

## **Welcome to the Codecademy Full Stack Developer Bootcamp for Beginners**

We're excited to have you on board for this journey, starting **2nd August 2025**. To help you get started smoothly, here's everything you need to know:

### **BOOTCAMP SCHEDULE:**

**Session Days:** Thursday, Saturday and Sunday

#### **Session Timings (Across Time Zones):**

- **Thursday Session**

**India (IST):** 10:30 PM – 11:30 PM (after Nov 2<sup>nd</sup> - 11:30 PM – 12:30 AM)

**US Eastern Time (ET):** 1:00 PM – 2:00 PM

**US Pacific Time (PT):** 10:00 AM – 11:00 AM

**UK (BST):** 6:00 PM – 7:00 PM

**EU (CET):** 7:00 PM – 8:00 PM

- **Weekend Sessions (Saturday & Sunday)**

**India (IST):** 8:00 PM – 12:00 AM (after Nov 2<sup>nd</sup> - 9:00 PM – 1:00 AM)

**US Eastern Time (ET):** 10:30 AM – 2:30 PM

**US Pacific Time (PT):** 7:30 AM – 11:30 AM

**UK (BST):** 3:30 PM – 7:30 PM

**EU (CET):** 4:30 PM – 8:30 PM

### **IMPORTANT UPDATES & COMMUNICATION**

Please note, all updates regarding live sessions will be posted in the **#announcements** channel of the discord server. Make sure to check Discord regularly!

### **LIVE SESSIONS VIA ZOOM**

- You must have a **Zoom account** to join the live sessions.
- Please set your **Zoom username** to your real name for easy identification.

### **HOW TO JOIN THE ZOOM SESSIONS?**

1. Log into your **Codecademy dashboard** and navigate to **My Home** (top menu).
2. Find your **enrolled bootcamp** and check the upcoming session.
3. Click "**Next Session**" to open the bootcamp schedule page.
4. The **session link activates 5 minutes before**—click it and join!

In case of any issues, a backup Zoom link will be shared via Discord.

## SESSION RECORDINGS

Missed a session? No worries!

- Recordings will be available on the **bootcamp schedule page**.
- Click on a **past session** to view the recording anytime.
- Past session links will be posted in #announcements channel of the Discord server within 24 hours.

## CODE PRO ACTIVATION

Your **Code Pro access** will be activated on **31st July (Thursday)**. If it's not activated, please reach out to me via **Discord DM**.

To ensure a smooth experience, here are a couple of important notes:

- If you already have an active **Pro subscription**, please write to us once your current subscription ends so we can extend your **12-month access**.
- If you're currently on a **trial plan**, you can let the trial expire without making a payment. Once it ends, let us know and we'll activate your Pro access.

Let's gear up for an exciting learning journey! If you have any questions, feel free to ask in the **#general** channel. See you in the first session!

## Course Curriculum

Week	Session	Details
Week 1	HTML Fundamentals	<b>Session 1: Saturday (4 hrs)</b> <ul style="list-style-type: none"><li>• Onboarding + IDE, AI for Learning, Intro to Web Development. HTML5 Document Structure, Doctype, Elements, Attributes, Emmet, W3C Validator. Semantic Elements, inline, block. Headers, Paragraphs, and MDN Docs</li></ul>
		<b>Session 2: Sunday (4 hrs.)</b> <ul style="list-style-type: none"><li>• Tables, Lists, Links and Navigation. HTML Forms &amp; Input Types.</li></ul>
		<b>Session 3: Thursday (1 hr)</b> <ul style="list-style-type: none"><li>• Problem-solving and doubt resolution session on topics from last week.</li></ul>

