

Project Title	Interactive Map
Technologies	HTML, CSS, JavaScript
Project Difficulties level	Hard

Project Description: In this project, you will create an interactive map web application using HTML, CSS, and JavaScript. The goal is to develop a map that displays points of interest or locations and allows users to interact with it. This project will help you practice front-end web development skills and enhance your understanding of working with maps and markers.

Key Features:

- **Map Display:** You will implement a map on your web page using HTML. You can use a popular mapping library like Leaflet or Google Maps to achieve this.
- **Marker Placement:** Add markers (pins) to the map to represent points of interest or locations. These markers should be customizable in terms of icons and information displayed when clicked.
- **Interactive Elements:** When users click on a marker, it should display additional information about the location, such as its name, description, or images. You can use HTML elements or pop-up windows for this purpose.
- **Search Functionality:** Implement a search feature that allows users to search for specific locations on the map. Users should be able to enter a location's name or category, and the map should center on the matching location and display the associated marker.
- **Custom Styling:** Use CSS to customize the appearance of your map, markers, and pop-up windows. Ensure that your map has an attractive and user-friendly design.
- **Responsiveness:** Make sure your map is responsive, meaning it should adapt to different screen sizes and work well on both desktop and mobile devices.

Requirements:

- Your project should consist of at least one HTML file, one CSS file, and one JavaScript file.
- Use a mapping library or API of your choice (e.g., Leaflet, Google Maps) to display the map. You may need to sign up for an API key if required.

- Create a minimum of five markers on the map, each representing a unique location or point of interest.
- Implement an interactive feature where users can click on a marker to view additional information about the location.
- Include a search bar or form that enables users to search for locations by name or category.
- Style your map and user interface with CSS, ensuring it looks visually appealing.

Optional Enhancements:

- Add animation effects when a marker is clicked or when pop-up information is displayed.
- Incorporate geolocation functionality to allow users to find their current location on the map.
- Create a filter system that lets users filter locations by category (e.g., restaurants, parks, museums).

Submission:

- Compile your HTML, CSS, and JavaScript files into a folder.
- Create a PDF document with a brief description of your project, instructions on how to use it, and screenshots of your web application.
- Submit both the project folder and the PDF document.

This project will not only enhance your front-end development skills but also give you practical experience in creating interactive and visually appealing web maps. Have fun building your interactive map!