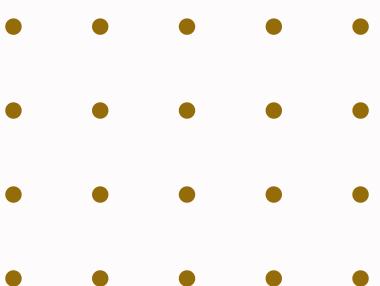


Unit-1

HTML- Introduction, tag basics, page structure, adding comments, working with texts, paragraphs and line break, emphasizing texts, heading and horizontal rules, lists, font size, face and color, alignment, links, tables, frames

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HTML



Introduction

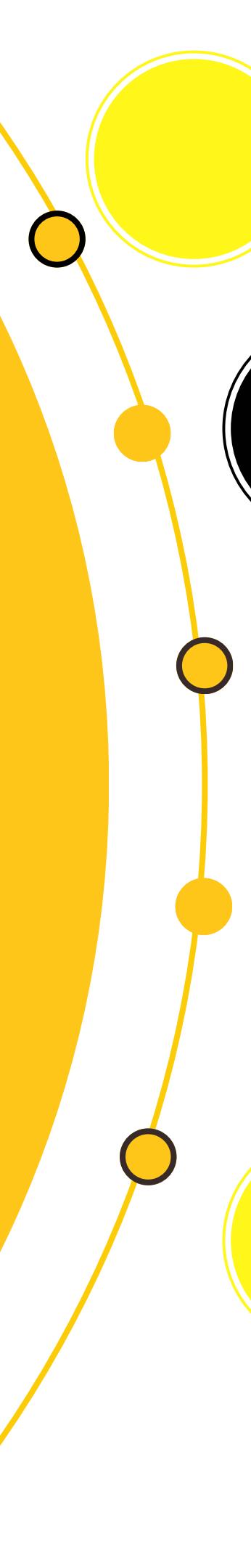
HTML

- stands for **Hyper Text Markup Language**.
- is the standard markup language for creating **Web pages**.
- describes the structure of a **Web page**.
- consists of a series of elements which tells the **browser how to display the content**.
- elements label pieces of content such as "**this is a heading**", "**this is a paragraph**", "**this is a link**", etc.

HTML Page Structure

```
<!DOCTYPE html>
<html>
<head>
    <title>Page Title</title>
</head>
<body>
    <h1>My First Heading</h1>
    <p>My first paragraph.</p>
</body>
</html>
```

- An HTML document is structured using a set of nested tags.
- Each tag is enclosed within `<...>` angle brackets and acts as a container for content or other HTML tags.
- Almost every website uses this structure.
- The main content goes inside the body tag.
- Note: These are the essential elements for a basic HTML document: `<!DOCTYPE html>, <html>, <head>, <title>, </head>, <body>, </body>, </html>`



DOCTYPE Declaration

- `<!DOCTYPE html>`
- The `<!DOCTYPE html>` declaration informs the web browser about the **HTML version being used**.

HTML Root Element

- `<html>`
- The `<html>` tag is the root element that encapsulates all the content on the page.
- The `</html>` tag marks the end of the `<html>` section.

Head Section

- The `<head>` tag contains **metadata and links to external resources like CSS and JavaScript files**.
- The `</head>` tag marks the end of the `<head>` section.

Title Tag

- `<title>Document</title>`
- The `<title>` tag **sets the title of the web page**, which is displayed in the browser's title bar or tab.

Body Tag

- The `<body>` tag contains the **visible content of the web page**. This is where text, images, and other elements go.
- `</body>`
- The `</body>` tag marks the end of the visible content of the web page.

HTML Element = Start Tag +
Content + End Tag

For example:

<h1>This is our first heading</h1>

In this example, <h1> is the start tag, and </h1> is the end tag.

"This is our first heading" is the content,

HTML Elements

An HTML element is a complete set that consists of a start tag (or opening tag), content, and an end tag (or closing tag).

Nested HTML Element = One
HTML Element Inside Another

For example: <h1>This is our
first heading</h1>

In this example, the (child) is
nested inside the <h1> (parent).

HTML Nested Elements

An HTML element is a complete
set that consists of a start tag (or
opening tag), content, and an end
tag (or closing tag).