		<b>Project:</b> Personal Bio Page - HTML structure with semantic markup and forms
Week 2	CSS Fundamentals & Layout	<b>Session 4: Saturday (4 hrs.)</b> <ul style="list-style-type: none"> <li>CSS Basics: Selectors, Rulesets, Properties. Box Model. Typography, Colors, Display &amp; Position. Chrome Dev Tools Intro</li> </ul>
		<b>Session 5: Sunday (4 hrs.)</b> <ul style="list-style-type: none"> <li>Flexbox, CSS Grid Layout,</li> <li>Specificity, Responsive Design with Media Queries</li> </ul>
		<b>Session 6: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
		<b>Project -</b> Styled Landing Page - Apply CSS fundamentals with responsive layout
Week 3	Advanced CSS & Frameworks	<b>Session 7: Saturday (4 hrs.)</b> <ul style="list-style-type: none"> <li>CSS Animations, Transitions, Transform, Advanced Selectors, Pseudo-elements. Intro to UI Frameworks/Libraries. Bootstrap Fundamentals: Components, Utilities, Grid System</li> </ul>
		<b>Session 8: Sunday (4 hrs.)</b> <ul style="list-style-type: none"> <li>Tailwind Fundamentals. Google Fonts, Font Awesome,</li> </ul>
		<b>Session 9: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week</li> </ul>
		<b>Project -</b> (Major Project #1) - Responsive design with animations
Week 4	Git & JavaScript Fundamentals	<b>Session 10: Saturday (4 hrs.)</b> <ul style="list-style-type: none"> <li>Git Fundamentals: Installation, Repository Setup, Basic Commands, Branching and Merging</li> <li>JavaScript Basics: Variables(let/const/var), Data Types. Operators, Control Flow, Loops, Conditionals</li> </ul>
		<b>Session 11: Sunday (4 hrs.)</b> <ul style="list-style-type: none"> <li>Functions, Scope. Debugging Intro. GitHub Portfolio Setup</li> </ul>
		<b>Session 12: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week</li> </ul>
		<b>Project -</b> GitHub Portfolio Setup & Interactive Calculator - Version control workflow and JavaScript logic
Week 5	Advanced JavaScript & DOM	<b>Session 13: Saturday (4 hrs.)</b> <ul style="list-style-type: none"> <li>Arrow Functions, Higher Order Functions. Arrays and Array Method. Objects and Object Methods. Destructuring, Spread Operator</li> </ul>
		<b>Session 14: Saturday (4 hrs.)</b> <ul style="list-style-type: none"> <li>DOM Selection, Manipulation. Events - Handling, Bubbling, Event Loop. Form Processing, Local Storage</li> </ul>
		<b>Session 15: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>

		<b>Project –</b> Todo List App - Advanced JavaScript with DOM manipulation and persistent storage
Week 6	APIs & Asynchronous JavaScript	<b>Session 16: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>Working with APIs, Fetch API, JSON, Error Handling, Callbacks, Promises</li> </ul>
		<b>Session 17: Sunday (4hrs.)</b> <ul style="list-style-type: none"> <li>Async/Await. Exploring Free APIs, Postman. Multiple API calls, Data Processing</li> </ul>
		<b>Session 18: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
		<b>Project –</b> (Major Project #2) - Vanilla JS frontend, API integration with one or more APIs
Week 7	React Fundamentals	<b>Session 19: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>Introduction to React and the Virtual DOM, React vs Vanilla JS. JSX, Components, Props. State Management with useState. Thinking in React</li> </ul>
		<b>Session 20: Sunday (4hrs.)</b> <ul style="list-style-type: none"> <li>Event Handling, Conditional Rendering,</li> <li>React Lists and Keys, Forms in React</li> </ul>
		<b>Session 21: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
		<b>Project –</b> React Counter & Todo App - Component basics and state management
Week 8	React Intermediate & Routing	<b>Session 22: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>Component Lifecycle with useEffect, Side Effects, Cleanup, Custom Hooks, React Dev Tools and Debugging</li> </ul>
		<b>Session 23: Sunday (4hrs.)</b> <ul style="list-style-type: none"> <li>React Router Setup, Routes, Links, Navigation, URL Parameters, Protected Routes</li> </ul>
		<b>Session 24: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
		<b>Project –</b> Multi-page React Application - Advanced component interactions with routing
Week 9	React State Management	<b>Session 25: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>Context API - useContext. Global State Management, Redux Part 1. Global State Management, Redux Part 2. useReducer Hook</li> </ul>
		<b>Session 26: Sunday (4hrs.)</b> <ul style="list-style-type: none"> <li>Updating Objects, Arrays, and Queuing. Component Optimization, Performance &amp; Best Practices Part 1. Component Optimization, Performance &amp; Best Practices Part 2.</li> </ul>
		<b>Session 27: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>

