Objectives

By the end of this tutorial, you will:

- Use advanced HTML5 elements to enrich web content.

E Content Overview

Lists

HTML provides different types of lists to organize content. The three main types are:

1. Ordered Lists ()

Ordered lists are used when the order of items matters. Each item is automatically numbered.

Syntax:

```
    First item
    Second item
    Third item
```

You can change the numbering style using the type attribute:

```
  Item A
  Item B
```

2. Unordered Lists ()

Unordered lists are used when the order of items doesn't matter. Each item is marked with a bullet point.

Syntax:

```
Milk
Eggs
Bread
```

You can customize the bullet style using the type attribute (disc, circle, square):

```
    Apples
    Bananas
```

3. Definition Lists (<dl>)

Definition lists pair terms with their descriptions.

Syntax:

```
<dl>
<dt>HTML</dt>
<dt>HTML</dt>
<dd>HyperText Markup Language</dd>
<dt>CSS</dt>
<dd>Cascading Style Sheets</dd>
</dl>
```

Nested Lists

Lists can be nested inside each other.

```
Fruits

Apple
Banana

Vegetables

Carrot
Spinach
```

HTML Images



Images are added to a webpage using the tag. This tag does not require a closing tag.

Basic Syntax

- src (source): Specifies the image file's URL or path.
- alt (alternative text): Displays text if the image cannot load and improves accessibility.

Setting Image Width and Height

```
<img src="image.jpg" alt="A sample image" width="300" height="200">
```

• width and height define the image size in pixels.

Using Images as Links

```
<a href="https://example.com">
    <img src="image.jpg" alt="Click to visit example" width="200">
</a>
```

Clicking the image will take the user to the specified link.

Adding a Favicon (Small Icon in Browser Tab)

```
<link rel="icon" type="image/png" href="favicon.png">
```

This line goes inside the <head> section of the HTML document.

HTML Tables

HTML Tables			
Product	Category	Price	
Laptop	Electronics	\$800	
Bookshelf	Furniture	\$ <mark>1</mark> 50	
Coffee Maker	Appliances	\$50	

Tables in HTML are used to display data in a structured format using rows and columns.

Basic Table Structure

The tag is used to define a table, with rows () and cells (for data, for headers).

Using <thead> and makes tables more structured and easier to style.

```
<thead>
 Name
 Age
 Country<
 </thead>
John
 25
  USA
 Jane
 30
 Canada
```

Why Use <thead> and ?

1. **Better Readability** – Separates table headers from content.

- 2. **Improved Styling** You can style the header differently from the body.
- 3. **Accessibility** Enhances support for screen readers.
- 4. **Easier Scripting** JavaScript can target specific sections more efficiently.

Adding a Table Caption

Merging Cells

colspan (Merges columns)

```
    colspan="2">Merged Column
```

• rowspan (Merges rows)

```
Merged Row
Data 1

> 2

> 3
```

Embedding Multimedia with <audio>, <video>, and <canvas>

HTML5 brings multimedia to life, allowing you to add audio, video, and graphics directly into your web pages!

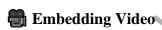




The <audio> tag embeds audio files, with options for playback controls:

Key Attributes:

- controls: Displays playback options (play, pause).
- autoplay: Starts the audio automatically.
- loop: Repeats the audio.





The <video> tag brings videos to your pages:

Key Attributes:

- width & height: Set the video dimensions.
- poster: Displays an image before the video starts.
- muted: Starts the video muted.

♥ Vibe Coding Session + AI Spark

"Make content pop—with the help of some creative AI support."

X AI Tools + Prompts:

Tool	Use Case	Sample Prompts
ChatGPT	Generate lists, table examples, alt text	 - "Generate a table showing 5 programming languages and their use cases." - "Create a bulleted list of healthy snacks." - "Give me descriptive alt text for an image of a person hiking."
Claude	Content enhancement, ethical writing	- "Refine this HTML table to be more accessible and meaningful."- "Can you generate content for a simple pricing table?"
Gemini	Content + SEO suggestions	- "What are some best practices for accessible image use?"- "Give me a sample list of 5 SEO keywords for a travel blog."
DALL·E / Midjourney	Generate visuals	- "Create an illustration of a laptop on a wooden desk."- "Show a group of icons for productivity tools."
Notion AI	Writing content for lists or image captions	- "Write 3 image captions for a portfolio gallery."- "Make a list of reasons to use tables in websites."

Challenge:

Build a fun page showcasing:

- A pricing or comparison table
- Two creative lists
- Three images with helpful alt text Let AI help brainstorm or enhance wherever needed!