

CHAPTER TWO

Basics of Markup languages

HTML

Mulugeta G.

Contents



HTML Basics

Linking Between Pages

Working with Tables and Frames

HTML Forms and Colors

HTML Blocks (Divisions)

Marquee and Multimedia in HTML

HTML

- HTML stands for **Hypertext Markup Language**
- It is the markup language **used for creating web pages**
- HTML **uses markup tags** to describe web pages.
- HTML is written in the form of HTML elements consisting of **HTML tags** surrounded by **angle brackets** (e.g. <html>).
- HTML tags normally come in pairs like **** and ****
- HTML is **not a programming language**, is a **markup language**

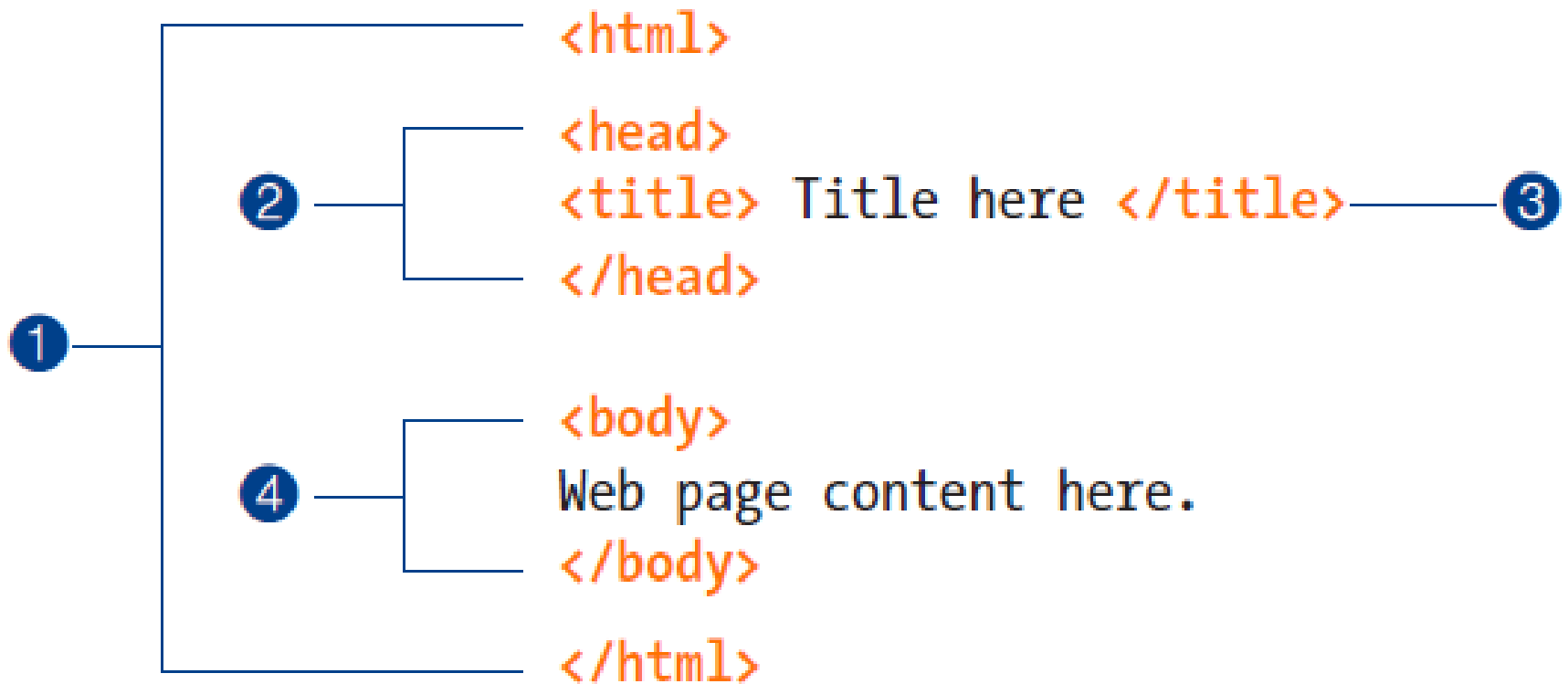
- HTML elements form the building blocks of all websites.
- HTML allows images and objects to be embedded and can be used to create interactive forms.
- It can embed JavaScript which affect the behavior of HTML webpage.
- HTML can also be used to include Cascading Style Sheets (CSS) to define the appearance and layout of text.
- World Wide Web Consortium (W3C) is the organization that develops guidelines and specifications for HTML.
- The W3C website is found at www.w3.org.

