**Interactive Map with Custom Markers**

# Introduction

This web application allows users to interact with a map where they can click anywhere to add a custom marker.   
Each marker can hold a note, and users can remove markers by right-clicking on them. The application also features a button to clear all markers.

# Application Functionality

The application utilizes Leaflet.js to embed a dynamic map in the browser. It supports the following features:  
  
- Add markers to the map by clicking anywhere on it.  
- Right-click a marker to remove it from the map.  
- Each marker can hold a custom note, which is input by the user.  
- A reset button is available to clear all the markers on the map.

# Usage Instructions

1. Open the application in your web browser.  
2. Click anywhere on the map to add a new marker.  
3. Enter a note for the marker when prompted.  
4. Right-click on a marker to remove it.  
5. Click the "Clear All Markers" button to remove all markers from the map.

# Setup Process

To run the application locally:  
  
1. Clone the repository or download the code files.  
2. Ensure you have an internet connection as Leaflet.js and other resources are hosted externally.  
3. Open the 'index.html' file in a web browser to view the application.  
  
Optional:  
For deploying on platforms like GitHub Pages, Netlify, or Heroku:  
  
1. Push the code to a GitHub repository.  
2. Deploy the repository using your chosen platform's deployment features.

# Codebase

## index.html

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <meta name="viewport" content="width=device-width, initial-scale=1.0">  
 <title>Interactive Map with Custom Markers</title>  
 <link rel="stylesheet" href="styles.css">  
 <link rel="stylesheet" href="https://unpkg.com/leaflet/dist/leaflet.css" />  
</head>  
<body>  
  
 <div class="header">  
 <h1>📍 Custom Map with Markers</h1>  
 <p>Click anywhere to add a marker. Right-click to remove it.</p>  
 </div>  
  
 <div id="map"></div>  
  
 <button id="resetMarkers" class="reset-btn">🗑️ Clear All Markers</button>  
  
 <script src="https://unpkg.com/leaflet/dist/leaflet.js"></script>  
 <script src="script.js"></script>  
  
</body>  
</html>

## styles.css

/\* General Styling \*/  
body {  
 font-family: 'Poppins', sans-serif;  
 text-align: center;  
 margin: 0;  
 padding: 0;  
 background: linear-gradient(to right, #00c6ff, #0072ff);  
 color: white;  
}  
  
/\* Header Section \*/  
.header {  
 padding: 20px;  
 background: rgba(0, 0, 0, 0.2);  
 box-shadow: 0 4px 10px rgba(0, 0, 0, 0.1);  
}  
  
h1 {  
 margin: 0;  
 font-size: 26px;  
}  
  
p {  
 font-size: 16px;  
 opacity: 0.9;  
}  
  
/\* Map Styling \*/  
#map {  
 width: 90%;  
 height: 500px;  
 margin: 20px auto;  
 border-radius: 15px;  
 box-shadow: 0px 10px 30px rgba(0, 0, 0, 0.3);  
 border: 3px solid white;  
 bottom: 18px;  
}  
  
/\* Floating Reset Button \*/  
.reset-btn {  
 position: fixed;  
 bottom: 15px;  
 right: 40%;  
 background: #ff4d4d;  
 color: white;  
 border: none;  
 padding: 15px 20px;  
 font-size: 16px;  
 border-radius: 50px;  
 box-shadow: 0px 5px 15px rgba(255, 77, 77, 0.5);  
 cursor: pointer;  
 transition: 0.3s ease;  
}  
  
.reset-btn:hover {  
 background: #cc0000;  
 transform: scale(1.1);  
}

## script.js

var map = L.map('map').setView([40.7128, -74.0060], 5);   
  
L.tileLayer('https://{s}.tile.openstreetmap.org/{z}/{x}/{y}.png', {  
 attribution: '© OpenStreetMap contributors'  
}).addTo(map);  
  
var markers = [];  
  
function addMarker(lat, lng) {  
 let note = prompt("Enter a note for this marker:");  
 if (note) {  
 let marker = L.marker([lat, lng]).addTo(map)  
 .bindPopup(note)  
 .openPopup();  
  
 markers.push(marker);  
  
 marker.on("contextmenu", function () {  
 map.removeLayer(marker);  
 markers = markers.filter(m => m !== marker);  
 });  
 }  
}  
  
map.on('click', function (e) {  
 addMarker(e.latlng.lat, e.latlng.lng);  
});  
  
document.getElementById('resetMarkers').addEventListener('click', function () {  
 markers.forEach(marker => map.removeLayer(marker));  
 markers = [];  
});