

60 Days Web Dev Bootcamp — Workbook 1 (Days 1–15)

Fully offline workbook: lessons, styled code examples, practice quizzes, and assignments.

Day 1: HTML Basics

Introduction to HTML: structure, tags, and your first page.

Example Code

Assignments

- Create index.html with a heading and two paragraphs.
- Open file in browser and view source.

Practice Quiz

1. What does HTML stand for?
2. Which tag contains visible content?
3. What tag declares HTML5?

Answer Key

1. HyperText Markup Language
2. <body>
3. <!DOCTYPE html>

Day 2: Semantic HTML & Structure

Use semantic elements like header, nav, main, article, section, footer.

Example Code

Assignments

- Build a two-page site using semantic tags.
- Link pages with nav links.

Practice Quiz

1. Name two semantic tags.
2. Why use semantic HTML?
3. Which tag typically contains navigation?

Answer Key

1. <header>, <main> (also <article>, <section>)
2. Accessibility and SEO; clearer structure
3. <nav>

Day 3: Text Formatting & Links

Bold, italics, inline tags, and internal/external links.

Example Code

Assignments

- Create a page using 5 text-level tags.
- Add internal anchors to sections.

Practice Quiz

1. What tag is semantic for strong emphasis?
2. Attribute to open link in new tab?
3. What is a relative link?

Answer Key

1.
2. target='_blank'
3. A link to another file in same site (e.g., about.html)

Day 4: Images & Media

Use ``, responsive `srcset`, `<figure>/<figcaption>`, `<audio>`, and `<video>`.

Example Code

Assignments

- Add an image with alt text and caption.
- Embed an audio or video element.

Practice Quiz

1. Why is alt text important?
2. Name two image formats.
3. What tag wraps an image with a caption?

Answer Key

1. Accessibility and SEO; fallback text
2. JPEG and PNG (also SVG, WebP)
3. `<figure>`

Day 5: Intro to CSS

Selectors, properties, external stylesheets, and basic styling.

Example Code

Assignments

- Create styles.css and change fonts and colors.
- Try class and id selectors.

Practice Quiz

1. How to link external stylesheet?
2. Name three selector types.
3. Which property sets text color?

Answer Key

1. <link rel='stylesheet' href='styles.css'>
2. element, class, id
3. color

Day 6: Colors & Typography

Color formats, font stacks, units (px, rem), and line-height.

Example Code

Assignments

- Create a type scale using rem.
- Design a 5-color palette and apply it.

Practice Quiz

1. What unit is relative to root font size?
2. What does rgba include?
3. Which property controls line spacing?

Answer Key

1. rem
2. alpha/opacity
3. line-height

Day 7: Box Model & Spacing

Content, padding, border, margin, and box-sizing.

Example Code

Assignments

- Create a card component with image and text.
- Compare content-box vs border-box.

Practice Quiz

1. Which property adds space inside element?
2. What does border-box include?
3. How to make images responsive?

Answer Key

1. padding
2. padding and border in element's width/height
3. max-width:100%; height:auto;

Day 8: Flexbox Fundamentals

display:flex, justify-content, align-items, flex-wrap, and flex properties.

Example Code

Assignments

- Build a responsive nav with flexbox.
- Create a wrapping card row.

Practice Quiz

1. How to activate flex layout?
2. Which property aligns on main axis?
3. How to allow item to grow?

Answer Key

1. display:flex
2. justify-content
3. flex: 1 (or flex-grow)

Day 9: CSS Grid Basics

grid-template-columns, rows, gap, and placing items with grid-area.

Example Code

Assignments

- Create a photo grid that collapses to 1 column on small screens.
- Use grid-template-areas.

Practice Quiz

1. What property enables grid?
2. How to make 3 equal columns?
3. Property for spacing between grid items?

Answer Key

1. display:grid
2. grid-template-columns: repeat(3, 1fr)
3. gap

Day 10: Responsive Design & Media Queries

Mobile-first approach, breakpoints, and fluid units.

Example Code

Assignments

- Convert fixed layout to responsive.
- Test across screen sizes.

Practice Quiz

1. Write media query for min-width 1024px.
2. Why mobile-first?
3. Why use fluid units?

Answer Key

1. @media (min-width:1024px) { ... }
2. Simpler overrides for larger screens
3. They adapt across devices and respect user settings

Day 11: JavaScript Intro & Setup

Include scripts, console.log, devtools, and basic debugging.

Example Code

Assignments

- Create app.js and log a message.
- Open devtools and inspect console.

Practice Quiz

1. How to include external JS?
2. What logs to console?
3. What attribute delays script until after parsing?

Answer Key

1. `<script src='app.js'></script>`
2. `console.log()`
3. `defer`

Day 12: Variables & Data Types

let, const, var, primitives, objects, arrays.

Example Code

Assignments

- Create variables and log types.
- Loop through array of objects.

Practice Quiz

1. What declares a constant?
2. How to make an array?
3. Operator to show variable type?

Answer Key

1. const
2. let arr=[1,2,3];
3. typeof

Day 13: Operators & Conditionals

Arithmetic, comparison, logical, if/else, switch, ternary.

Example Code

Assignments

- Build grading logic using if/else.
- Practice strict equality.

Practice Quiz

1. What is strict equality operator?
2. What is ternary syntax?
3. Logical AND operator?

Answer Key

1. ===
2. condition ? true : false
3. &&

Day 14: Loops & Functions

for, while, for...of, function declaration, scope, return.

Example Code

Assignments

- Write functions that map/filter arrays.
- Use loops to compute aggregates.

Practice Quiz

1. Which loop iterates values directly?
2. Function declaration syntax?
3. Keyword to exit loop?

Answer Key

1. for...of
2. function name(params){ }
3. break

Day 15: DOM Basics & Mini Project

Selecting elements, modifying DOM, events. Mini-project: interactive quiz.

Example Code

Assignments

- Build a 3-question quiz and store top score in localStorage.
- Connect UI with JS event handlers.

Practice Quiz

1. How to get element by id?
2. Which method attaches an event?
3. How to store key-value in browser?

Answer Key

1. document.getElementById
2. addEventListener
3. localStorage.setItem/getItem