



# Welcome to this session: Introduction to Web Development - HTML

**The session will start shortly...**

Questions? Drop them in the chat.  
We'll have dedicated moderators  
answering questions.





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# Web Development for All

Imagine you are a small business owner looking to expand your customer base. You know that having a professional website could help attract new customers, but you're not sure where to start.

*There are many online tools which can be used to create websites but these are limited and websites often look generic.*

# Web Development for All

In this lecture, we will explore the basics of web development and HTML to help you create a website that is both visually appealing and user-friendly.

# Web Development for All

- When outputting Strings to display to users:
  - **Firstly:** We define the output [HTML]
    - `print("Hello everyone! Welcome to my class :)")`
  - **Secondly:** We format or style the output [CSS]
    - `print("Hello everyone! \n Welcome to my class :)")`
  - **Finally:** We can add functionality to the output [JavaScript]
    - `print("Hello everyone! \n Welcome to my class :) \n The date is: {}".format(date.today()))`



## Learning Outcomes

- ❖ **Understand** the **basic structure** and **purpose** of HTML.
- ❖ **Describe the importance** of HTML in web development.
- ❖ **Create simple HTML documents** using appropriate tags.
- ❖ **Differentiate** between HTML **tags** and **attributes**.
- ❖ **Identify the role of HTML** in separating content from presentation.

# Lecture Overview

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- HTML
- Basics Tags







# What is the primary purpose of HTML?

- A. Styling web pages
- B. Adding interactivity to web pages
- C. Structuring web content
- D. Managing server-side operations



**Which of the following is an HTML tag?**

- A. class
- B. style
- C. <div>
- D. id



# What is the significance of separating content from presentation in HTML?

- A. Improves website performance
- B. Facilitates collaboration among developers
- C. Enhances search engine optimisation (SEO)
- D. Ensures accessibility and device compatibility

# Introduction to Web Development - HTML

- ❖ **HTML (HyperText Markup Language) is used to structure and format the content of websites on the World Wide Web.**
- ❖ In simple words, HTML is the primary building block to create and structure website content.
- ❖ Web Developers use it to create a skeleton of modern websites and web apps.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Hello CoGrammar</title>
  </head>
  <body></body>
</html>
```

# HTML Tags

- ❖ Tags are the fundamental building blocks that indicate to the browser what sort of structure the content is contained in.
- ❖ A tag is a specific syntax enclosed within angle brackets ("`<`" and "`>`") that denotes the beginning and end of an HTML element.
- ❖ Tags typically come in pairs: The opening tag indicates the start of an element, and the closing tag that includes a forward slash, marks the end of that element.
- ❖ For example: A paragraph element will have the opening tag `<p>` and the closing tag `</p>`

# Basic Tags: <html>

- ❖ The **<html>** tag serves as the root element of an HTML document, enclosing all other elements.
- ❖ It indicates the beginning and end of the HTML document and defines the document type.

```
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<html lang="en">
  <head>
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    <title>Hello CoGrammar</title>
  </head>
  <body></body>
</html>
```

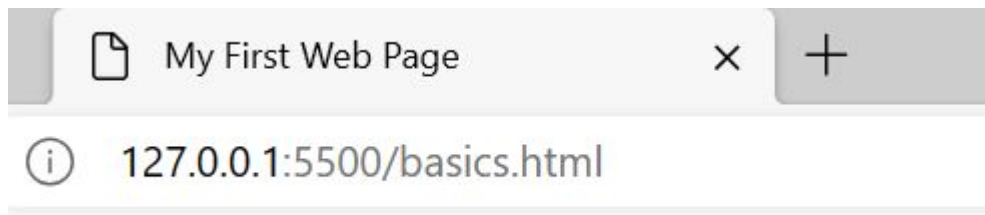
## Basic Tags: <head>

- ❖ The **<head>** tag contains metadata about the HTML document.
- ❖ The metadata includes information such as the document's title, character set, links to external stylesheets or scripts, and other elements that are not displayed directly on the webpage.

```
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<html lang="en">
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    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Hello CoGrammar</title>
  </head>
  <body></body>
</html>
```

## Basic Tags: <title>

- ❖ **<title>** tag specifies the title of the HTML document, which is displayed in the browser's title bar or tab.







BREAK



# HTML Structure

- ❖ HTML elements are organised and **nested within each** other to create a **structured hierarchy** or **tree-like arrangement**.
- ❖ This hierarchy **defines the relationships** and **dependencies between elements**, determining how they are displayed and interact with each other on a webpage.
  - ↓ A DOCTYPE that indicates which version of HTML to load.
  - ↓ A head which contains metadata about the page.
  - ↓ A body which contains the actual content.
  - ↓ Both the head and body are nested inside the html element.

# HTML Structure

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# HTML Elements

## ❖ Headings (<h1> to <h6>)

- Headings are used to define the headings or titles of sections within a webpage.
- <h1> (most important) to <h6> (least important), moving down a substructure.

## ❖ Paragraphs (<p>)

- Paragraphs are used to define paragraphs of text.
- It separates blocks of text, making content easier to read and understand.

# HTML Elements

## ❖ Line Breaks (<br>)

- This element is used to insert a line break within a paragraph or other block-level element.
- It forces text or content to start on a new line without creating a new paragraph.

## ❖ Links (<a>)

- The anchor element, is used to create hyperlinks to locations within the same webpage, other webpages or other files.
- It allows users to navigate between different pages or resources on the internet.

# HTML Elements

## ❖ Images (<img>)

- The image element is used to insert images into a webpage.
- It specifies the location (URL) of the image file and includes optional attributes such as width, height, alt text, and more.

## ❖ Lists (<ul>, <ol>, <li>)

- Lists are used to organise and present information in a structured format.
- <ul> (unordered list) represents a bulleted list.
- <ol> (ordered list) represents a numbered list.
- <li> (list item) is used to define individual items within a list, whether it's a bullet point or a numbered item.



# HTML Tags vs Attributes

- ❖ Tags are the fundamental building blocks of HTML and are used to define the structure and content of a webpage.
- ❖ Attributes provide additional information about the objects created by HTML elements and modify their behaviour or appearance such as size, colour, alignment, links, and more.
- ❖ Attributes are specified within the opening tag of an HTML element and are written as name-value pairs.

# Q & A SECTION

**Please use this time to ask  
any questions relating to the  
topic, should you have any.**



**Thank you  
for attending**



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