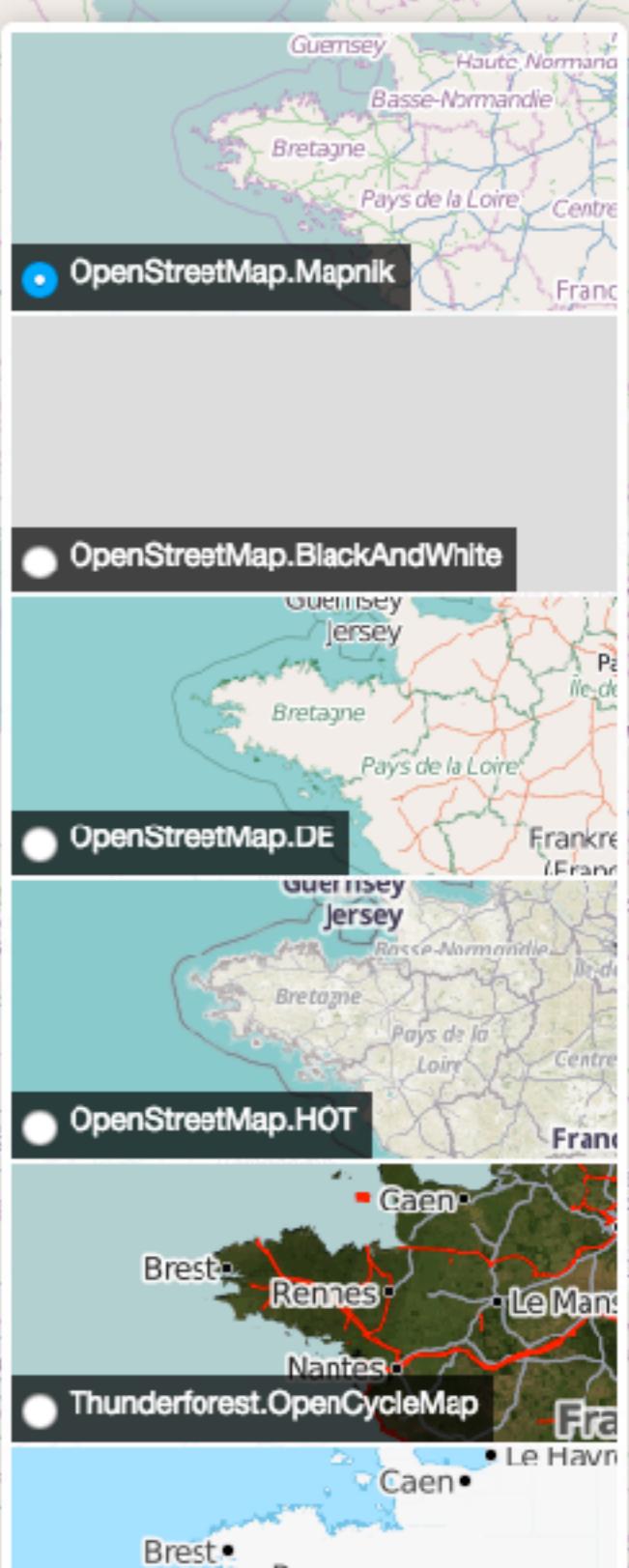
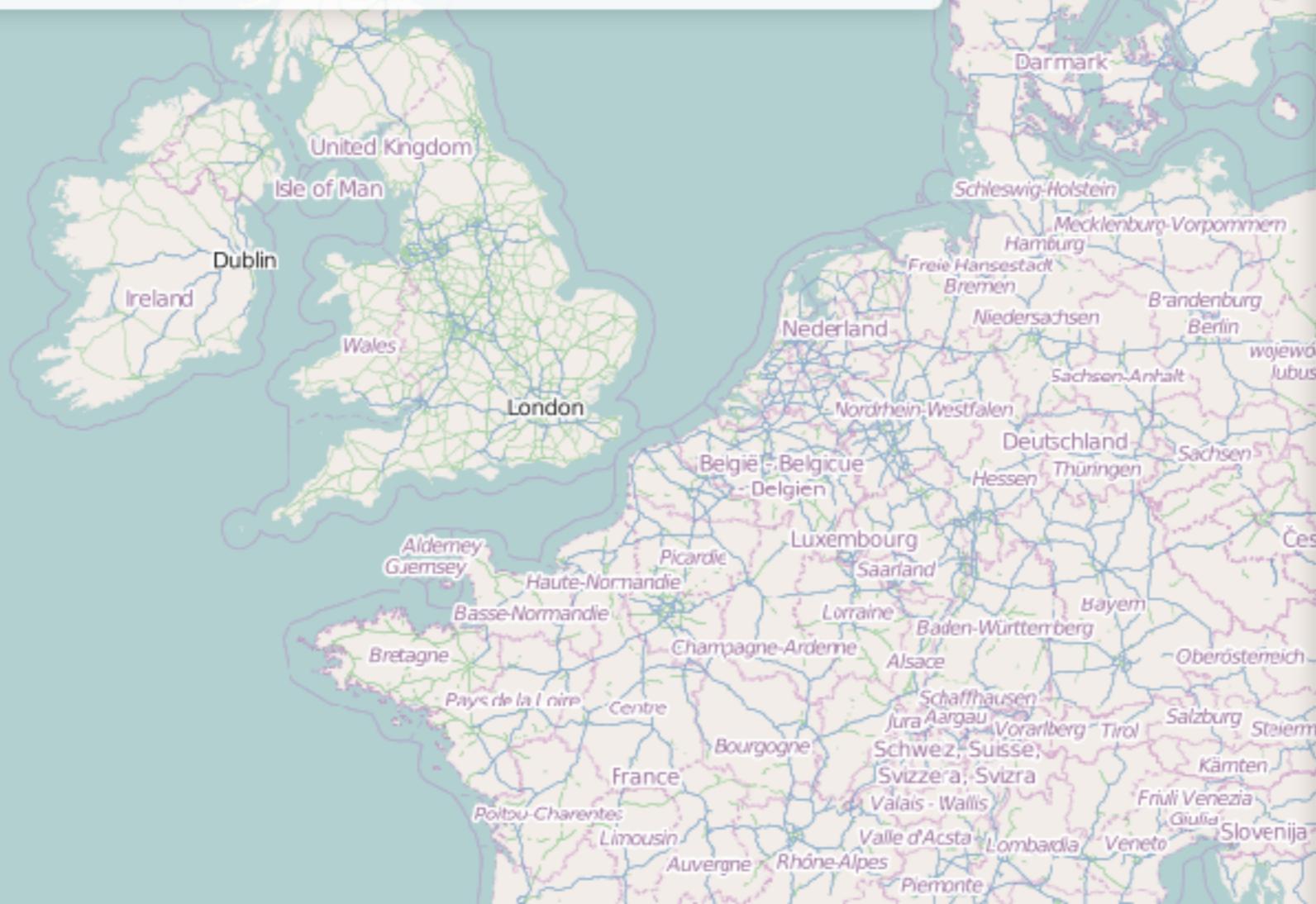
This page shows mini maps for all the layers available in [Leaflet-providers](#).