Empty HTML Tag

An empty HTML element does not have a closing tag or content. These elements are also known as "void elements" or "self-closing elements."

Empty HTML Element = Tags with No Content

For example:

```
<br />
```

This is a break tag, which has no content and no closing tag. It's used to insert a line break within text or other inline elements.

The `<hr />` tag, used for horizontal rules, is another example of an empty or void element.

HTML Tags vs. Elements

HTML Tags

- HTML tags are the markers that define the start and end of an element. They are wrapped in angle brackets, like `<p>` and `</p>`.
- HTML Elements
- An HTML element includes an opening tag, content, and a closing tag, forming a complete set. For example, `<p>This is a paragraph.</p>`.

Key Takeaways

- Tags set boundaries; elements include tags plus content.
- Tags come in pairs (most of the time), whereas elements may include nested elements.
- Self-closing or void elements like `
` are still considered elements, even though they don't have a closing tag or content.
- Elements can be "parent" or "child" when nested, but tags cannot.

HTML

ATTRIBUTES

HTML attributes are used to define the characteristics of an HTML element. They are placed within the element's opening tag and consist of two parts: the name and the value.

- Name: Specifies the property for that element.
- Value: Sets the value of that property for the element.

Types of HTML Attributes

There are three main types of HTML attributes:

- **Core Attributes:** These are basic attributes that can be applied to most HTML elements.
 - Examples include `id`, `class`, and `style`.
- **Internationalization Attributes:** These attributes help adapt the document to different languages and regions.
 - Examples include `lang` and `dir`.
- **Generic Attributes:** These attributes provide additional information about the element but don't necessarily affect its appearance or behavior.
 - Examples include `data-*` attributes for storing custom data private to the page or application.

CORE ATTRIBUTES

Core attributes are some of the most widely used attributes in HTML. There are 4 main types:

ID Attribute

The ID attribute is used to assign a unique identifier to an HTML element. Each element with an ID has its own unique identity, similar to how each individual has a unique identity. Multiple elements cannot have the same ID.

```
<p id="html">This is an HTML tutorial</p>
<p id="python">This is a Python tutorial</p>
```

In this example, the ID attribute helps to distinguish between two paragraphs by having different values: "html" and "python".

Class Attribute

The class attribute lets you give the same name to multiple HTML elements. That way, you can easily change their look or behavior all at once. Classes are not unique and can be assigned to multiple elements. They are generally used for applying the same styles or behaviors to a group of elements.

```
<div class="myClass">This is a div with a class.</div>
<p class="myClass">This is a paragraph with the same class.</p>
```

In this example, the class attribute helps to give `<div>` and `<p>` the same name which will help us while styling these elements further.

Style Attribute

The style attribute allows for inline styling of HTML elements. It is used in conjunction with CSS properties to directly style individual elements within the HTML code. It is commonly placed within the <head> section of the HTML file, although it can technically be used in the <body> as well. The style tag allows you to define the look and feel of various HTML elements on the page, including their colors, sizes, margins, and other visual styles.

```
<!DOCTYPE html>
<html>
<head>
<style>
/* CSS rules go here */
p {
color: blue;
font-size: 18px;
}
.highlight {
background-color: yellow;
}
</style>
</head>
<body>
<p>This is a blue paragraph.</p>
<p class="highlight">This paragraph has a yellow
background.</p>
</body>
</html>
```

Title Attribute

The title attribute provides additional information about an element and is often displayed as a tooltip when the mouse hovers over it.

Example:

```
<h4 title="hello, motto">Title attribute</h4>
```

Case Sensitivity

The HTML standard is flexible about the case of attribute names, allowing them to be written in either uppercase or lowercase, such as "title" or "TITLE." However, for best practices and compatibility with stricter document types like XHTML, the W3C recommends using lowercase attributes.

HTML Tags

- If you want to build a beautiful website, tags are essential elements that help you achieve that.
- An HTML tag acts as a container for content or other HTML tags. Tags are words enclosed within < and > angle brackets.
- They serve as keywords that instruct the web browser on how to format and display the content.

Document Structure Tags

<!DOCTYPE html>: Specifies the document type.

<html>: Encloses the entire HTML document.

<head>: Contains meta-information and links to scripts and stylesheets.

<body>: Contains the content of the web page.

