

4-Day CSS + Bootstrap + Flexbox + TailwindCSS Training Program

Goal: By the end, trainees can confidently style responsive, modern, production-ready websites using raw CSS, Bootstrap utilities, Flexbox layouts, and TailwindCSS.

Day 1 — Core CSS & Layout Foundations (8 hrs)

What to Learn (Why it Matters)

- CSS basics: selectors, colors, units (px, em, rem, %, vh, vw).
- Box model: margin, padding, border.
- Display types: inline, block, inline-block.
- Positioning: static, relative, absolute, fixed, sticky.
- CSS variables & inheritance.
- Typography: fonts, line-height, text-align.

Task: Build a “Personal Resume Page” (No Frameworks)

- Layout: Header (name + title), sidebar (contact info), main section (experience, education).
- Apply consistent spacing using **box model**.
- Use **CSS variables** for theme (primary color, font family).
- Style typography with Google Fonts.
- Sticky header with navigation.

Deliverable: A professional resume page styled only with CSS.

Why real-world: Every dev must master CSS fundamentals for clean, reusable UI.

Day 2 — Flexbox & Responsive Design (8 hrs)

What to Learn (Why it Matters)

- Flexbox properties: `flex, justify-content, align-items, flex-wrap, order`.

- Building responsive grids with Flexbox.
- Media queries for breakpoints (mobile-first design).
- Responsive typography and images.

Task: Build a “Landing Page Layout” with Flexbox

- Sections: Hero banner (title + button), Features (3 cards), Testimonials, Footer.
- Use **Flexbox** for horizontal + vertical alignment.
- Add **media queries** for 3 breakpoints: mobile, tablet, desktop.
- Responsive nav bar (logo left, menu right → collapses on mobile).
- Add hover animations to buttons.

Deliverable: Responsive landing page using Flexbox + pure CSS.

Why real-world: Flexbox is the backbone of modern layouts (dashboards, SaaS apps, e-commerce).

Day 3 — Bootstrap (8 hrs)

What to Learn (Why it Matters)

- Bootstrap grid system & containers.
- Components: Navbar, Cards, Modals, Carousel, Buttons.
- Utility classes: spacing, typography, display.
- Bootstrap forms & validation states.

Task: Build a “Company Website” using Bootstrap

- Pages: Home, Services, Contact.
- Use **Bootstrap Navbar** with dropdown.
- Hero section with Bootstrap carousel.
- Services section with **card components** in a responsive grid.
- Contact form with validation feedback.
- Modal popup for “Get a Quote”.

Deliverable: A multi-page responsive website styled only with Bootstrap.

Why real-world: Bootstrap is still widely used in enterprise projects for rapid prototyping and consistent UI.

Day 4 — TailwindCSS & Advanced Styling (8 hrs)

What to Learn (Why it Matters)

- Tailwind setup (CDN vs PostCSS).
- Utility-first CSS philosophy.
- Responsive utilities (`sm:`, `md:`, `lg:`).
- Customization: config file, extending theme.
- Dark mode support.
- Transitions, animations, shadows.

Task: Build a “Dashboard UI” using TailwindCSS

- Sidebar navigation (collapsible on mobile).
- Header with search bar + profile dropdown.
- Dashboard cards with metrics (users, revenue, orders).
- Chart placeholder (using Tailwind + dummy divs).
- Dark mode toggle.

Deliverable: A fully responsive modern dashboard with TailwindCSS utilities.

Why real-world: Tailwind is now industry-standard for scalable, fast-to-build design systems.

Capstone Project (End of Day 4)

Deliver a Multi-Page Application:

- Homepage → built with **Bootstrap**.
- About/Resume page → styled with **raw CSS**.
- Features page → **Flexbox responsive layout**.
- Dashboard → styled with **TailwindCSS**.

This gives trainees exposure to **all four styling approaches** in **one real-world project**.
