

The following are questions I asked ChatGPT for lab 1 and it's responses.

How would I use leaflet.js?

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To use Leaflet.js to create interactive maps, you would typically follow these steps:

Include Leaflet.js: First, include the Leaflet library in your HTML file. You can either download the Leaflet library and include it locally or use a content delivery network (CDN) to include it from a remote server. Here's an example of including Leaflet.js from a CDN:

html

Copy code

```
html

<link rel "stylesheet" href "https://unpkg.com/leaflet/dist/leaflet.css"
      src "https://unpkg.com/leaflet/dist/leaflet.js"

<div id "map" style "width: 600px; height: 400px;"
```

Create a Map: Write JavaScript code to create a map instance and specify its properties such as the initial center coordinates, zoom level, and any other options you want to configure. Here's a basic example:

javascript

Copy code

```
var map = L.map('map').setView([51.505, 0.09], 13);

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

Add Layers and Markers: You can add various layers (such as tile layers or geoJSON layers) and markers to your map to display additional information. Here's an example of adding a marker to the map:

javascript

Copy code

```
var marker = L.marker([51.5, 0.09]).addTo(  
    map;  
    map.bindPopup("Hello world!  
I am a popup.").openPopup(  
    map;
```

Interactivity: Leaflet provides options for adding interactivity to your map, such as popups, tooltips, event handling, and custom controls.

This is just a basic overview of how to use Leaflet.js. The library offers many more features and options for customization, so you may want to refer to the official Leaflet documentation for more detailed information and examples: [Leaflet Documentation](#)

Show me how to do make a daterange picker with bootstrap please

ChatGPT

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Sure, here's an example of how you can integrate Bootstrap DateRangePicker with Leaflet to create a date range picker search bar:

html

Copy code

```
<html>  
  
  <head>  
    <link  
      rel "stylesheet" href "https://unpkg.com/leaflet/dist/leaflet.css"  
      rel "stylesheet"  
      href "https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/css/bootstrap.min.cs  
s" integrity "sha384-XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX"  
      crossorigin "anonymous"  
      rel "stylesheet"  
      href "https://cdn.jsdelivr.net/npm/daterangepicker/daterangepicker.css"  
    </link>  
  
    <div id "searchBar"  
      position "relative"  
      top "10px"  
      left "10px"  
      z-index "1000"  
    </div>  
  
    <script src "https://unpkg.com/leaflet/dist/leaflet.js">  
    </script>  
  </head>  
</html>
```

```

        src "https://code.jquery.com/jquery-3.6.0.min.js"
        src "https://cdn.jsdelivr.net/momentjs/latest/moment.min.js"

src "https://cdn.jsdelivr.net/npm/daterangepicker/daterangepicker.min.js"

src "https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/js/bootstrap.bundle.m
in.js" integrity "sha384-XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX"
crossorigin "anonymous"

```

```

        id "map" style "width: calc(100% - 20px); height: calc(100% - 20px); position:
absolute; top: 20px; left: 10px;"
        id "searchBar" class "input-group"
            type "text" id "dateRangePicker" class "form-control"
            class "btn btn-primary" id "searchButton"

```

```

var          map 'map'  setView  51.505  0.09  13
    tileLayer 'https://{s}.tile.openstreetmap.org/{z}/{x}/{y}.png'
attribution  '&copy; OpenStreetMap contributors'
    addTo

```

```

    '#dateRangePicker'  daterangepicker
opens  'left'
locale
format  'YYYY-MM-DD'

```

```

function performSearch
var
    '#dateRangePicker'  data 'daterangepicker'          format 'YYYY-MM-DD'
var
    '#dateRangePicker'  data 'daterangepicker'          format 'YYYY-MM-DD'

```

```

var
    name  'Building Permit 1'  date  '2024-02-15'  location  51.5  0.1
    name  'Building Permit 2'  date  '2024-02-20'  location  51.51  0.09
    name  'Building Permit 3'  date  '2024-02-25'  location  51.49  0.11

```

```

        eachLayer function
if          instanceof
        removeLayer

```

```
var                                     filter function
return
```

```
                                forEach function
marker                          addTo
bindPopup ' <b>'                ' </b><br>Date: '
openPopup
```

```
'#searchButton' on 'click' function
performSearch
```

```
performSearch
```

In this example:

- We've included Bootstrap CSS and JavaScript files along with its DateRangePicker plugin.
- The date range picker search bar is positioned at the top left corner using Bootstrap's grid system.
- We've added a "Search" button that triggers the search when clicked.
- The `performSearch()` function remains the same as in the previous examples.

This code will provide you with a date range picker search bar integrated with Bootstrap's DateRangePicker plugin, allowing users to select a date range and search for building permits within that range.