Metadata Tags

<title>: Sets the title of the web page.

<meta>: Provides metadata such as character set, author, and viewport settings.

<link>: Links external resources like stylesheets.

Text Formatting Tags

<p>: Paragraph.

<h1>, <h2>, <h3>, <h4>, <h5>, <h6>: Headings.

: Strong emphasis (typically bold).

: Emphasis (typically italic).

: Line break.

<hr>: Horizontal rule.

HTML Tags

List Tags

``: Unordered list.

``: Ordered list.

``: List item.

Form Tags

`<form>`: Form.

`<input>`: Input field.

`<textarea>`: Text area.

`<button>`: Button.

`<select>`: Dropdown list.

`<option>`: Options within a `<select>`
or `<datalist>`

Hyperlink and Media Tags

`<a>`: Anchor (used for links).

``: Image.

`<audio>`: Audio content.

`<video>`: Video content.

Table Tags

`<table>`: Table.

`<tr>`: Table row.

`<td>`: Table data cell.

`<th>`: Table header cell.

`<thead>`: Table header group.

`<tbody>`: Table body group.

`<tfoot>`: Table footer group.

Semantic Tags

`<header>`: Header section.

`<footer>`: Footer section.

`<article>`: Article.

`<section>`: Section.

`<nav>`: Navigation.

`<aside>`: Sidebar content.

Paired and Unpaired HTML Tag

1. Paired Tags (Container Tags)

These are tags that come in pairs, consisting of an opening tag and a corresponding closing tag. The content goes between these two tags.

- Opening Tag: The opening tag starts with < and ends with >. For example, <p>.
- Closing Tag: The closing tag also starts with < but includes a forward slash / before the tag name, and ends with >. For example, </p>.

2. Unpaired Tags (Self-Closing Tags or Stand-Alone Tags)

These are tags that don't require a closing tag. They are self-contained, encapsulating all the information within a single tag.

- Self-Closing Tag: A self-closing tag starts with < and ends with /> (though the / is optional in HTML5). For example, or
.

Comments in HTML are like little notes you leave in your code for yourself or other people. These notes help make the code easier to understand but don't show up on the actual website. The web browser just skips over them.

- 1** Comments are ignored by web browsers.
- 2** They aid in code readability and documentation.
- 3** HTML comments are denoted by <!-- content -->.
- 4** The shortcut key for commenting out code is **Ctrl + /**.
- 5** HTML supports both single-line and multi-line comments.

HTML Comments

Types of Comments in HTML

HTML primarily supports two types of comments:

Single-line Comments

Single-line comments are contained within one line. They are useful for short annotations. For example:

```
<!-- This is a single-line comment -->
```

Multi-line Comments

Multi-line comments span across multiple lines, making them ideal for detailed explanations or temporarily disabling blocks of code.

Example:

```
<!-- This is a multi-line comment.  
It spans multiple lines.  
-->
```

HTML- <div>

- The <div> element is used as a container for other HTML elements.
- The <div> element is by default a block element, meaning that it takes all available width, and comes with line breaks before and after.
- A <div> element takes up all available width.
- The <div> element has no required attributes, but style, class and id are common.
- The <div> element is often used to group sections of a web page together.

HTML DIV Example

London

London is the capital city of England.

London has over 13 million inhabitants.

```
<!DOCTYPE html>
<html>
<style>
div {
    background-color: #FFF4A3;
}
</style>
<body>
<div><h1>HTML DIV Example</h1></div>

<div>
    <h2>London</h2>
    <p>London is the capital city of England.</p>
    <p>London has over 13 million inhabitants.</p>
</div>

<p>The yellow background is added to demonstrate the footprint of the DIV element.</p>
</body>
</html>
```

[Read More about <div>](#)

Paragraph Tag

- To create well-structured text in your HTML document, the `<p>` tag is essential for defining paragraphs.
- The `<p>` tag is used to format text into distinct paragraphs. Each paragraph element is separated by automatic empty line spaces above and below the content, providing a clear visual separation. The tag must be closed with its corresponding `</p>` tag.

Attributes and Styling

- While the `<p>` tag is straightforward, you can enhance its functionality using various attributes like class or id for CSS styling. You can also include inline styles using the `style` attribute.

```
<p class="example" style="color: blue;">
```

This is a styled paragraph.

```
</p>
```

Line Break Tag

To insert a line break in your HTML document, you can utilize the `
` tag.

