



# WEB DESIGN AND DEVELOPMENT

Week 1

# Creating Your First HTML Page

1. Start with a plain text document:
  - On Windows: right-click → *New* → *Text Document*.
  - Change the extension from .txt to .html.
  - Example: name it **index.html** (all lowercase).
2. Why lowercase?
  - Windows may ignore case, but most web servers run on Linux.
  - On Linux, `Index.html` ≠ `index.html`. Using uppercase might break your site when you upload it.
3. If your computer warns you “the file might become unusable” when changing the extension, just confirm — we want .html.
4. Once changed, the file icon usually updates to show it can be opened in a browser (like Chrome).
5. Opening this file in a browser at this stage shows a blank page (because no code is inside yet).

## Editing the File

- You need a plain text editor, not Word.
- Common editors: **Notepad++**, **VS Code**, Atom (Mac/Windows).
- Open your `index.html` in one of these editors.

Tip: Make your text bigger when coding. In Notepad++, zoom with **Ctrl + mouse wheel**. This helps catch mistakes more easily.

## Building the HTML Skeleton

We start with **5 essential tags**:

- |  |   |
|--|---|
| 1. <code>&lt;!DOCTYPE html&gt;</code>            | tells the browser we're using HTML5.              |
| 2. <code>&lt;html&gt; ... &lt;/html&gt;</code>   | wraps everything (the root).                      |
| 3. <code>&lt;head&gt; ... &lt;/head&gt;</code>   | contains metadata about the page.                 |
| 4. <code>&lt;title&gt; ... &lt;/title&gt;</code> | defines the page title (shows up on browser tab). |
| 5. <code>&lt;body&gt; ... &lt;/body&gt;</code>   | holds the visible content (text, images, etc.).   |

### Best practice:

- Always open **and close tags** immediately before adding content.
  - Example:
    - `<html>`
    - `</html>`
    - Then add child elements inside (nested in with indentation)

### Indentation:

- Use **tabs** rather than spaces so everything lines up neatly.
- Example:
  - `<html>`
  - `<head>`
  - `<title>My first page</title>`
  - `</head>`
  - `<body>`
  - `<p>This is my page</p>`
  - `</body>`
  - `</html>`

### Testing the Page

- Save the file (**Ctrl+S**) → refresh the browser.
- At first, only the page **title** appears in the browser tab.
- Adding content (like `<p>This is my page</p>`) makes visible text appear.
- You can duplicate content quickly (e.g., in Notepad++ with **Ctrl+D**).

### Linking an External CSS File

1. Inside your `<head>`, add:
2. `<link rel="stylesheet" href="style.css">`
  - `link` = the tag.
  - `rel="stylesheet"` = defines the relationship (it's a stylesheet).
  - `href="style.css"` = points to the CSS file name.
3. This tag is **self-closing** (no separate closing tag). In HTML5, `/>` at the end is optional but still okay to add.
4. Create a new file called **style.css** (same folder as your HTML file). If they aren't in the same folder, the HTML won't find the CSS without more advanced "pathing."

## Adding CSS Rules

In style.css:

- **Targeting paragraphs (<p>):**
- p {
- color: blue;
- font-family: Helvetica;
- }
- p is the **selector** (what to style).
  - color and font-family are **properties**.
  - blue and Helvetica are the **values**.
  - End each rule with a **semicolon ;**.
- **Targeting a heading (<h1>):**
- h1 {
- color: red;
- font-family: Georgia;
- }
- **Targeting everything in <body> (global change):**
- body {
- font-size: 200%;
- }

This doubles the default font size for everything inside <body>.

## Result

- Paragraphs (<p>) appear in **blue Helvetica**.
- Headings (<h1>) appear in **red Georgia**.
- If you use the body selector, all text grows larger.

## Final Exercise (Practice)

- You'll be given sample HTML and CSS files (some broken).
- Your task: **fix them** by:
  - Making sure tags are properly opened/closed.
  - Correcting tag names.
  - Fixing CSS syntax (colons, semicolons, braces).