

HTML

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What is HTML

- Stands for HyperText Markup Language
- HyperText: Link between web pages.
- Markup Language: Text between tags which defines structure.
- It is a language to create web pages
- HTML defines how the web page looks and how to display content with the help of elements
- It forms or defines the structure of our Web Page
- Need to save your file with .html extension

Features Of HTML

- Learning curve is very easy (easy to modify)
- Creating effective presentations
- Adding Links wherein we can add references
- Can display documents on platforms like Mac , Windows, Linux etc
- Adding videos, graphics and audios making it more attractive.
- Case insensitive language

HTML Editors

- Simple editor: Notepad
- Notepad++
- Atom
- Best editor: Sublime Text.

HTML Skeleton

```
<!DOCTYPE html>  
<html>  
  <head>  
    <title></title>  
  </head>  
  <body>  
  
  </body>  
</html>
```

`<!DOCTYPE html>`

Instruction to the browser about the HTML version.

`<html>`

Root element which acts as a container to hold all the
code

Browser should know that this is a HTML document

Permitted content: One head tag followed by one body tag

`<head>`

Everything written here will never be displayed in the
browser

It contains general information about the document

Title, definitions of CSS and script sheets

Metadata (information about the document)

<body>

- Everything written here will be displayed in the browser
- Contains text, images, links which can be achieved through tags.
- Examples:
 - <p> This is our first paragraph. </p>
 - Go To Google
 -

HTML Comments

- Comments don't render on the browser
- Helps to understand our code better and makes it readable.
- Helps to debugging our code
- Three ways to comment:
 - Single line
 - Multiple line
 - Comment tag `//`Supported by IE

HTML Element

- Elements are created using tags
- Elements are used define semantics
- Can be nested and empty

Basic Structure

`<p color="red"> This is our first Paragraph </p>`

- Contains following things:
 - Start tag: `<p>`
 - Attributes : `color ="red"`
 - End tag : `</p>` // optional
 - Content: This is our first Paragraph

Element Types

- Block Level :
 - Takes up full block or width and adds structure in the web page
 - Always starts from new line
 - Always end before the new line
 - Example :
 - `<p >`
 - `<div>`
 - `<h1>...<h6>`
 - ``
 - ``

Element Types

- Inline Level :
 - Takes up what is requires and adds meaning to the web page
 - Always starts from where the previous element ended
 - Example :
 - ``
 - ``
 - ``
 - ``
 - `<a>`

Basic Tags:

- Enclosed within `<>`
- Different tags render different meaning .
- `<title>` tag
 - Whatever is written this tag comes up in the web page's tab
 - Defines the title of the page
 - Syntax: `<title>Home </title>`
- `<p>` tag
 - Defines the paragraph
 - Syntax: `<p > This is our first Paragraph </p>`

List of Self closing tags

- `<hr>` tag
 - Stands for horizontal rule
 - Dividing the web page
- `
` tag
 - Stands for break line
 - Moving to next line
- `` tag
 - To add images in the web page

- `<h1>` tag `<h6>` tag
 - Stands for heading tag
 - Defines heading of a page
 - h1 represents most important page in the page
 - h6 represents least important page in the page
- `` tag
 - Defines the text to be bold
 - Replaced `` tag //HTML5
- `` tag
 - Defines the text to be bold
 - Replaced `<i>` tag //HTML5

- `` tag
 - Stands for ordered list
 - To define series of events that take place in some order
 - Example making a tea (like a flow chart)
 - `.....`

- `` tag
 - Stands for unordered list
 - To define series of events that take place where order is not important.
 - Example your hobbies
 - `.....`

- `` tag
 - Defines the list item
 - Used inside the `ol` and `ul` tag to define the events
 - ``
- `<div>` and `` tags
 - Both of these are used to group different tags .
 - Acts like a container.
 - Effective while styling.
 - `<div>.....</div>`
 - `....`
 - Difference `<div>` is block level and `` is inline level.

- `` tag
 - Used to add images in a web page
 - Syntax: ``
 - Self closing tag.
- `<a>` tags
 - Used to add links in a web page
 - `` Name of the link ``

<table> tag

- Used to create a table on a web page
- Need other tags for completing the creation of a table
 - <tr> : for marking the table row
 - <th> : for table header
 - <td> : for table column data
- Everything is always enclosed within <tr>
 - <thead> : to keep all header data
 - <tbody> : to keep all body data

<form> tag

- action attribute: It specifies the URL to send form data to
- method attribute: specifies the type of HTTP request(GET or POST)
- Example: `<form action="/my-form-submitting-page" method="POST">`
- `<input>`: used to accept data from the user
- Some types of inputs are:

- Text: used to store text data. Syntax: type="text"
- Password: used to enter a secure password. Syntax: type="password"
- Placeholder: temporary text in input fields. It is generally accompanied by "text" and "password" attributes. Syntax: placeholder="insert- text-here"
- Button: used to include buttons in the form. Syntax: type="button"
value="insert-text-here"
- Submit button: For creating a submit button. All the data will get submitted when it is clicked. Syntax: type="submit"
- Checkbox: to provide the ability to check multiple options. Syntax: type="checkbox". To check options by default, set it with the checked attribute.

- Radio Button: allows one to choose a single option. Syntax: `type="radio"`. Keep the name attribute of all the options the same.
- `<select>`: For every possible option to select, use an `<option>` tag`<option>`
- Text Areas: multi-line plain-text editing control. Syntax: `<textarea>`. You can specify how large the text area is by using the "rows" and "cols" attributes
- Labels: add captions for individual items in a form. Syntax: `<label>`. A label can be used by placing the control element inside the `<label>` element, or by using the "for" and "id" attributes.
- Validations ensure that users fill out forms in the correct format, e.g.:
- required: The Boolean attribute which makes a field mandatory:
- email: the browser will ensure that the field contains an @ symbol.

Attributes

- Properties associated with each tag.
- `<tag name="value"></tag>` is the structure.
- Global Attribute:
 - Title : Add extra information (hover)
 - Style: Add style information(font,background,color,size)
- ``
 - src is the attribute used in image tag to define path
 - Width is attribute used to define width in pixels
 - Alt i.e alternate text if image is not loaded
- ` Name of the link `
 - href used to define path of the link.

Thank You