Introduction to HTML

Welcome to the world of web development! This presentation will introduce you to the fundamentals of HTML, the language that forms the foundation of every webpage you see.

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What is HTML?

HyperText Markup Language

HTML is a markup language used to structure and present content on the web. It defines the meaning and structure of web pages, using tags to tell a web browser how to display content.

Brief History

Created by Tim Berners-Lee in the early 1990s, HTML has evolved significantly since its inception. Its latest version, HTML5, includes new features and functionalities.

Role of HTML

HTML provides the blueprint for web pages, dictating the arrangement of text, images, videos, and other elements to create the layout and visual experience you see on the web.

Basic Structure

Every HTML document starts with a doctype declaration, followed by the html tag. Within this tag, the head section contains metadata about the page, and the body section contains the visible content.

Basic HTML Structure

Head Section

Contains meta information about the webpage, including the title, character set, links to stylesheets, and scripts. This section is not visible to the user but provides important information for browsers and search engines.

Body Section

Holds all the visible content of the webpage, including text, images, videos, links, and interactive elements. This is where you define the content that users will see and interact with.

Element Structure

- doctype declaration
- html tag
- head section
- body section

# Headings

1 **Heading Levels**

HTML provides six heading levels (h1 to h6) to create different levels of hierarchy in your content. h1 is the largest and most important heading, while h6 is the smallest and least important.

2 **Heading Usage**

Use headings to structure your content logically, making it easier for users to scan and understand the information presented. Also, search engines use headings to index your website content.

3 **Importance of Headings**

Headings improve the accessibility and SEO (search engine optimization) of your web pages. They provide structure and hierarchy, making it easier for users with disabilities to navigate the content and for search engines to understand the topic of the page.

Paragraphs

Paragraph Element

1
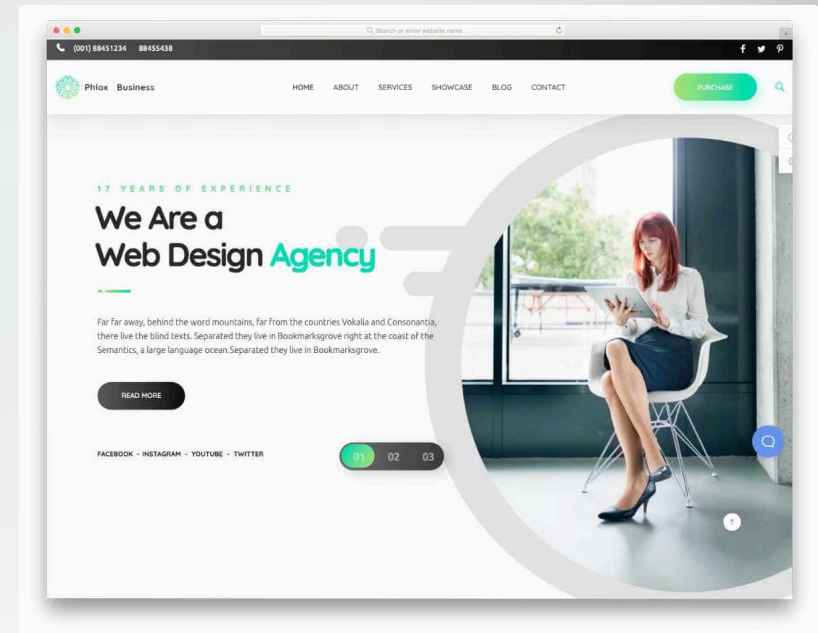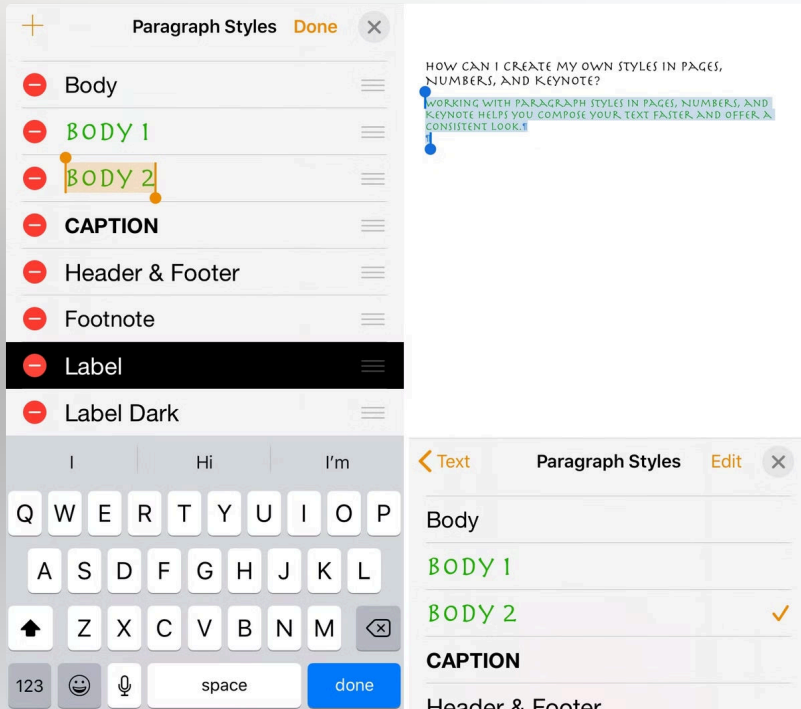
The element is used to create paragraphs of text. When you want to start a new paragraph, simply create a new element.
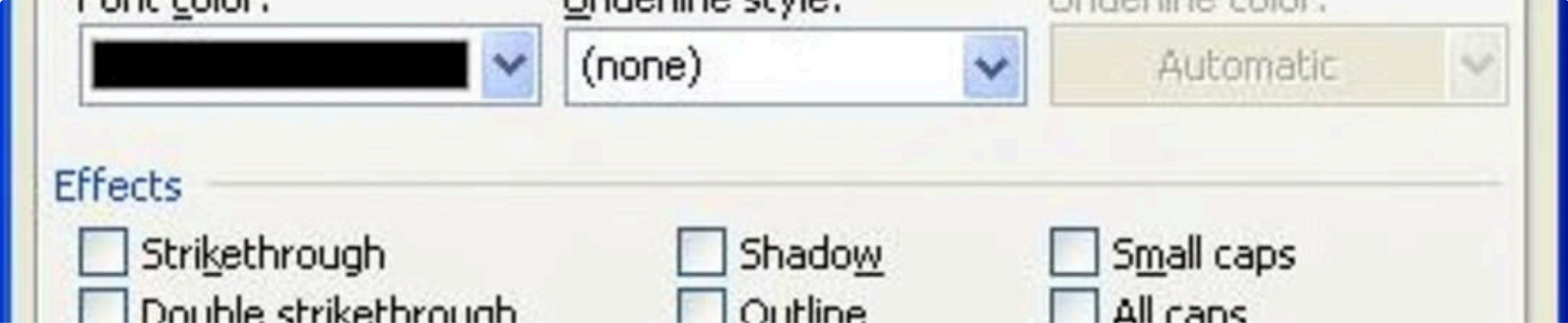
Multiple Lines