		<b>Project –</b> (Major Project #3) - React App with routing, hooks, and state management
Week 10	Backend Introduction & Express	<b>Session 28: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>Introduction to Node.js, NPM, Module System, HTTP Concepts, Express.js Setup</li> </ul>
		<b>Session 29: Sunday (4hrs.)</b> Express Routing, Middleware, Request/Response Objects, Static Files, Error Handling
		<b>Session 30: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
		<b>Project –</b> Express API
Week 11	MongoDB & Mongoose	<b>Session 31: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>Introduction to NoSQL. MongoDB Basics, Document Structure. MongoDB CRUD Operations. Database best practices</li> </ul>
		<b>Session 32: Sunday (4hrs.)</b> <ul style="list-style-type: none"> <li>Mongoose Setup, Schemas, Models, Validation, Relationships, Population</li> </ul>
		<b>Session 33: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
		<b>Project –</b> Connecting Express to MongoDB with Mongoose
Week 12	Cloud Technologies and Mongo Atlas DB	<b>Session 34: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>Cloud Services Overview - AWS, Azure, Google Cloud. DotEnv / Environment Variables. MongoDB Atlas Setup. REST APIs in Depth, RPC vs REST</li> </ul>
		<b>Session 35: Sunday (4hrs.)</b> <ul style="list-style-type: none"> <li>Advanced Rest Concepts. API First Design, Auto Generating Docs. Using Protected APIs.</li> </ul>
		<b>Session 36: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
		<b>Project –</b> RESTful API with 3rd Party API Integration and MongoDB
Week 13	Authentication & Security	<b>Session 37: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>User Authentication Concepts &amp; Password Security with Bcrypt. JSON Web Tokens (JWT) - Structure, Signing, Verification. JWT Implementation - Login/Register Routes. Protected Routes &amp; Middleware</li> </ul>
		<b>Session 38: Sunday (4hrs.)</b> <ul style="list-style-type: none"> <li>Authorization vs Authentication, Role-based Access. Security Best Practices - HTTPS, Environment Variables, Input Validation. OWASP Top 10</li> </ul>
		<b>Session 39: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
		<b>Project -</b> (Major Project #4) - Complete RESTful API with 3rd Party API Integration, Authentication, and MongoDB

Week 14	Full Stack Integration	<b>Session 40: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>Connecting React to Express API. Axios Configuration + CORS. Environment configuration. Authentication Flow in React</li> </ul>
		<b>Session 41: Sunday (4hrs.)</b> <ul style="list-style-type: none"> <li>Protected Components. Error Handling &amp; Loading States. PROJECT: Full Stack Authentication - Complete login system integration</li> </ul>
		<b>Session 42: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
		<b>Project -</b> Full Stack Authentication - Complete login system integration
Week 15	Software Development Life Cycle, Agile, Design	<b>Session 43: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>SDLC Overview, What is Agile?, Stories and Acceptance, Criteria, Ceremonies and Artifacts, Prototypes and Wireframes</li> </ul>
		<b>Session 44: Sunday (4hrs.)</b> <ul style="list-style-type: none"> <li>MERN Architecture Planning, Project Setup, Database Design with Mongoose, Authentication</li> </ul>
		<b>Session 45: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
		<b>Project -</b> (Major Project #5) - Final Full Stack Project
Week 16	Final Project Frontend	<b>Session 46: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>Final Project Frontend Setup with React. User interface design. Component architecture. State management implementation</li> </ul>
		<b>Session 47: Sunday (4hrs.)</b> <ul style="list-style-type: none"> <li>API testing with Postman. Unit testing with Jest. E2E Testing with Playwright. Work on Final Project</li> </ul>
		<b>Session 48: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
Week 17	Final Project Working Day	<b>Session 49: Saturday (4hrs.)</b> <ul style="list-style-type: none"> <li>Q&amp;A and Working on Final Project</li> </ul>
		<b>Session 50: Sunday (4hrs.)</b> <ul style="list-style-type: none"> <li>Cloud Deployment Providers and Overview. Development vs Production Environments, Build Processes, Observability. Frontend vs Backend Deploys, CORS in Production, Environment Variables. Final Project Deployment Work</li> </ul>
		<b>Session 51: Thursday (1 hr)</b> <ul style="list-style-type: none"> <li>Problem-solving and doubt resolution session on topics from the last week.</li> </ul>
Week 18	Career Preparation & Graduation	<ul style="list-style-type: none"> <li><b>Session 52: Sunday (4hrs.)</b> Technical Interview Strategies. Coding challenges practice, Behavioral Questions. Mock interviews, and Portfolio</li> </ul>

		<p>Presentation Techniques. Technical Interview Practice Assignments</p>
		<ul style="list-style-type: none"> <li>• <b>Session 53: Sunday (5 hrs.)</b> Resume Building &amp; Job Search Strategies - Professional resume creation. LinkedIn optimization, job search platforms, networking strategies, and application best practices. Complete professional resume and LinkedIn profile.</li> <li>• Final Presentations &amp; Graduation Ceremony</li> </ul>