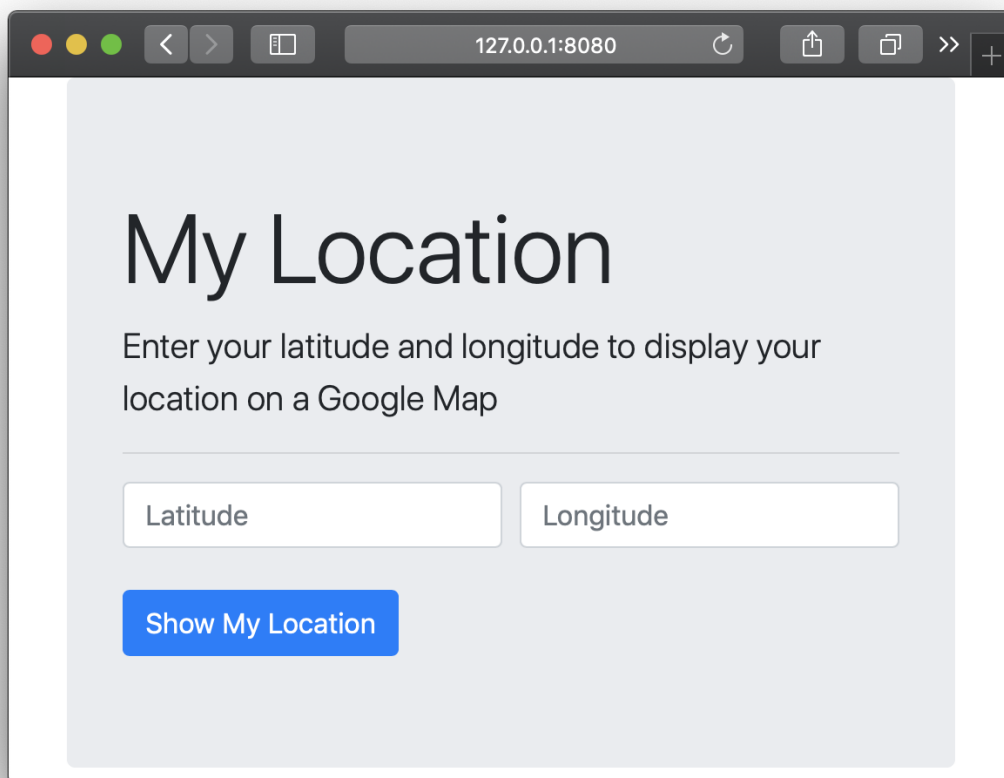


You are to create a Vue.js application that will allow a User to enter a latitude and longitude, and view the corresponding location on a **static** Google Map. Note that the map is static, meaning it should not be interactive.

To accomplish this, you are to create a Single Page Component named **my-map**. This component will be dynamically updated with the form data on your page.

Here is an example webpage:



The screenshot shows a web browser window with the address bar displaying '127.0.0.1:8080'. The webpage has a light blue background and a white border. The title 'My Location' is prominently displayed in a large, dark font. Below the title, there is a subtitle: 'Enter your latitude and longitude to display your location on a Google Map'. A horizontal line separates the text from the input fields. There are two white input fields with rounded corners, labeled 'Latitude' and 'Longitude'. Below these fields is a blue button with white text that says 'Show My Location'.

Once the User enters their latitude and longitude and clicks the "Show My Location" button, you should display their location on a static Google Map. The map should contain a marker at the User's specified location.