2

You can write multiple lines of text within a single paragraph element. The browser will automatically wrap the text to fit the width of the container.

Line Breaks

3

To force a line break within a paragraph, use the element. This is useful when you want to create a visual break in the flow of text.

Formatting Text

Bold	**Strong**	Use ** or strong tags to emphasize text.
Italic	*Emphasis*	Use * or em tags to emphasize text.
Underline	Underlined	Use u tags to underline text.

Images

Tag	Description
<html> ... </html>	Declares the Web page to be written in HTML
<head> ... </head>	Delimits the page's head
<title> ... </title>	Defines the title (not displayed on the page)
<body> ... </body>	Delimits the page's body
<h n> ... </hn>	Delimits a level n heading
 ... 	Set ... in boldface
<i> ... </i>	Set ... in italics
<center> ... </center>	Center ... on the page horizontally
...	Brackets an unordered (bulleted) list
...	Brackets a numbered list
...	Brackets an item in an ordered or numbered list
 	Forces a line break here
<p>	Starts a paragraph
<hr>	Inserts a horizontal rule
<img src="...">	Displays an image here
 ... 	Defines a hyperlink

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Image Element

The element is used to insert images into your web pages. The src attribute specifies the path to the image file, and the alt attribute provides alternative text for screen readers and users who cannot see the image.

Image Attributes

The width and height attributes control the dimensions of the image in pixels. You can also use CSS to control the size and appearance of images.

Made with Gamma
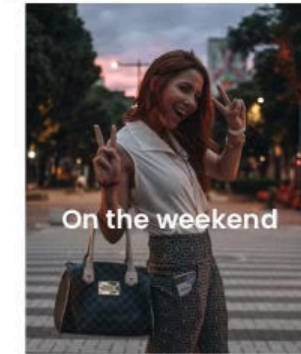
Links

Link Element

The element creates a link to another web page or resource. The href attribute specifies the URL of the target resource.

