🔥 Full-Stack Roadmap Learning Plan

🚀 **Full-Stack Developer Roadmap (Step-by-Step Guide)**

This roadmap will guide you from **beginner to advanced level** in **full-stack web development** with recommended resources in **English and Hindi**.

📌 **Step 1: Learn the Basics of Web Development (1-2 Months)**

Start with the fundamentals of how websites work.

◆ **Learn HTML (Structure of Web Pages)**

- Understand basic HTML tags (<p>, <h1>, <img>, <a>, <table>, <form>)

- Semantic HTML (<header>, <section>, <article>, <footer>)

- Forms and validation

🔗 **Resources:**

- HTML Basics - W3Schools

- HTML Full Course (Hindi) - Apna College

◆ **Learn CSS (Styling Web Pages)**

- CSS Basics (Selectors, Colors, Backgrounds, Borders, Text Styling)

- Box Model, Flexbox, Grid

- CSS Animations and Transitions

- Responsive Design with Media Queries

🔗 **Resources:**

- CSS Basics - MDN

- CSS Flexbox & Grid - FreeCodeCamp

- CSS Full Course (Hindi) - CodeWithHarry

◆ **Learn JavaScript (Programming for the Web)**

- Variables, Data Types, Operators

- Functions, Loops, Conditional Statements

- DOM Manipulation (document.querySelector, addEventListener)

- ES6+ Features (Arrow Functions, Destructuring, Promises)

🔗 **Resources:**

- JavaScript Full Course - FreeCodeCamp

- JavaScript Full Course (Hindi) - CodeWithHarry

🎯 **Mini Project:** Create a **simple portfolio website**

📌 **Step 2: Learn a Frontend Framework (1-2 Months)**

Choose **React.js** for modern frontend development.

◆ **Learn React.js (Frontend Library)**

- Components, Props, State

- React Hooks (useState, useEffect, useContext)

- React Router (Navigation)

- API Integration with Fetch & Axios

- State Management (Context API, Redux - optional)

🔗 **Resources:**

- React Official Docs

- React.js Crash Course - Traversy Media

- React.js Full Course (Hindi) - CodeWithHarry

🎯 **Mini Project:** Create a **weather app** using an API

📌 **Step 3: Learn Backend Development (2-3 Months)**

Start with **Node.js** and **Express.js** to build backend applications.

◆ **Learn Node.js & Express.js (Backend Development)**

- Introduction to Node.js

- NPM (Node Package Manager)

- Modules & File System

- Express.js (Routes, Middleware, API Development)

🔗 **Resources:**

- Node.js Crash Course - Traversy Media

- Node.js & Express.js (Hindi) - CodeWithHarry

- **Learn Databases (MongoDB / MySQL)**

  - Introduction to Databases

  - CRUD Operations (Create, Read, Update, Delete)

  - Connecting Node.js with MongoDB/MySQL

  - Writing Queries & Data Validation

🔗 **Resources:**

  - MongoDB Official Docs

  - MongoDB Full Course - FreeCodeCamp

  - MySQL Crash Course - Mosh

🎯 **Mini Project:** Create a **User Authentication System (Login/Signup)**

📌 **Step 4: Full-Stack Development (1-2 Months)**

Combine **Frontend (React.js)** and **Backend (Node.js + Express.js + Database)**

- **Connecting Frontend & Backend**

  - API Requests from React to Node.js

  - Using **Axios** for HTTP Requests

  - Handling Authentication (JWT, OAuth)

  - Securing Routes and User Authentication

🔗 **Resources:**

  - MERN Stack Crash Course - FreeCodeCamp

  - Full-Stack Web App (Hindi) - Apna College

🎯 **Mini Project:** Create a **To-Do App with Authentication**

📌 **Step 5: Advanced Topics & Deployment (1-2 Months)**

- **Learn Git & GitHub**

  - Version Control Basics

  - Pushing & Pulling Code

- Creating Branches & Merging

- [Git & GitHub Full Course - FreeCodeCamp](#)

- [Git & GitHub Full Course (Hindi) - CodeWithHarry](#)

◆ **Learn Deployment & Hosting**

- Deploy Frontend on **Netlify/Vercel**

- Deploy Backend on **Render/Heroku**

- Hosting Database on **MongoDB Atlas**

🔗 **Resources:**

- [Deploy React App on Netlify - FreeCodeCamp](#)

- [Deploy Node.js App on Heroku - Traversy Media](#)

🎯 **Final Project: Build & Deploy a Full-Stack E-Commerce Website**

📌 **Bonus: Learn Additional Technologies**

- TypeScript

- Next.js (for better React apps)

- GraphQL (for API Development)

- Cloud (AWS, Firebase)

🎯 **Summary of Learning Plan**

Month	Topics Covered
Month 1	HTML, CSS, JavaScript
Month 2	React.js
Month 3	Node.js & Express.js
Month 4	MongoDB/MySQL & Backend APIs
Month 5	Full-Stack Projects & Authentication

Month	Topics Covered
Month 6	GitHub, Deployment, and Final Project

🎯 **Final Checklist for Full-Stack Mastery**

✅ Can build a frontend app using **React.js**
✅ Can create REST APIs using **Node.js & Express.js**
✅ Can work with **databases (MongoDB/MySQL)**
✅ Can connect frontend & backend
✅ Can deploy full-stack projects

🔗 **Connect with Me**

GitHub: https://github.com/iankushsingh

🔥 **Start building projects & contributing to open source!** 🚀