HTML Document

- A text document containing markup tags
- The **tags** tell the browser how to display the document
- Should have a **.htm** or **.html** file name extension
- Can be created using a simple text editor like
 - Notepad, Notepad++, Sublime, WordPad,

HTML Document Structure

- An HTML document has the following **basic structure**:



HTML Terms

- **Tag**

- a piece of code that acts as a label that a web browser interprets
- Used to tag or "mark-up" pieces of text. Once tagged, the text becomes HTML code to be interpreted by a web browser. Tags look like this: `<tag>`

- **Element**

- A complete tag, having an opening `<tag>` and a closing `</tag>`.

- **Attribute**

- Is a property value that customizes or modifies an HTML
- Elements will often have multiple attributes.

HTML Elements

- Names enclosed in angle bracket < and >
- Commonly have a start tag and end tag
 - **Start tag format:** <tag_name>
 - **End tag format:** </tag_name> [note the / after <]
 - E.g. bold text
- Some tags may not have end tags
 - E.g.
, <hr>
- Tags may have attributes
 - <tag_name attr1="val1" attr2="val2" ...>...</tag_name>
 - E.g. Hello
- **Not case sensitive**

HTML Tags

- **html**
 - everything in the document should be within `<html>...</html>`
- **head**
 - Contains information which is **not** displayed in the browser
 - May contain other tags in it such as `<title> </title>` tag.
 - Format: `<head>...</head>`
- **title**
 - sets the title of the web page to be displayed in the browser's title bar.
 - found within the `<head>` tag.
 - **Format:** `<title> ...</title>`

```
<head>  
    <title>HTML Basic tags</title>  
</head>
```

HTML Tags

- **body**
 - Contains the **visible part of the web page**
 - **What we place here will be displayed to our visitors.**
 - Contains several other tags and content in it
 - Format: `<body>...</body>`
 - **Attributes:**
 - `bgcolor="color"`
 - `background="img url"`
 - `text="text color"`
 - `link="link color"`
 - `alink="active link color"`
 - `vlink="visited link color"`

HTML Tags

- **headings**

- Predefined formats for text presentation
- Six(6) heading formats defined in HTML: `<h1>` up to `<h6>`
 - `<h1>` the largest font size
 - `<h6>` the smallest font size
- **Format:**
 - `<h1>...</h1>`
- E.g. `<h2>`a text in heading two`</h2>`

- **bold**

- makes a text appear in bold
- **Format:** `...` or `...`
- E.g. ``a text in bold``

HTML Tags

- **italics**
 - makes a text appear in italics
 - **Format:** `<i>...</i>` or `...`
 - E.g. `<i>a text in italics</i>`
- **underline**
 - makes a text appear underlined
 - **Format:** `<u>...</u>`
 - E.g. `<u>underlined text</u>`
- **paragraph**
 - defines a paragraph
 - **Format:** `<p>...</p>`

HTML Tags

- E.g. **<p>**this is a paragraph of text. it has a new line before and after it.**</p>**
- The browser inserts a new line before and after the text in the paragraph tag.
- **attribute:**
 - **align**="alignment" {left, right, center, justify}
- **line break**
 - inserts a new line
 - **Format:** **
**
 - E.g. line one **
** line two **
** line three **
** line four

HTML Tags

- **horizontal rule**

- inserts a horizontal line

- **Format:** `<hr>`

- **Attributes:**

- `width="width"` {absolute: in pixels or relative: in %}
- `noshade`
- `color="color"` {browser dependent}

- E.g. `<hr width="75%" noshade color="#FF0000">`

- **sub/sup**

- define either a subscript or a superscript

- **Format:** `_{...}` ; `^{...}`

- E.g. `X₁² + 2X₃`

HTML Tags

- **Formatting Tags**

<code></code>	bold
<code><i></i></code>	<i>italicized</i>
<code><u></u></code>	<u>underlined</u>
<code><sup></sup></code>	Sample ^{superscript}
<code><sub></sub></code>	Sample _{subscript}
<code></code>	strong
<code></code>	<i>emphasized</i>
<code><pre></pre></code>	Preformatted text
<code><blockquote></blockquote></code>	Quoted text block
<code></code>	Deleted text – strike through

HTML Tags

- **Lists: Unordered, Ordered and Definition lists**

- **Unordered Lists (ul)**

- Define **bulleted lists** (**disc, circle, square, none**)

- **Format:**

``

`...`

`...`

...