`
` tag is used to insert line breaks in text or paragraphs.

When implemented, it automatically moves the text following the tag to the next line. It's particularly useful in formatting textual content where line breaks are essential for readability or visual layout.

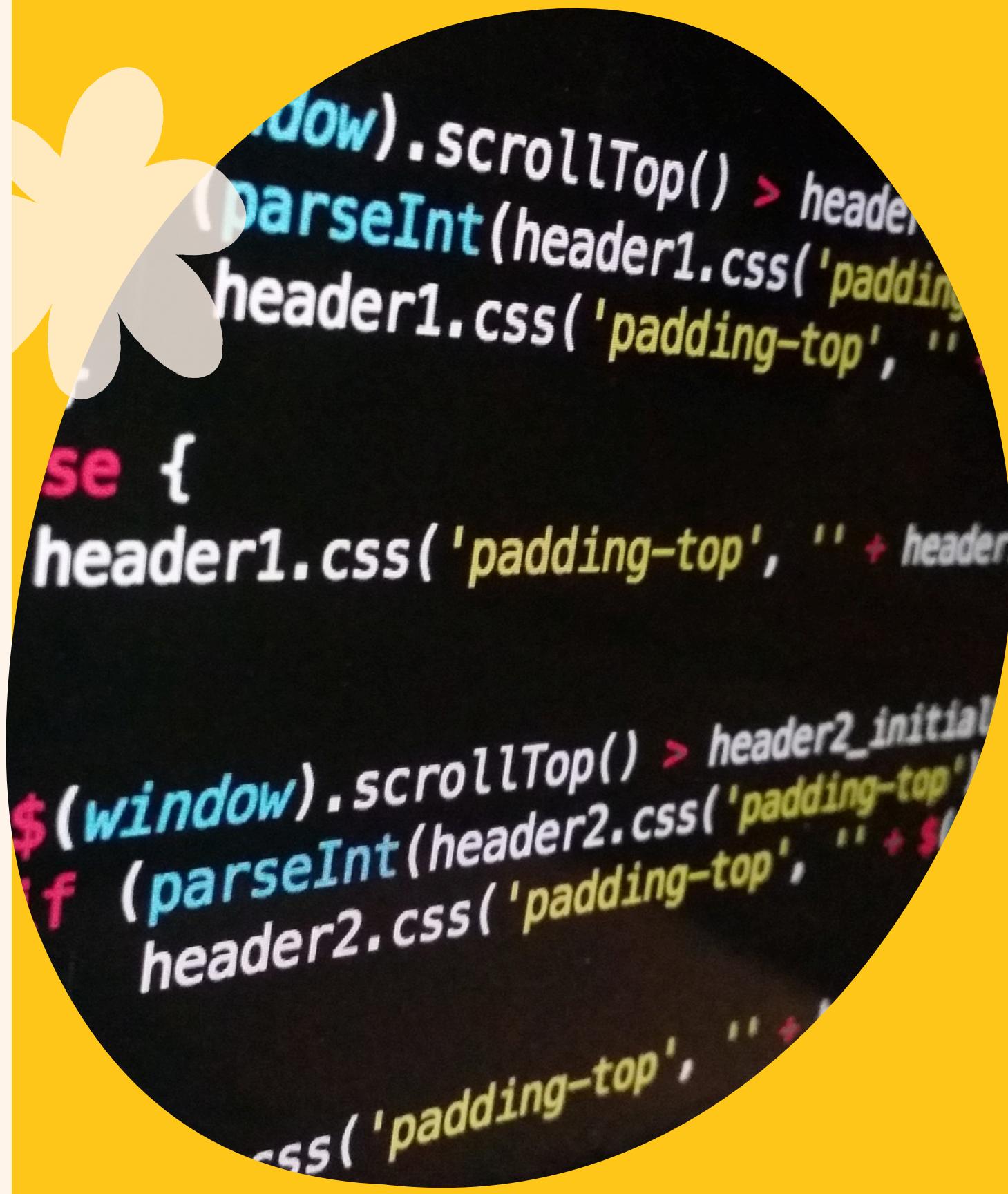
The `
` tag is commonly referred to as an empty or self-closing tag, meaning it doesn't require a closing tag. This tag is responsible for breaking text lines or separating paragraphs.

