* **Full Stack Software Engineer Roadmap (2025-2026)**

**Overview**

Your goal is to become the **best Full Stack Software Engineer** by systematically studying and mastering all necessary topics, from basics to advanced. This roadmap is designed to ensure every topic, chapter, and concept is covered, leaving no gaps. It is divided into multiple sections for clarity and ease of progress tracking.

**Total Duration: January 2025 - December 2026**

* **Daily Study Time**: 8 hours (with flexibility for office and personal tasks)
* **Key Areas**: Study, Practice, Projects, Exams, Innovation, and Communication Skills

**Roadmap Sections**

**1. Frontend Development (Jan 2025 - May 2025)**

**HTML (January 2025)**

* Structure of HTML Documents
  + Tags: <html>, <head>, <body>
  + Basic Elements: Headings, Paragraphs, Links, Images
* HTML Attributes: id, class, src, href
* HTML5 Features: <article>, <section>, <header>, <footer>

**Practice Tasks**:

1. Create a personal profile webpage.
2. Build a contact form with basic validation.

**CSS (February 2025)**

* Basics: Selectors, Properties, Box Model
* Layouts: Flexbox, Grid
* Advanced Concepts: Transitions, Animations, Media Queries

**Practice Tasks**:

1. Style your HTML profile webpage.
2. Create a responsive grid-based image gallery.

**JavaScript Basics (March 2025)**

* Variables, Data Types, Operators
* Loops and Conditions
* Functions, Arrays, and Objects

**Practice Tasks**:

1. Build a simple calculator.
2. Create a to-do list app.

**JavaScript Advanced (April 2025)**

* DOM Manipulation
* Event Handling
* ES6 Features: Promises, Async/Await

**Practice Tasks**:

1. Develop a dynamic weather app.
2. Implement a countdown timer.

**React.js (May 2025)**

* Components, Props, State
* Hooks: useState, useEffect
* Routing and Context API

**Practice Tasks**:

1. Build a multi-page blog app.
2. Create a shopping cart using Context API.

**2. Backend Development (June 2025 - October 2025)**

**Node.js and Express.js (June - July 2025)**

* Setting up Node.js
* Creating APIs with Express
* Middleware and Routing

**Practice Tasks**:

1. Build a RESTful API for a task manager.
2. Implement user authentication.

**Databases (August - September 2025)**

* SQL: CRUD Operations, Joins, Indexing
* NoSQL: MongoDB Basics, Aggregation

**Practice Tasks**:

1. Design a relational database for a library system.
2. Create a blog backend with MongoDB.

**Integration (October 2025)**

* Connecting Frontend with Backend
* API Testing (Postman)
* Authentication & Authorization

**Practice Tasks**:

1. Build a full-stack app: e.g., Expense Tracker.
2. Implement OAuth2 login.

**3. Advanced Topics (November 2025 - February 2026)**

**DevOps & Deployment (November - December 2025)**

* Docker Basics
* CI/CD Pipelines
* Deploying on AWS/Heroku

**Practice Tasks**:

1. Containerize a Node.js app with Docker.
2. Automate deployment using GitHub Actions.

**Algorithms & Data Structures (January - February 2026)**

* Sorting & Searching Algorithms
* Data Structures: Arrays, Trees, Graphs
* Problem Solving on Platforms (LeetCode, HackerRank)

**Practice Tasks**:

1. Solve 100 problems on arrays and strings.
2. Implement a binary search tree.

**4. Projects and Industrial Experience (March 2026 - August 2026)**

**Capstone Projects**

* E-commerce Platform
* Social Media App

**Industrial Training**

* Internship at a reputed company
* Contribute to open-source projects

**5. Soft Skills & Placement Preparation (September 2026 - December 2026)**

**Soft Skills**

* Effective Communication
* Resume Building
* Mock Interviews

**Placement Preparation**

* Important Questions (Frontend, Backend, DSA)
* Mock Interviews

**Study Plan Example (Daily Routine)**

**Monday to Friday**:

* **6:00 AM - 7:00 AM**: Exercise & Breakfast
* **7:00 AM - 9:00 AM**: Study Session 1
* **9:00 AM - 6:00 PM**: Office Work
* **6:00 PM - 7:00 PM**: Break & Dinner
* **7:00 PM - 9:00 PM**: Study Session 2s
* **9:00 PM - 11:00 PM**: Practice/Project Work

**Weekend**:

* Focus on revision, project work, and mock interviews.

This roadmap will ensure your journey is structured and goal-oriented. You can add your daily progress and customize as needed.