``

- **Attribute:**

- **type**="bullet type" {**disc, circle, square, none**}

- E.g.

`<ul type="square"> bookmarkerchalk`

HTML Tags

- **Ordered Lists (ol)**

- define **numbered lists** (**1**, **i**, **I**, **a**, **A**)

- **Format:**

...

...

...

- **Attribute:**

- **type**="number type" { **1**, **i**, **I**, **a**, **A** }

- E.g.

<ol type="i"> bookmarkerchalk

HTML Tags

- **Definition Lists (dl)**

- define a list of **term-description pairs**

- **Format:**

`<dl>`

`<dt>...</dt>`

`<dd>...</dd>`

`<dt>...</dt>`

`<dd>...</dd>`

...

`</dl>`

- E.g.

`<dl>`

`<dt>book</dt><dd>something that we read ...</dd>`

`<dt>marker</dt><dd>something we write with ...</dd>`

HTML Tags

- **images**
 - insert images in an html document
 - **Format:** `` {no end tag}
 - **Attributes:**
 - **src**=“img url” --> Location of image file(relative or absolute)
 - **alt**=“alternate text” --> Substitute text for display
 - **border**=“border width” -- > Size of border, 0 for no border
 - **width**=“image width” -- > Number of pixels of the width
 - **height**=“image height” -- > Number of pixels of the height
 - **supported image formats:**
 - gif, jpg/jpeg, png
 - E.g. ``

HTML Tags

- **anchor**

- defines a **hyperlink** or a **named anchor**
- used for **navigation**
- **Format:** `<a>...`
- **Attributes:**
 - **href**="url"
 - **target**="target" { _self, _blank }
 - **name**="anchor name"
- E.g.

`Go to home`

`Google`

HTML Tags-Target Attribute

- **target attribute** specifies where to open the linked document.
- The target attribute can have one of the following values:
 - **_blank** - Opens the linked document in a new window or tab
 - **_self** - Opens the linked document in the same window/tab as it was clicked (**this is default**)
 - **_parent** - Opens the linked document in the parent frame
 - **_top** - Opens the linked document in the full body of the window

HTML Tags

- **Navigation with anchors**

- **named anchors**

- named places in an html document
 - **Format:** ``
 - E.g. ``

- **linking to anchors**

- **Format:**
 - `link text` {on the same page}
 - `link text` {on a different page}
 - E.g.
 - `Top of page` {assuming the example above}
 - `Establishment of DDU`

HTML Tags

Tables

- Tables are defined with the **<table>** tag.
- A table is **divided into rows** with the **<tr>** tag
- Each **row is divided into data cells** with the **<td>** tag.
- **td** stands for "table data," and **holds the content of a data cell**.
- A **<td>** tag can contain **text, links, images, lists, forms, other tables, etc.**
- **Tags involved:**
<table>, <tr>, <td>, <th>, <caption>

HTML Tags

Tables

- NB: If you do not specify a **border** attribute, the table will be **displayed without borders**.

Table headers

- **Headers in a table** are defined with the **<th>** tag.
- The text in a **<th>** element will be **bold and centered**.

HTML Tags

► **Format:**

`<table>`

`<caption>table caption</caption>`

`<tr>`

`<td>...</td> <td>...</td> ...`

`</tr>`

`<tr>`

`<td>...</td> <td>...</td> ...`

`</tr>`

`...`

`</table>`

NB: The `<caption>` element **puts a title above the table**

HTML Tags

- E.g.