127.0.0.1:8080

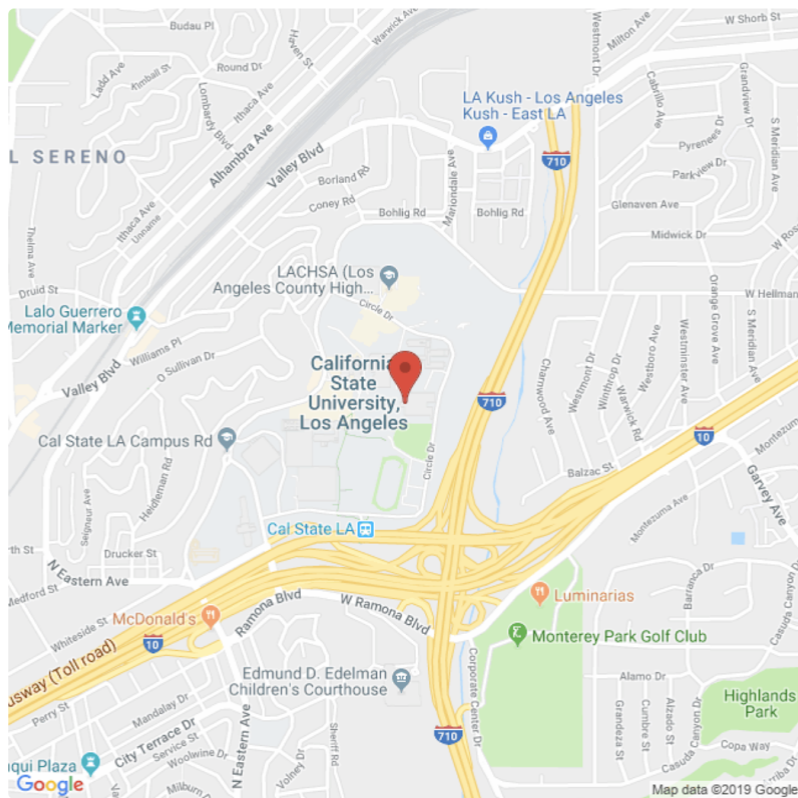
# My Location

Enter your latitude and longitude to display your location on a Google Map

34.06644527949616

-118.16667079925537

Show My Location



Here is a link to Google's Static Maps API:

<https://developers.google.com/maps/documentation/maps-static/dev-guide>

The expected use of your component is outlined below. You will need to determine how to dynamically update the latitude and longitude when the user clicks the "Show My Location" button.

---

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css"
integrity="sha384-ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/IJTQUOhcWr7x9JvoRxT2MZw1T" crossorigin="anonymous">
  <title>CS4220 Final</title>
</head>
<body>
  <div class="container">
    <div class="jumbotron">
      <h4 class="display-4">
        My Location
      </h4>
      <p class="lead">Enter your latitude and longitude to display your location on a Google Map</p>
      <hr>
      <form>
        <div class="form-row">
          <div class="col">
            <input type="text" name="lat" id="lat" placeholder="Latitude" class="form-control">
          </div>
          <div class="col">
            <input type="text" name="lon" id="lon" placeholder="Longitude" class="form-control">
          </div>
        </div>
        <div class="form-row">
          <div class="col">
            <input type="submit" value="Show My Location" class="btn btn-primary mt-4" >
          </div>
        </div>
      </form>
    </div>