Emphasizing Text Tag

- The `` tag is used to define emphasized text. The content inside is typically displayed in italic.
- A screen reader will pronounce the words in `` with an emphasis, using verbal stress.
- The `` tag also supports the Global Attributes in HTML.
- The `` tag also supports the Event Attributes in HTML.

Heading Tags

- In HTML, heading tags ranging from `<h1>` to `<h6>` are used to define the structure and layout of text on a web page.
- These tags help create a hierarchical organization of content, making it easier for both users and search engines to understand the page's content.
- The `<h1>` tag is generally used for the main title and is the largest and most prominent, while `<h2>` to `<h6>` tags are used for subheadings, further subheadings and so on.
- Proper use of heading tags not only improves the readability of a web page but also optimizes it for search engine ranking in Google.



Heading Tags

The `<h1>` tag defines the first-level heading and is typically the largest and boldest among all the heading tags. It is often used for the main title of the page.

The `<h2>` tag is used for second-level headings and is slightly smaller than the `<h1>` tag. This is commonly used for section titles.

The `<h3>` tag is used for third-level headings. These are smaller than `<h2>` tags and are often used for sub-sections within an `<h2>` section.

The `<h4>` tag defines a fourth-level heading, which is smaller than the `<h3>` tag. It's often used for sub-sections within an `<h3>` section.

The `<h5>` tag is used for fifth-level headings and is smaller than `<h4>` tags. These are rarely used but can be helpful for deeply nested sections.

The `<h6>` tag defines the sixth-level heading and is the smallest among all the heading tags. It's rarely used but can serve specific formatting needs.

Horizontal Rules

To add a horizontal line in your HTML document, the `<hr>` tag comes in handy.

01

The `<hr>` tag is an empty or self-closing tag, meaning it doesn't require a closing tag.

02

The `<hr>` tag defines a thematic break in an HTML page (e.g. a shift of topic).

03

The `<hr>` element is most often displayed as a horizontal rule that is used to separate content (or define a change) in an HTML page.

HTML Lists

HTML provides different types of lists to display data in various forms. Each list contains one or more list items.

- Unordered List: Displays items using bullets.
- Ordered List: Displays items in a numerical sequence, and supports various numbering styles like Arabic numerals, Roman numerals etc.
- Definition List: Organizes items in a format similar to a dictionary, with terms and their corresponding

Unordered List

An unordered list uses bullets to display items. It is suitable for listing items where the order doesn't matter.

Ordered List

An ordered list uses numbers or other types of markers to indicate the sequence of items. It's ideal for listing steps in a process or ranking items in order of importance.

Definition List

A definition list arranges items in a way similar to a dictionary, with a term followed by its definition. This is useful to display metadata.

Unordered Lists

An unordered list is a list of items that are not arranged in any specific, sequential order. Unlike ordered lists, the items in an unordered list are typically marked with bullet points, dashes, or other symbols to indicate list membership, but these markers do not imply any particular order.

Key Characteristics of Unordered Lists

- No specific sequence is required.
- Typically displayed as bullet points.
- Defined using the `` tag.
- Individual items use the `` tag.

Customizing Bullet Points with 'type' Attribute

You can specify the style of bullet points using the `type` attribute. It supports three values:

- `disc` - default bullet style
- `square`
- `circle`

```
<body>
  <h1>Unordered list example</h1>
  <ul>
    <li>Pen</li>
    <li>Pencil</li>
    <li>Eraser</li>
  </ul>
</body>
```

```
<ul type="square">
  <li>Notebook</li>
  <li>Marker</li>
</ul>
```

Ordered Lists

An ordered list is a list of items that are arranged in a specific, sequential order. Each item in the list is usually numbered to indicate its position in the sequence. Ordered lists are commonly used when the sequence of the items is important.

Key Characteristics of Ordered Lists

- Ordered lists are used for items that follow a sequence.
- They are created using the `` (Ordered List) tag.
- List items are enclosed within `` (List Item) tags.