### Provider names for leaflet-providers.js

OpenStreetMap.Mapnik

### Plain JavaScript:

```
var OpenStreetMap_Mapnik = L.tileLayer('http://{s}.tile.openstreetmap.org/{z}/{x}/{y}.png', {  
    attribution: '&copy; <a href="http://www.openstreetmap.org/copyright">OpenStreetMap</a>'  
});
```



# Mobile

## Remove padding and margin

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

## Meta viewport

```
<meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, user-scalable=no" />
```

## Geolocate

```
map.locate({setView: true, maxZoom: 16});
```

```
function onLocationFound(e) {  
    var radius = e.accuracy / 2;  
  
    L.marker(e.latlng).addTo(map)  
        .bindPopup("You are within " + radius + " meters from this point").openPopup();  
  
    L.circle(e.latlng, radius).addTo(map);  
}  
  
map.on('locationfound', onLocationFound);
```

# Plugins: clustering

## Download distribution

```
<link rel="stylesheet" href="http://pixel.iji.es/teaching/leaflet/markercluster/dist/MarkerCluster.css" />
<link rel="stylesheet" href="http://pixel.iji.es/teaching/leaflet/markercluster/dist/MarkerCluster.Default.css" />
<script src="http://pixel.iji.es/teaching/leaflet/markercluster/dist/leaflet.markercluster-src.js"></script>
```

## Data!

## MarkerCluster

```
var markers = new L.MarkerClusterGroup();
markers.addLayer(new L.Marker(getRandomLatLng(map)));
... Add more layers ...
map.addLayer(markers);
```

# Plugins: PruneCluster

# Plugins: Realtime

Your  
turn!

