

Web GIS Using Leaflet Js Certificate Course

Course Overview

Leaflet Js is an open-source JavaScript library used for creating interactive web maps. It provides a lightweight and versatile solution for developers to incorporate maps into their web applications. Here's an overview of Leaflet.js and its features for web map application development:

some key features and capabilities of LeafLetJS:

- **Map Initialization:** Leaflet.js allows you to initialize a map container on a web page using a specific latitude, longitude, and zoom level. You can customize the map's appearance, such as the tile layers, attribution, and initial center and zoom.
- **Tile Layers:** Leaflet.js supports various tile providers, including OpenStreetMap, Mapbox, and others. You can choose different map styles, such as street maps, satellite imagery, or custom map tiles, to display on your web map.
- **Markers and Popups:** You can add interactive markers to your map to represent points of interest, locations, or any other relevant information. Leaflet.js provides the ability to customize marker icons, labels, and tooltips. You can also associate popups with markers to display additional details when clicked.
- **Polygons, Polylines, and Circles:** Leaflet.js allows you to draw and style polygons, polylines, and circles on the map. This is useful for displaying boundaries, routes, or any other spatial data.
- **Layers and Layer Controls:** You can add multiple layers to your map, including tile layers, markers, polygons, or custom layers. Leaflet.js provides built-in controls to toggle the visibility of these layers.
- **Plugins and Extensions:** Leaflet.js has a vibrant ecosystem of plugins and extensions that extend its functionality. These plugins cover various needs, including clustering markers, heatmaps, geocoding, routing, and more.
- **Customization and Styling:** Leaflet.js offers a flexible API for customization. You can style map elements, controls, and tooltips to match your application's design.

Pre-Requisites

- **HTML/CSS:** A basic understanding of HTML (Hypertext Markup Language) and CSS (Cascading Style Sheets) is essential. Leaflet.js requires HTML elements to embed maps into web pages, and CSS is used for styling the map and its components.
- **JavaScript:** Proficiency in JavaScript is crucial since Leaflet.js is a JavaScript library. Familiarize yourself with JavaScript fundamentals, including variables, functions, loops, conditionals, and object-oriented programming concepts.
- **Web Development:** Having a good understanding of web development concepts and technologies is beneficial. This includes knowledge of DOM manipulation, event handling and asynchronous programming.
- **Geospatial Concepts:** Familiarity with geospatial concepts such as latitude, longitude, coordinate systems, and map projections will help you understand and work with geographic data effectively.
- **Map Fundamentals:** Gaining knowledge of fundamental cartographic principles and map elements like scale, legends, and map symbols will help you create visually appealing and informative web maps

well these prerequisites are beneficial, Remember that learning is an iterative process, and as you progress with Leaflet.js, you'll gain a deeper understanding of web mapping and related technologies. Engaging in practical exercises, exploring example projects, and participating in the supportive Leaflet.js community can further enhance your learning experience.

Benefits of Learning Web GIS -LeafletJS

Learning Leaflet Js offers several benefits for web developers interested in creating interactive web map applications

- **Lightweight and Fast:** Leaflet.js is a lightweight library, which means it has a smaller file size compared to other mapping libraries. This results in faster loading times for your web maps, improving the overall user experience.
- **Easy to Use:** Leaflet.js has a simple and intuitive API, making it easy to learn and use for developers of different skill levels. Its documentation is extensive, providing clear explanations and examples to guide you through the process of building web maps.
- **Flexibility and Customization:** Leaflet.js provides a high level of flexibility and customization options. You can easily customize map styles, markers, tooltips, and other map elements to match your application's design and branding.
- **Cross-Browser Compatibility:** Leaflet.js is compatible with most modern web browsers, ensuring that your web maps work seamlessly across different platforms and devices.
- **Mobile-Friendly:** Leaflet.js is designed to be mobile-friendly, providing a smooth and responsive experience on mobile devices. It supports touch events, allowing users to interact with the map using gestures.
- **Active Community and Plugin Ecosystem:** Leaflet.js has a large and active community of developers. This means there are plenty of resources, tutorials, and forums available for support and collaboration. Additionally, Leaflet.js has a wide range of plugins and extensions that can extend its functionality to meet specific requirements, such as clustering markers, integrating with external services, or visualizing data.
- **Integration with Other Libraries:** Leaflet.js can be easily integrated with other JavaScript libraries and frameworks, such as jQuery or React. This allows you to leverage the power of these tools while building your web map application.
- **Open Source and Free:** Leaflet.js is an open-source library released under the permissive BSD license. This means you can use it for free, modify it according to your needs, and contribute to the community.

By learning Leaflet.js, you gain the skills and tools necessary to create powerful, interactive, and visually appealing web map applications, opening up possibilities for engaging and informative user experiences.