Setting the 'type' Attribute

The type attribute specifies the style of numbering. You have several options:

- 1.Uppercase Roman Numerals: Use `type="I"`
- 2.Lowercase Roman Numerals: Use `type="i"`
- 3.Arabic Numerals: Use `type="1"` (This is the default if the `type` attribute is not specified)
- 4.Lowercase Alphabetical Letters: Use `type="a"`
- 5.Uppercase Alphabetical Letters: Use `type="A"`

```
<ol>
  <li>Mango</li>
  <li>Orange</li>
  <li>Litchi</li>
</ol>
```

```
<ol type="A" start="3">
  <li>Pen</li>
  <li>Pencil</li>
</ol>
```

Definition Lists

A Definition List in HTML is used to represent a list of terms along with their corresponding descriptions or definitions.

- **<dl>** The Definition List is created using the **<dl>** (Definition List) element, which is the container for the list and wraps around one or more pairs of **<dt>** and **<dd>**.
- **<dt>** The Definition Term defines the terms that you want to explain.
- **<dd>** The Definition Description contains the definitions or explanations for the terms.

```
<dl>
  <dt>HTML</dt>
  <dd>HyperText Markup Language: The standard
language for creating web pages.</dd>

  <dt>CSS</dt>
  <dd>Cascading Style Sheets: A stylesheet language
used for describing the look and formatting of a
document written in HTML.</dd>
```

HTML

HyperText Markup Language: The standard language for creating web pages.

CSS

Cascading Style Sheets: A stylesheet language used for describing the look and formatting of a document written in HTML.

Font Size, face and Color

The `` tag in HTML is used to define the font size, color, and face (font family) for text content within the document.

This tag made it easy to apply these styles directly within the HTML content.

Syntax of font Tag in HTML

```
<font attribute1="value1" attribute2="value2" ...>Your text here</font>
```

The `` tag could include several attributes, with the most common ones given below.

- `size`: To specify the size of the font.
- `color`: To define the color of the text.
- `face`: To set the font family.

```
<!DOCTYPE html>
<html>
<head>
    <title>Example of Font Tag - Emphasized
Text</title>
</head>
<body>
    <!-- Using the font tag with multiple
attributes to emphasize the text -->
    <font size="4" color="blue"
face="Arial">Important: Please read the
instructions carefully.</font>
</body>
</html>
```

HTML Align Attribute

HTML align Attribute in HTML is used to specify the alignment of the text content of The Element. This attribute is used in all elements. The Align attribute can also be set using the CSS property “text-align: ” or in “vertical-align: ”. For horizontal alignment, use align with values like “left,” “center,” or “right” within appropriate tags.

Note: The align attribute is deprecated in HTML5, and styles should be used via CSS for better practices

Syntax:

```
<element_name align="left | right | center |  
justify">
```

Attribute Value	Description
left	It sets the text left-align.
right	It sets the text right-align.
center	It sets the text center-align.
justify	It stretches the text of a paragraph to set the width of all lines equal.

ANCHOR TAG

Links are fundamental to navigating the web. In HTML, links are created using the `<a>` tag, also known as the Anchor tag.

HTML links primarily use two attributes:

- **href attribute:** Defines the URL the link points to.
- **target attribute:** Specifies where to open the linked document.

Key Characteristics of HTML Links

Essential Attributes of the Anchor Tag

Target Attribute Values

Linking to Specific Page Sections

Link Colors

- Specified by the `<a>` tag.
- Also known as **hyperlinks**.
- Used to link one document to another.
- Includes a closing tag ``.

- `_blank`: Opens the linked document in a new window or tab.
- `_top`: Opens document in the full body of the window.
- `_self`: Opens document in the same window or tab (default behavior).
- `_parent`: Opens the linked document in the parent frame.

- Links typically appear in different colors
- Active: Displayed in red
- Visited: Appears purple
- Unvisited: Shown as blue

To link to a specific section of a webpage, you can:

- Use the name or id attribute of the target section.
- Use a hyperlink with a hash (#) followed by the target id or name.

HTML Tables

HTML tables allow you to arrange data like text, images, and links in rows and columns. You use the `<table>` tag to start and end a table.

Syntax of HTML Table:

`<table> table content </table>`

Key Elements of HTML Table:

`<table>`: Defines the table itself.

`<tr>`: Used for table rows.

`<th>`: Used for table headings.

`<td>`: Used for table data (cells).