<table>

`<caption align="center" valign="bottom">table 1.0</caption>`

<tr>

`<th>Column 1</th> <th>Column 2</th>`

</tr>

<tr>

`<td>Cell 1</td> <td>Cell2</td>`

</tr>

<tr>

`<td>Cell 3</td> <td>Cell 4</td>`

</tr>

</table>

table 1.0

Column 1	Column 2
Cell 1	Cell 2
Cell 3	Cell 4

Example

Example 2

Name	Course	Year
Mulugeta G.	Internet Programming	3
Damana D.	Android Programming	3

```

<table border="1">
  <tr>
    <th>Name</th>
    <th>Course</th>
    <th>Year</th>
  </tr>
  <tr>
    <td>Mulugeta G.</td>
    <td>Internet Programming</td>
    <td>3</td>
  </tr>
  <tr>
    <td>Damana D.</td>
    <td>Android Programming</td>
    <td>3</td>
  </tr>
</table>

```

HTML Tags

- **Table attributes:**

- **align**=“alignment” {left, center, right}
- **bgcolor**=“color” --> - background color (inside cells)
- **width**=“table width” {absolute or relative}
- **border**=“border width” -- > width of border
- **bordercolor**=“color”
- **cellspacing**=“space amount” {in pixels}-> separation between cells
- **cellpadding**=“padding amount” {in pixels}-> around data inside cell

HTML Tags

- **Table row attributes:**
 - **align**=“alignment” {left, center, right}
 - **bgcolor**=“color”
 - **height**=“height”
 - **valign**=“alignment” {top, middle, bottom}
- **Table data/heading attributes:**
 - **align**=“alignment”
 - **valign**=“alignment”
 - **width**=“width”
 - **bgcolor**=“color”
- Unless otherwise specified, <tr> and <td> inherit attributes of <table> whenever it applies.

Attribute	Value	Description
align	Left Center right	Specifies the alignment of a table according to surrounding text
bgcolor	rgb(x,x,x) #xxxxxx colorname	Specifies the background color for a table
background	Image url	Sets background image of the table
border	pixels	Specifies the width of the borders around a table
bordercolor	rgb(x,x,x) #xxxxxx colorname	Specifies the color used for the border
cellpadding	pixels	Specifies the space between the cell wall and the cell content
cellspacing	pixels	Specifies the space between cells
width	Pixels %	Specifies the width of a table
height	Pixels %	Specifies the height of a table

HTML Tags

- Cells spanning multiple rows/columns
 - Two additional attributes of `<td>` and `<th>`
 - **colspan**=“num columns”
 - **rowspan**=“num rows”

E.g. (**colspan**)

Name		Age
Abebe	Kebede	27
Beti	Alemayehu	21

HTML Tags

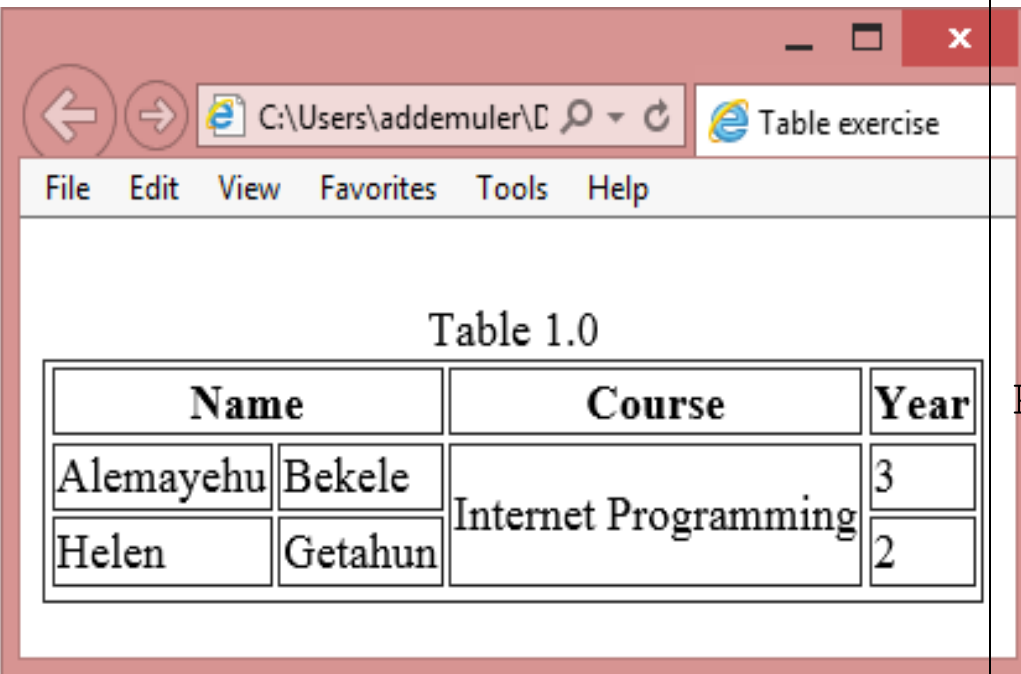
- E.g. (**rowspan**)