Related Job Roles

- Web Developer
- GIS Developer
- Front-End Developer
- Full-Stack Developer
- Freelancer or Consultant

These are just a few examples of job roles that are related to Leaflet.js and web mapping. The demand for professionals with skills in web mapping and interactive map development continues to grow as organizations recognize the value of visualizing spatial data and creating engaging user experiences

Available Training Options

- Online/Offline
- Weekdays Batches
- Weekend Batches
- Course - Duration: 60 Days
- Mode of Training - Online - Live Online Classes
- Daily 1Hr (Need to have a laptop or Computer with Good Internet)

Dedicated Trainer, Practical sessions. One-on-One Live Training Session with Hands-on Practical Training. For fees details and discounts whatsapp on Phno: +91 8050123030

Leaflet Js Training Syllabus

Topics we cover:

1. HTML 5
2. CSS
3. JavaScript
4. OpenLayers
5. Geoserver

Introduction to HTML

HTML is the standard markup language for Web pages, which helps you to create your own website.

- Understanding about Browser
- Domain
- Host
- HTML Structure

TAG'S in HTML

- heading
- font
- formatting
- paragraph

List in HTML

- ol and it's type
- ul and it's type

Table and it's properties

- table
- tr
- th
- td

Input Elements

- checkbox
- color
- date
- email
- file
- hidden
- image
- month
- number
- password
- radio
- reset
- search
- submit
- text

CSS - Introduction

- CSS - Syntax
- CSS - Colors
- CSS - Backgrounds
- CSS - Fonts
- CSS - Text
- CSS - Images
- CSS - Links
- CSS - Tables
- CSS - Borders
- CSS - Margins
- CSS - Lists
- CSS - Padding
- CSS - Positioning
- CSS - Layers
- CSS - Pseudo Classes
- CSS - Pseudo Elements
- CSS - Text Effects
- CSS - Rounded Corner
- CSS - Border Images
- CSS - Multi Background
- CSS - Color
- CSS - Gradients
- CSS - Shadow
- CSS - Text
- CSS - Box Sizing

Introduction to JavaScript

- What is Javascript
- JavaScript history
- Relation between JavaScript and ECMAScript
- Versions of JavaScript

JavaScript Core

- Syntax, Variables, Values, Data Types
- Syntax review
- Keywords
- Variable declaration
- Variable scope
- Block scope.
- Data Types
- Primitive values
- Reference values
- Expressions and Operators
- Expressions (arithmetic, relational, logical, assignment and others),

Control structures

- Flow control and conditionals
- Loops and iteration

Functions

- Defining functions
- Calling functions
- Functions as values
- Arguments and parameters
- Function scope
- Closures
- Arrow functions

Arrays

- Creating and populating Arrays
- Array methods
- Working with Arrays

JavaScript BOM

- Window Object
- History Object
- Navigator Object
- Screen Object

JavaScript DOM

- getElementById
- getElementsByClassName
- getElementsByName
- getElementsByTagName
- innerHTML property
- innerText property

JavaScript OOPs

- JS Class
- JS Object
- JS Prototype
- JS constructor Method
- JS static Method
- JS Encapsulation
- JS Inheritance
- JS Polymorphism
- JS Abstraction

- Setting up GeoServer on Windows Environment
- Working with Vector Spatial Data
- About Workspaces
- Create Workspace
- About Stores
- Import Vector Data to Store
- Publish Vector Data to Geoserver
- Web Map Service (WMS)
- Serving Cascading WMS
- Web Feature Service (WFS)
- Differences WMS and WFS
- Layer Preview in GeoServer
- Connect and Work with QGIS

Layer Styling

- Styling Point Features
- Styling Line Features
- Styling Polygon Features
- GeoServer Basic Vector Styling
- Exporting SLD from QGIS

- Introduction to Leaflet JS
- Installation of Leaflet JS
- Creation of Web project with Leaflet JS environment
- Creation of basic Web Mapping Application
- Using layer switcher and measure in Leaflet JS
- Adding point, line and polygon with feature info popup
- Adding GeoJSON file to leaflet Js Application with attribute popup and attribute filtering
- Developing choropleth map
- Displaying numerical data with proportional symbol
- Routing functionality using Leaflet

For Registration/ Customization of Course / Course Fees

Call / What's app on:	+91 8050123030
Duration:	60 Days
Mode of Training:	Online
Weekdays:	Monday-Friday
Weekends:	Saturday and Sunday

Student Review

Arvind Raju

From : Oman

I've taken up the Advance Python & Arcpy classes from this institute with trainer Mrs. Roselynn is very knowledgeable and teaches the course topics with great detail. Everything was easy to understand and I was always helped with doubts until it was completely rectified. I would definitely recommend this Institute to anyone wanting to learn Python or any of the other courses they offer.

Ullash Ghosh

From : Kolkatta

Excellent teaching of Advance Python programming by experienced trainer. Flexible timings. It was an awesome experience.

Jahir Hussain

From : Qatar

Its Helped me to identify clear, be able next steps towards resolving my own workplace conflict and issues.