Basic Table Structure:

```
<table>
  <tr>
    <th>Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Harry</td>
    <td>100</td>
  </tr>
</table>
```

HTML Tables

```
<table style="width:100%">
  <tr>
    <td>Company</td>
    <td>Contact</td>
    <th>Country</th>
  </tr>
  <tr>
    <td>Alfreds Futterkiste</td>
    <td>Maria Anders</td>
    <td>Germany</td>
  </tr>
  <tr>
    <td>Centro comercial Moctezuma</td>
    <td>Francisco Chang</td>
    <td>Mexico</td>
  </tr>
</table>
```

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Centro comercial Moctezuma	Francisco Chang	Mexico

[Know More about Tables](#)

HTML Tables

HTML Table Border

To add a border, use the CSS border property on table, th, and td elements:

```
table, th, td {  
    border: 1px solid black;  
}
```


Collapsed Table Border

To avoid having double borders like in the example above, set the CSS border-collapse property to collapse.

```
table, th, td {  
    border: 1px solid black;  
    border-collapse: collapse;  
}
```


[Know more about various border related tags](#)

HTML Tables

HTML Table Sizes

HTML tables can have different sizes for each column, row or the entire table. Use the style attribute with the width or height properties to specify the size of a table, row or column.

HTML Table Width

To set the width of a table, add the style attribute to the <table> element:

For example: `<table style="width:100%">`

HTML Table Column Width and Row Height

To set the size of a specific column, add the style attribute on a <th> or <td> element

To set the height of a specific row, add the style attribute on a table row element:

HTML Tables

```
<table style="width:100%">  
  <tr>  
    <th style="width:70%">Firstname</th>  
    <th>Lastname</th>  
    <th>Age</th>  
  </tr>  
  <tr>  
    <td>Jill</td>  
    <td>Smith</td>  
    <td>50</td>  
  </tr>  
  <tr>  
    <td>Eve</td>  
    <td>Jackson</td>  
    <td>94</td>  
  </tr>  
</table>
```

Set the first column to 70% of the table width

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

HTML Tables

```
<table style="width:100%">  
  <tr>  
    <th>Firstname</th>  
    <th>Lastname</th>  
    <th>Age</th>  
  </tr>  
  <tr style="height:200px">  
    <td>Jill</td>  
    <td>Smith</td>  
    <td>50</td>  
  </tr>  
  <tr>  
    <td>Eve</td>  
    <td>Jackson</td>  
    <td>94</td>  
  </tr>  
</table>
```

Set the height of the second row to 200 pixels

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

HTML Tables

HTML Table Headers

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94

Vertical Table Headers

Firstname	Jill	Eve
Lastname	Smith	Jackson
Age	50	94

```
<table style="width:100%">
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
```

```
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>
```

```
<table style="width:100%">
```

```
  <tr>
    <th>Firstname</th>
    <td>Jill</td>
    <td>Eve</td>
  </tr>
```

```
  <tr>
    <th>Lastname</th>
    <td>Smith</td>
    <td>Jackson</td>
  </tr>
```

HTML Tables

HTML Table Padding & Spacing

HTML tables can adjust the padding inside the cells, and also the space between the cells.

HTML Table - Cell Padding

Cell padding is the space between the cell edges and the cell content. By default the padding is set to 0.

To add padding on table cells, use the CSS padding property:
For example:

```
th, td {  
    padding: 15px;  
}
```

With Spacing	With Padding																		
<table border="1"><tbody><tr><td>hello</td><td>hello</td><td>hello</td></tr><tr><td>hello</td><td>hello</td><td>hello</td></tr><tr><td>hello</td><td>hello</td><td>hello</td></tr></tbody></table>	hello	hello	hello	hello	hello	hello	hello	hello	hello	<table border="1"><tbody><tr><td>hello</td><td>hello</td><td>hello</td></tr><tr><td>hello</td><td>hello</td><td>hello</td></tr><tr><td>hello</td><td>hello</td><td>hello</td></tr></tbody></table>	hello								
hello	hello	hello																	
hello	hello	hello																	
hello	hello	hello																	
hello	hello	hello																	
hello	hello	hello																	
hello	hello	hello																	

HTML Tables

Padding can be added to only specific sides of the cell as well using the padding-top, padding-bottom, padding-left, and padding-right properties:

```
th, td {  
    padding-top: 10px;  
    padding-bottom: 20px;  
    padding-left: 30px;  
    padding-right: 40px;  
}
```

HTML Table - Cell Spacing

Cell spacing is the space between each cell. By default the space is set to 2 pixels. To change the space between table cells, use the CSS border-spacing property on the table element:

```
table {  
    border-spacing: 30px;  
}
```

Row Span and Column Span

Rowspan: If you want a table cell to span multiple rows, you can use the rowspan attribute.