Name	Abebe
Phone	0911-1212-12
	0911-1616-16

- E.g. (**hybrid**)

aa	bb	cc	dd
	1	2	

Example



The screenshot shows a web browser window with the address bar displaying 'C:\Users\addemuler\C' and the page title 'Table exercise'. The browser's menu bar includes 'File', 'Edit', 'View', 'Favorites', 'Tools', and 'Help'. The main content area displays a table titled 'Table 1.0'.

Name		Course	Year
Alemayehu	Bekele	Internet Programming	3
Helen	Getahun		2

```

<table border="1">
  <tr>
    <th colspan="2">Name</th>
    <th>Course</th>
    <th>Year</th>
  </tr>
  <tr>
    <td>Alemayehu</td>
    <td>Bekele</td>
    <td rowspan="2">Internet
    Programming</td>
    <td>3</td>
  </tr>
  <tr>
    <td>Helen</td>
    <td>Getahun</td>
    <td>2</td>
  </tr>
  <tr>
    <td> </td>
    <td> </td>
    <td> </td>
    <td> </td>
  </tr>
</table>

```

Example

Tables: align and width attributes

- **Align** – determines position of text within a cell
- **Width** – determines width of row relative to table

```
<table border="1" align="center">
<tr>
  <th colspan="2"
width="60%">Name</th>
  <th rowspan="2">Course</th>
  <th rowspan="2">Year</th>
</tr>
<tr>
  <th>First</th>
  <th>Last</th>
</tr>
<tr>
  <td>Helen</td>
  <td>Getahun</td>
  <td>IP</td>
  <td align="center">3</td>
</tr>
<tr>
  <td>Alemayehu</td>
  <td>Bekele</td>
  <td>Computer
Network</td>
  <td align="center">2</td>
</tr>
<!-- etc -->
```

Table 2.0

Name		Course	Year
First	Last		
Helen	Getahun	IP	3
Alemayehu	Bekele	Computer Network	2

HTML Tags

- **HTML Comments**

- Comments are **not displayed by the browser**, but they can **help to document your HTML source code**.
- insert commented text in an html document
- **Format:** `<!-- comment text -->`
- Notice that there is an exclamation point (!) in the opening tag, but not in the closing tag.
- E.g. `<!-- this is a comment text -->`

HTML Special Characters

- **Special characters (named characters)**
 - Not found on the standard keyboard
 - e.g. ©
 - used by HTML
 - e.g. <
 - ignored by browsers
 - e.g. blank spaces
- **Format:**
 - **&#code;** or **&name;**
- **Examples:**
 - © → © < → < & → & → space
 - ® → ® ™ → ™

Character	Code	Short name	Character name ³⁷
"	"	"	quotation mark
'	'	'	apostrophe
&	&	&	ampersand
<	<	<	less-than
>	>	>	greater-than
	 	 	non-breaking space
¡	¡	¡	inverted exclamation mark
¢	¢	¢	cent
£	£	£	pound
¤	¤	¤	currency
¥	¥	¥	yen
	¦	¦	broken vertical bar
§	§	§	section
¨	¨	¨	spacing diaeresis
©	©	©	copyright
^a	ª	ª	feminine ordinal indicator
«	«	«	angle quotation mark (left)
¿	¿	¿	inverted question mark
×	×	×	multiplication
÷	÷	÷	division

Example

```
<table border="1" bgcolor="cyan">
```

```
  <tr> <th colspan="4"> School of Computing </th> </tr>
```

```
  <tr align="center">
```