Ayeesha H

From : Bangalore

Great knowledge given by the mentor, Best training institution. Mam has explained all the topics very clearly.

Student Review

Vishnu vg From Kerala

My trainer, has a very good command over all the topics. She has explained each topic very clearly. We got a good understanding of all the concepts as she used to write programs daily for the real time scenarios. She make us practice during the classes. Overall I could say, you will be gaining good hands-on and understanding by end of the course

Eshawar Rao From Hubli Dharwad

Excellent Faculty, Excellent Knowledge about subject, madam gives Attention towards every individual student, Madam is having enough Patience in clearing all individual doubts, Overall Excellent training centre to learn and to grow.

Siddhi Kanekar From Pune

Best training institution. Mam has explained all the topics very clearly.
Thank you so much mam for being part of your institution.

Aghil Dev From Orisa

I happy to be a student of rose mam, as she was always present to help. My classes were good and helped me in understanding the concept. Thanks rose mam

Gaurav Chauhan

Position: GIS Analyst

Company:

Carifer Technologies Private Limited
Chennai

Salary: 13 LPA

Harisha

Position: GIS Analyst

Company:

GVS Technosoft Pvt. Ltd
Salary: 10 LPA

Ankit Hemnani

Position: Software Engineer .Net

Company:

Celtic System Pvt.Ltd
Salary: 7.5 LPA

Harish Vijayakumar

Position: Project-Assosiate

Company:

Cognizant Technology Solutions India
Private Limited
Salary: 12 LPA

KIRAN B

Qualification: MBA

Position: Business Head

Experience: 18 Years

His extensive experience in Operations Management, Client Acquisition, HR & Recruitment, and working with startups, he has demonstrated a track record of success across multiple industries and geographies. Starting from an executive level, he progressed to management positions, where he implemented process improvements to enhance efficiency, increase revenue, and drive growth. His vast network of colleges and training centers has significantly contributed to the development of robust recruitment and training pipelines. Moreover, he has successfully engaged with diverse clients.

NIKHIL S D

Qualification: BE Civil

Position: CAD Trainer (Civil)

Experience: 10 Years

Programing Skills: C,C++

2D And 3D Skills: AutoCad, 3D Max, Staad pro, Solid Works, Revit, Google Sketchup and ArcGIS CityEngine

Highly experienced CAD Civil Trainer with a demonstrated track record of success in delivering comprehensive training and instruction, specifically tailored for civil engineering applications. Committed to empowering learners with the necessary skills and knowledge to excel in their civil design and drafting projects.

RAMESH J

Qualification: BE Mech

Position: CAD CAM Trainer (Mech)

Experience: 6 Years

Programing Skills: C,C++,Python

2D And 3D Skills: AutoCad, Catia, Pro-e, Solid Edge, MatLab, Ansys, Solid Works,

Results-oriented CAD Mech Trainer with a decade of experience delivering exceptional training and instruction in 2D and 3D modeling software for mechanical engineering applications. Committed to equipping learners with the skills and knowledge needed to excel in mechanical design, simulation, and manufacturing.

ROSELEN S B

Qualification: MCA

Position: Programmer And Corporate Trainer

Experience: 12 Years

Programing Skills: Java, Python, AI, Machine Learning, Php, SQL, Full Stack

GIS Skill: Arcpy, ArcGIS JS API, ArcGIS Python API, PostGIS, Web AppBuilder, WebGIS

Highly experienced programming mentor with strong background in various programming languages. With over 12 years of training experience, has successfully mentored more than 3000 students, dedicated to helping aspiring programmers and professionals acquire the necessary skills and knowledge to excel in their programming careers.

KAVITA H

Qualification: MSc.IT

Position: Programing Trainer

Experience: 10 Years

Programing Skills: C, C++, Java, MSSQL, MYSQL Server, C# and good knowledge in Servlets, JSP, EJB Worked on J2EE 1.4 Application Server

Kavita is a seasoned programming mentor and trainer with a decade of experience specializing in Java Servlets and MySQL. She has a strong passion for teaching and guiding individuals in mastering these technologies. kavita's in-depth knowledge and practical experience in Java Servlets and MySQL make her an ideal mentor for aspiring programmers looking to excel in web development

ANKIT H

Qualification: MSc.Geoinformatics

Position: GIS Trainer

Experience: 6 Years

GIS Skills: Arc GIS, Arc GIS Pro, QGIS, IGIS, Fusion X, Auto CAD, MS Office, Google Earth, Bhuvan Portal, Geo-Server, Arcgis online, Microstation

Programing Skills: HTML, CSS, Java script, ArcGIS API for Java script, .Net, Python
Ankit is a highly skilled GIS trainer. Has experience in ArcGIS, QGIS, PostGIS, remote sensing, and network analysis. His expertise lies in the field of spatial data analysis and geospatial technologies. He is passionate about sharing his knowledge and helping individuals develop proficiency in GIS applications for various industries.

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