For example: <td rowspan="value">

A diagram showing a table structure with two rows and two columns. The top-left cell spans both rows, demonstrating the effect of the rowspan attribute. The text "Rowspan" is written to the right of the second column.

Colspan: If you want a table cell to span multiple columns, you can use the colspan attribute.

For example: <td colspan="value">

A diagram showing a table structure with two rows and three columns. The top-left cell spans all three columns, demonstrating the effect of the colspan attribute. The text "Colspan" is written above the first column.

Example of Column Span and Row Span

```
<table border="1">  
  <tr>  
    <td colspan="2">Merged Columns</td>  
  </tr>  
  <tr>  
    <td>Column 1</td>  
    <td>Column 2</td>  
  </tr>  
</table>
```

[Read about Table styling](#)
[Read about Table Colgroups](#)

```
<table border="1">  
  <tr>  
    <td>Row 1, Column 1</td>  
    <td rowspan="2">Merged Rows</td>  
  </tr>  
  <tr>  
    <td>Row 2, Column 1</td>  
  </tr>  
</table>
```

HTML Frames

The `<frameset>` tag was used in HTML 4 to define a frameset.

The `<frame>` tag was used in HTML 4 to define one particular window (frame) within a `<frameset>`.

Instead of using frames in HTML 5, we use Iframes.

HTML Iframes

An HTML iframe is used to display a web page within a web page.

HTML Iframe Syntax

The HTML `<iframe>` tag specifies an inline frame.

An inline frame is used to embed another document within the current HTML document.

Syntax:

```
<iframe src="url" title="description"></iframe>
```

HTML Frames

Iframe - Set Height and Width

Use the height and width attributes to specify the size of the iframe or you can add the style attribute and use the CSS height and width properties to specify the size of the iframe:

```
<!DOCTYPE html>
<html>
<body>

<h2>HTML Iframes</h2>
<p>You can use the height and width
attributes to specify the size of the
iframe:</p>

<iframe src="demo_iframe.htm" height="200"
width="300" title="Iframe Example">
</iframe>

</body>
</html>
```

```
<!DOCTYPE html>
<html>
<body>

<h2>HTML Iframes</h2>
<p>You can also use the CSS height and
width properties to specify the size
of the iframe:</p>

<iframe src="demo_iframe.htm"
style="height:200px;width:300px"
title="Iframe Example"></iframe>

</body>
</html>
```

HTML Iframes

You can also use the CSS height and width properties to specify the size of the iframe:

This page is
displayed in an
iframe

HTML Frames

Iframe - Remove the Border

By default, an iframe has a border around it. To remove the border, add the style attribute and use the CSS border property.

For Example:

```
<iframe src="demo_iframe.htm" style="border:none;" title="Iframe Example">
</iframe>
```

HTML Iframe Style

With CSS, you can also change the size, style and color of the iframe's border

For Example:

```
<iframe src="demo_iframe.htm" style="border:2px solid red;" title="Iframe
Example"></iframe>
```

HTML Frames

Iframe - Target for a Link

An iframe can be used as the target frame for a link. The target attribute of the link must refer to the name attribute of the iframe:

Output:

Iframe - Target for a Link

This page is displayed in an iframe

```
<!DOCTYPE html>
<html>
<body>
```

```
<h2>Iframe - Target for a Link</h2>
```

```
<iframe src="demo_iframe.htm"
name="iframe_a" height="300px"
width="100%" title="Iframe Example">
</iframe>
```

```
<p><a href="https://www.w3schools.com"
target="iframe_a">W3Schools.com</a></p>
```

```
<p>When the target attribute of a link
matches the name of an iframe, the link
will open in the iframe.</p>
```

```
</body>
</html>
```