12-Session Beginner Front-End Web Development Course Outline

Goal: Build real products fast while understanding the essentials of web development.

Month 1 - Foundations (HTML & CSS)

Session 1: Introduction to the Web & HTML Basics

- What is web development? Frontend vs backend.
- The browser and how websites work.
- Structure of an HTML document.
- Core tags: headings, paragraphs, links, images, lists, divs, spans.
- Semantic HTML.
- Mini Project: "My Profile" a basic HTML page with personal info, photo, and links.

Session 2: Layout & Styling with CSS

- · CSS syntax and selectors.
- · Inline, internal, and external CSS.
- Fonts, colors, margins, paddings, borders.
- Display: block vs inline vs inline-block.
- Mini Project: Style "My Profile" from Session 1 using CSS.

Session 3: Box Model, Positioning & Flexbox

- Box model explained visually.
- Static, relative, absolute, fixed positioning.
- Flexbox fundamentals (container & item properties).
- V Exercise: Create a responsive navigation bar layout.

Session 4: Responsive Design + CSS Grid

- Media queries and breakpoints.
- · Mobile-first design.
- Grid basics: container, columns, rows.
- *Mini Project*: Responsive 2-column blog layout.

Month 2 - Tailwind CSS & JavaScript Fundamentals

Session 5: Intro to Tailwind CSS

- · Utility-first CSS explained.
- Setup via CDN and VS Code tips.
- Typography, spacing, colors, and responsiveness in Tailwind.

• V Exercise: Rebuild "My Profile" using Tailwind.

Session 6: Layouts in Tailwind (Flex, Grid, Cards)

- Reusable components (cards, buttons, headers).
- Flex and Grid with Tailwind classes.
- *Mini Project*: Responsive pricing page or feature showcase.

Session 7: JavaScript Basics

- What is JS and where it runs.
- Variables (let, const), data types.
- Operators, conditionals (if, else, switch).
- V Exercise: Simple quiz with prompts and alerts.

Session 8: DOM Manipulation + Events

- Selecting elements (querySelector , getElementById)
- Events (click, submit, keyup)
- Changing styles, text, HTML with JS.
- Mini Project: "Theme Switcher" (light/dark mode toggle).

Month 3 - Dynamic Pages & Real-World Projects

Session 9: JS Arrays, Loops & Functions

- Arrays and objects.
- for , (while , for Each , and basic map).
- Writing and using functions.
- V Exercise: Dynamic list from an array of items.

Session 10: Forms & Input Handling

- HTML forms + Tailwind form controls.
- Capturing input with JS.
- Form validation basics.
- *Mini Project*: Feedback form with live validation.

Session 11: Mini App - "To-Do List" Project

- Build a full to-do app with:
- Form input
- Add/remove tasks
- · Local state with JS
- Tailwind styling
- Challenge Extension: Save to localStorage.

Session 12: Capstone Project + Deployment

- Project ideas:
- Landing page with contact form
- Product showcase
- Portfolio site
- Teach GitHub Pages for free hosting.
- V Final Project Presentation: Each student shares their project.

Tools to Introduce Along the Way

- VS Code setup (with Tailwind IntelliSense)
- CodePen or Replit for rapid prototyping
- GitHub for version control (light intro)
- AI code assist tips (how to prompt effectively, reviewing AI code)

After Each Session

Provide: - Code templates (starter + solution) - 1–2 practice exercises (mini challenges) - Optional stretch challenges for advanced learners - Cheat sheets (e.g., HTML tags, Tailwind utilities, JS syntax)