

Web Development - Day 2

HTML Elements, Attributes & Git Commits

Today's Agenda

- Deep dive into HTML elements and their purpose
- Understanding HTML attributes
- Semantic HTML
- Git commit best practices
- Hands-on practice
- Assignment: Recipe page creation

HTML Elements Deep Dive

Structural Elements

Element	Purpose	Example
<code><header></code>	Introductory content, navigation	<code><header><h1>My Website</h1></header></code>
<code><main></code>	Main content of the page	<code><main><article>Content</article></main></code>
<code><footer></code>	Footer information	<code><footer>© 2024</footer></code>

Text Elements

```
<p>Paragraph text</p>
<strong>Important text</strong>
<em>Emphasized text</em>
<blockquote>Quoted text</blockquote>
```

HTML Attributes

Attributes provide additional information and functionality to HTML elements.

Attribute	Purpose	Example
class	Specifies CSS class	<div class="container">
id	Unique identifier	<div id="header">
src	Source file reference	
alt	Alternative text	

Best Practice: Always include alt attributes for images and meaningful class/id names.

Semantic HTML

Semantic HTML elements clearly describe their meaning to both the browser and the developer.

Benefits:

- Better SEO (Search Engine Optimization)
- Improved accessibility
- Easier code maintenance
- Clearer code structure

```
<article>
  <header>
    <h1>Article Title</h1>
    <time datetime="2024-01-01">January 1, 2024</time>
  </header>
  <section>
    <p>Article content...</p>
  </section>
</article>
```

Git Commits

Writing Good Commit Messages

Commit Message Structure:

[type]: Short description (50 chars)

Longer description with more details...

- What was changed
- Why it was changed
- Any notable side effects

Common Types:

- feat: New feature
- fix: Bug fix
- docs: Documentation changes
- style: Formatting changes
- refactor: Code restructuring

Good commit messages

git commit -m "feat: Add navigation menu to header"

git commit -m "fix: Correct image alignment in recipe cards"

git commit -m "docs: Update README with setup instructions"

Avoid:

- "Fixed stuff"
- "Update"
- "Changes"
- Very long messages in the subject line

Practice Exercise

Building a Simple Webpage

1. Create a new file: about.html
2. Include:
 - Header with navigation
 - Main content section
 - Image gallery
 - Contact form
 - Footer
3. Make commits for each major section

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>About Us</title>
</head>
<body>
  <header>
    <nav>Menu items...</nav>
  </header>
  <main>Content...</main>
  <footer>Footer content...</footer>
</body>
</html>
```

Assignment: Recipe Page

Requirements:

- Create a new repository: "recipe-collection"
- Include:
 - Recipe title and description
 - Ingredients list (unordered list)
 - Step-by-step instructions (ordered list)
 - At least 2 images with alt text
 - Preparation time and serving size
 - Author credits
- Make at least 5 meaningful commits
- Include a README.md file

Commit Structure:

1. Initial setup and basic HTML structure
2. Add recipe content and ingredients
3. Add instructions and steps
4. Include images and styling
5. Final touches and README updates

Additional Resources

- MDN HTML Elements Reference
- Git Commit Message Guide
- HTML5 Semantic Elements Guide
- Web Accessibility Initiative (WAI)

Next Class Preview

- Introduction to CSS
- Styling your recipe page
- CSS selectors and properties
- Git branches and merging