* **LESSON 6 HANDS-ON PRACTICE: CREATING YOUR FIRST HTML DOCUMENT**

**Hands-on Practice: Creating Your First HTML Document**

Welcome back! Now that we've covered the basics of website development, it's time to get hands-on and create your very first HTML document. This practical exercise will give you a foundational understanding of HTML and how it structures content on the web. Let's dive in!

**Objectives**

By the end of this lesson, you will be able to:

* Understand the basic structure of an HTML document.
* Create and save an HTML file.
* Use essential HTML tags to structure content.
* Display your HTML document in a web browser.

**Getting Started**

* **Setting Up Your Environment:**
  + Choose a code editor. Some popular options include Visual Studio Code, Sublime Text, and Atom.
  + Ensure you have a web browser installed (e.g., Google Chrome, Firefox, or Safari).
* **Creating a New HTML File:**
  + Open your code editor and create a new file.
  + Save the file with a **.html** extension (e.g., **index.html**).

**Understanding HTML Structure**

An HTML document consists of nested elements, each defined by tags. Here’s a basic outline of an HTML document:

html

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<!DOCTYPE html> <html lang="en"> <head> <meta charset="UTF-8"> <meta name="viewport" content="width=device-width, initial-scale=1.0"> <title>My First HTML Page</title> </head> <body> <h1>Welcome to My First HTML Page</h1> <p>This is a paragraph of text.</p> </body> </html>

**Key Components of the HTML Document**

* **<!DOCTYPE html>:**
  + Declares the document type and version of HTML being used.
  + Essential for ensuring your HTML is interpreted correctly by the browser.
* **<html lang="en">:**
  + The root element that wraps all content on the page.
  + The **lang** attribute specifies the language of the document.
* **<head>:**
  + Contains meta-information about the document, such as character set, viewport settings, and the title.
  + This section does not display content on the webpage itself.
* **<meta charset="UTF-8">:**
  + Sets the character encoding for the document to UTF-8, ensuring it can handle all types of characters.
* **<meta name="viewport" content="width=device-width, initial-scale=1.0">:**
  + Ensures the page scales correctly on different devices.
* **<title>:**
  + Sets the title of the webpage, which appears in the browser tab.
* **<body>:**
  + Contains all the visible content of the webpage.
  + Elements such as headings, paragraphs, images, links, and more are placed here.

**Adding Content to Your HTML Document**

Let’s break down the content added in the **<body>** section:

* **Headings (<h1> to <h6>):**
  + Define headings on the page.
  + **<h1>** is the highest (or most important) level, and **<h6>** is the lowest.

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<h1>Welcome to My First HTML Page</h1>

* **Paragraphs (<p>):**
  + Define blocks of text or paragraphs.

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<p>This is a paragraph of text.</p>

**Viewing Your HTML Document**

* **Save Your HTML File:**
  + Ensure your changes are saved (usually **Ctrl+S** or **Cmd+S**).
* **Open in a Web Browser:**
  + Locate your HTML file in your file system.
  + Double-click the file or right-click and choose “Open with” followed by your web browser.
  + You should see your webpage displayed with the content you've added.

**Recap and Next Steps**

Congratulations! You've created your first HTML document and viewed it in a web browser. You now understand the basic structure of an HTML document and how to use essential tags to add content.

**Why You Should Continue Taking This Course:**

* **Foundational Skills:**
  + Master the basics before moving on to more complex topics.
  + Essential for anyone interested in web development and cybersecurity.
* **Practical Application:**
  + Hands-on exercises help solidify your understanding.
  + Apply what you learn immediately to see real results.
* **Incremental Learning:**
  + Each lesson builds on the previous one, ensuring a smooth learning curve.
  + Avoid feeling overwhelmed by breaking down topics into manageable sections.
* **Support and Resources:**
  + Access to a community of learners and instructors for guidance.
  + Additional resources and reading materials provided for deeper learning.