School of Computing			
Chair 1	Chair 2	Chair 3	Chair 4
Computer Science	Information Technology	Software Engineering	Information Science
Copy ©2012			

```
  </tr>
```

```
  <tr> <td colspan="4" align="center"> Copy &copy;2012 </td> </tr>
```

```
</table>
```

Lab Practice

	
Home About Contact	<p>HTML stands for Hypertext Markup Language</p> <p>It is the markup language used for creating web pages HTML uses markup tags to describe web pages. HTML is written in the form of HTML elements consisting of HTML tags surrounded by angle brackets (e.g.). HTML tags normally come in pairs like and . HTML is not a programming language, is a markup language</p>
Footer page	

aa	bb	cc	dd
	1	2	

HTML Tags

- **Frames and Framesets**

- Frames are a way of dividing the browser window into several independent windows where each section can load a separate HTML document
- Each frame can be independently loaded a different url
- **Frames** are found in Framesets

HTML Tags

- **Advantages of Frames**

- Improved performance (minimal page refresh)
- Flexibility
- Simultaneous multiple views

- **Drawbacks of Frames**

- Fairly complex (for developer)
- May confuse users (if not properly used)
- Some (old) browsers may not support frames
- URL masking, when printing and bookmarking

HTML Tags

- **Frameset** - collection of frames in the browser window
 - The window is divided into frames in a similar way the tables are organized into rows and columns.
- **Framesets** define the 'layout' of the frames it contains
 - Used to divide the body into different sections (therefore, no need to use the **body tag** in the HTML)
 - Several frames can be included in a frameset
 - Framesets can be nested in one another to provide a more complex layout.

HTML Tags

- Tag format:
 - **Single frameset**

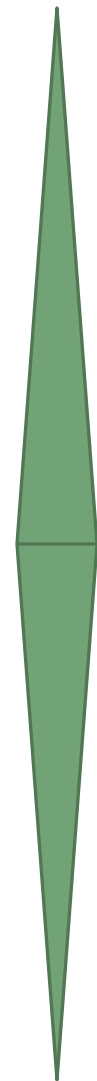
<frameset>

<frame>

<frame>

...

</frameset>



- **Nested frameset**

<frameset>

<frame>

<frameset>

<frame>

<frame>

...

</frameset>

<frame>

...

</frameset>

HTML Tags

■ Frameset Attributes

- **rows** = “row dimensions” { ex. rows=“10%, 90%” }
- **cols** = “column dimensions” { ex. cols=“20%, *, 30%” }
- **border** = “value”
- **bordercolor** = “color”
- **frameborder** = “value” { 0, 1, no, yes }
- **framespacing** = “value”