Link Types

Internal links point to other pages within the same website, while external links point to pages on different websites. Anchor links link to specific sections within the same page.

1   2   3

Link Attributes

The target attribute controls where the link opens. By default, it opens in the same browser window. Setting target="_blank" opens the link in a new tab or window.

Lists

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Unordered Lists

Unordered lists, created with the element, display list items with bullet points. Use the element to create each list item.
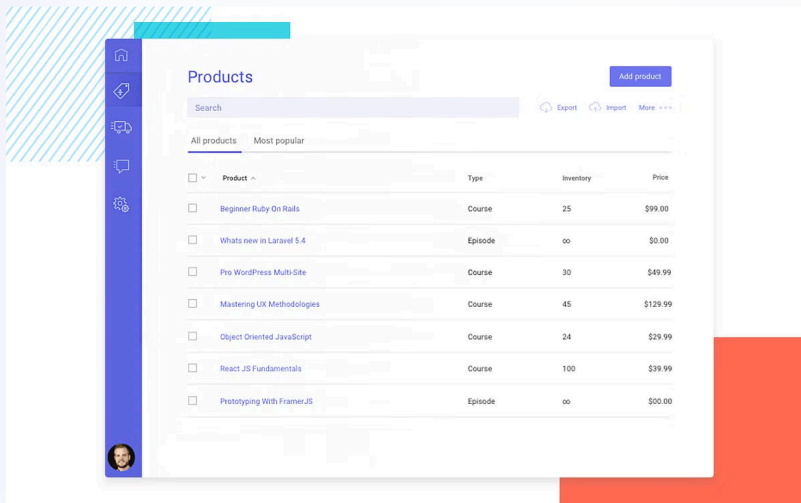
💬

Ordered Lists

Ordered lists, created with the element, display list items with numbers. Use the element to create each list item.

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Description Lists

Description lists, created with the element, provide a more structured way to present key-value pairs. Use the element for the term and the element for the description.

Tables

1 **Table Structure**

Tables are created using the element, which defines the table itself. The element defines each row, and the element defines each cell within a row.

2 **Table Attributes**

Attributes such as border, cellspacing, and cellpadding control the appearance of table borders and spacing.

3 **Headers and Cells**

Table headers, defined with the element, provide labels for columns or rows. Data cells, defined with the element, contain the actual data in the table.
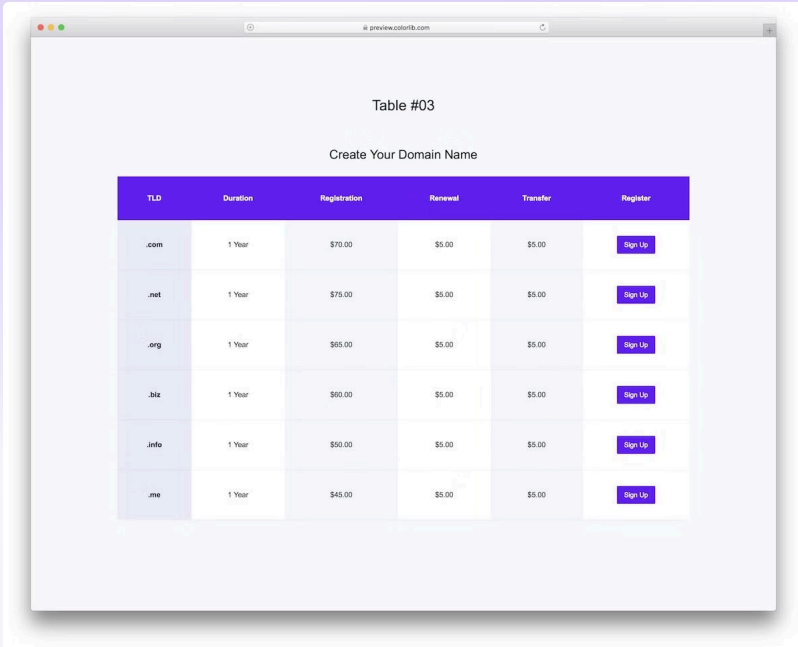
HTML Forms

- **Form Elements:** HTML forms include input fields, dropdowns, checkboxes, radio buttons, and submit buttons to collect user data.

- **Form Structure:** The **<form>** element defines the form, and various **<input>** elements are used to create form controls.

- **Validation:** Form validation ensures users provide correct information before submitting. This can be done with HTML attributes or JavaScript.

- **Data Processing:** When a form is submitted, the data is sent to a server-side script for processing, storage, or other actions.

- **Accessibility:** Proper form labeling and structure ensures users with disabilities can easily understand and use the form.