    <my-map lat="34.066445" lon="-118.166670"></my-map>

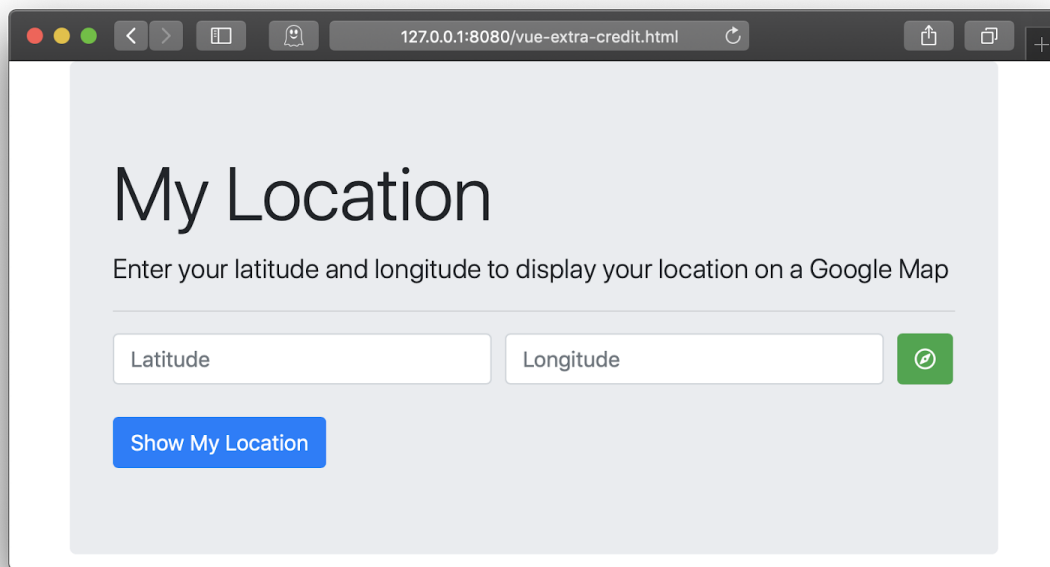
  </div>
</body>
</html>
```

---

## Extra Credit

For extra credit, you can have auto-detect the User's latitude and longitude. To do this, add a button to your form that, when clicked, retrieves the User's geolocation.


Here is an example of what your UI may look like:



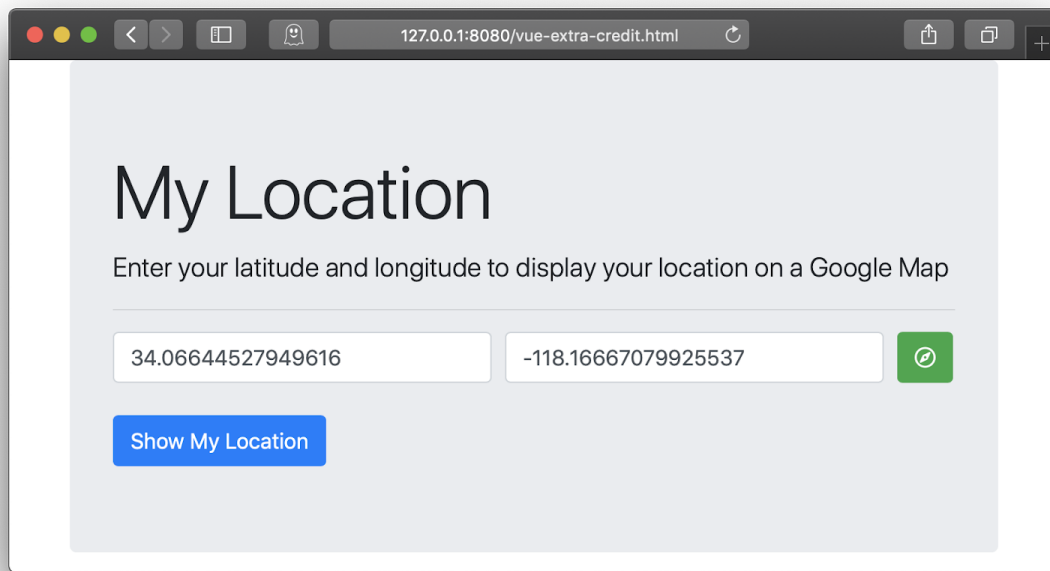
The screenshot shows a web browser window with the address bar displaying `127.0.0.1:8080/vue-extra-credit.html`. The page content is as follows:

# My Location

Enter your latitude and longitude to display your location on a Google Map



Upon clicking the green icon, the latitude and longitude should be automatically populated on the form like so:



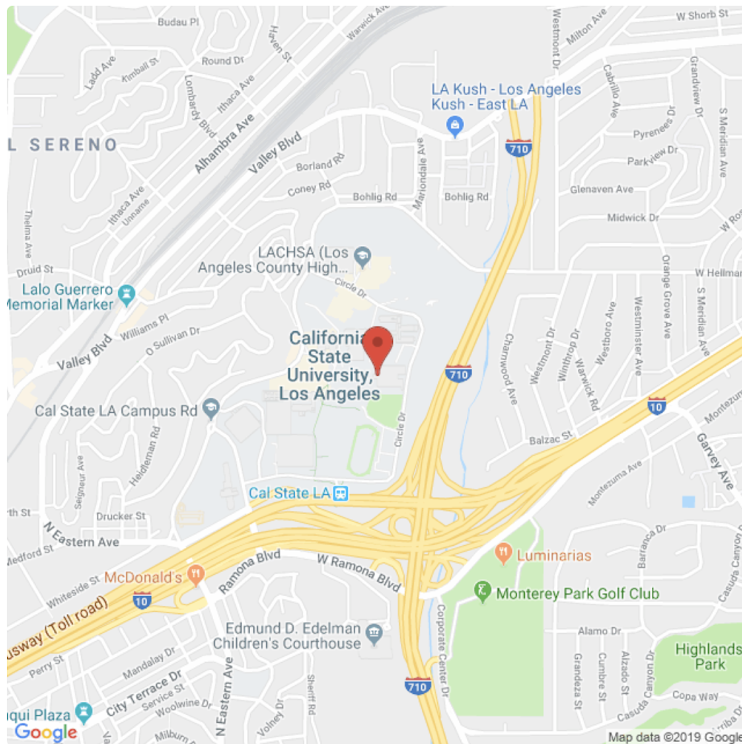
Now, as before, when the User clicks the "Show My Location" button, it will display the location of the User's latitude and longitude on a static Google Map.

# My Location

Enter your latitude and longitude to display your location on a Google Map



Show My Location



# Grading

- 50pts - Single-Page Vue.js Component - my-app
- 30pts - Static Google Map
- 20pts - Marker at the specified location on the map
- 1-2 minute video showing the HTML, Styles, and Javascript behind your component.

## Extra Credit

- "Locate Me" functionality that detects the Users latitude and longitude
  - When doing the extra credit, you may add an additional 30 seconds to your video to outline your code.

## How to submit your work:

1. Source Code to CSNS
2. Video presentation to CSNS