# Module 1: Web Foundations & Programming

**Duration:** 4 Weeks
**Study Mode:** Online — 4 hours/day (mon - fri)

**Objective:**
Equip learners with essential skills to create modern, responsive websites using HTML, CSS, JavaScript, TailwindCSS, and Bootstrap — while mastering Git and GitHub for version control.

### Target Audience

- Complete beginners with no prior coding experience
- University students and graduates exploring tech
- Professionals seeking a career switch
- Anyone with basic computer literacy and curiosity for web tech

# Weekly Breakdown

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### Week 1: Introduction to Web Development & HTML

**Topics:**

- What is the Internet? How the Web works (client-server model, HTTP/HTTPS)
- Browsers, domain names, DNS, and hosting basics
- Introduction to **HTML5**: structure, elements, attributes
- Semantic HTML: `<header>`, `<footer>`, `<section>`, `<article>`
- Text, links, images, lists, tables, forms, media embedding

- Basic accessibility principles

**Practical Exercises:**

- Create a basic HTML page with semantic tags
- Build a profile or landing page using only HTML

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## Week 2: CSS — Styling the Web

**Topics:**

- Introduction to **CSS3**: selectors, colors, units, box model
- Typography, spacing, background, and borders
- Layout systems: **Flexbox** and **Grid**
- Responsive design with media queries
- Organizing CSS: inline, internal, external
- **Intro to Bootstrap**: container system, grid, cards, buttons, navbar
- **Intro to TailwindCSS**: utility-first classes, mobile-first styling

**Practical Exercises:**

- Rebuild the Week 1 HTML page using CSS for layout and design
- Recreate layouts using both **Bootstrap** and **TailwindCSS**
- Compare results: traditional CSS vs Bootstrap vs Tailwind

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## Week 3: JavaScript — Making Websites Interactive

**Topics:**

- JS syntax: variables (`let`, `const`), data types, operators
- Conditionals (`if`, `else`), loops (`for`, `while`)
- Functions and scope
- DOM (Document Object Model) manipulation
- Event handling: clicks, form submissions, mouse/keyboard events
- Form validation with JavaScript
- Simple dynamic UI: show/hide, toggles, alerts

**Practical Exercises:**

- Create a "To-Do List" app using plain JavaScript
- Add interactivity to previous HTML/CSS pages (e.g., collapsible FAQs)

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## Week 4: Version Control with Git & GitHub + Final Project

**Topics:**

- Why use version control? Introduction to Git
- Git basics: `init`, `add`, `commit`, `status`, `log`
- Branching: `checkout`, `merge`, resolving conflicts
- Remote repositories: pushing to **GitHub**
- GitHub essentials: README.md, commits, pull requests

- Deployment basics: GitHub Pages and Netlify

**Final Project:**

- Plan and develop a personal portfolio website
- Use HTML, CSS (Bootstrap/Tailwind), JavaScript
- Version control with Git, host on GitHub or Netlify
- Present your project and receive feedback

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## Learning Outcomes

By the end of Module 1, students will:

- Understand how the web works (client-server, HTTP, DNS, domains)
- Build semantically correct HTML5 pages
- Style websites using CSS, Bootstrap, and TailwindCSS
- Create interactive elements with JavaScript
- Use Git and GitHub for project collaboration and tracking
- Host and share their websites online

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## 🏆 Certification

Upon successful completion (final project submission and participation), learners receive:

- **Dovepeak Certificate in Web Foundations & Programming**

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## 🎓 Graduate Opportunities

Top-performing students will be:

- Shortlisted for internships or junior frontend roles at **Dovepeak Digital Solutions**
- Recommended for advanced modules (Frontend Engineering with React)

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# Intake Information

**Next Intakes:** July, August, September
**Class Schedule:** Monday to Friday, 4 hours/day
**Flexible attendance and class recordings available**