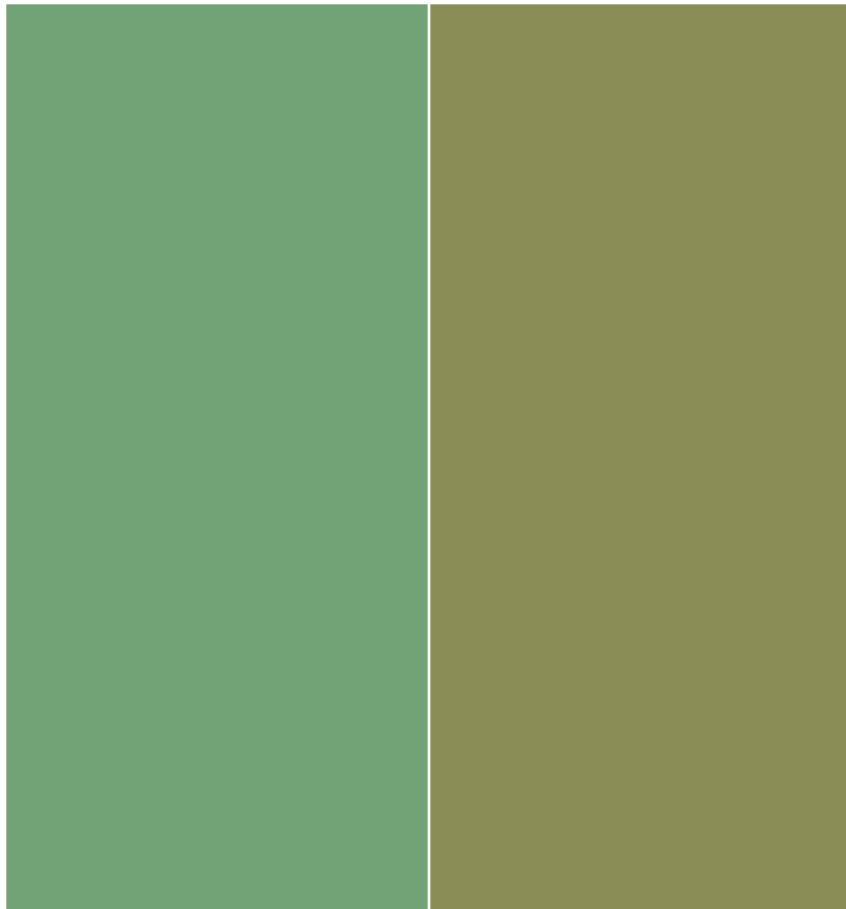
HTML Tags

■ Frame Attributes

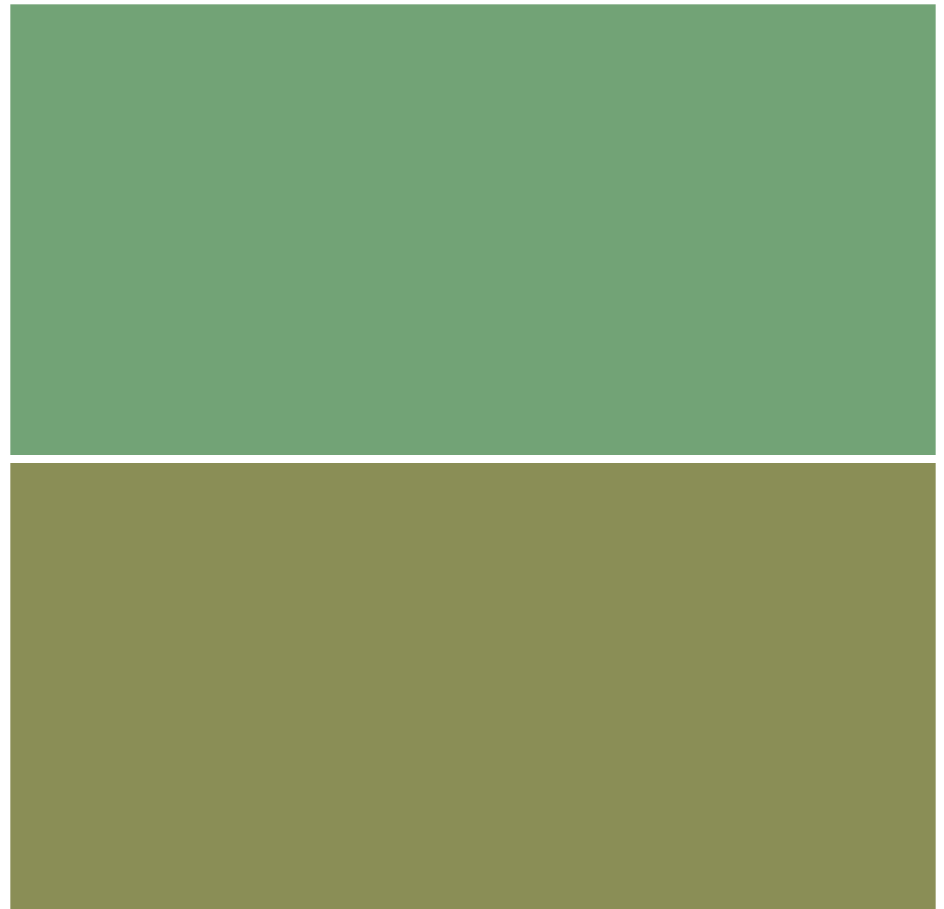
- **name** = “frame_name”
- **src** = “url” { url can be local or external }
- **noresize** [= “noresize”]
- **scrolling** = “value” { auto, yes, no }
- **allowtransparency** = “value” { in % }
- **frameborder** = “value” { 0, 1, yes, no }
- **bordercolor** = “color”

Example

Example 1



Example 2



Example

index.html

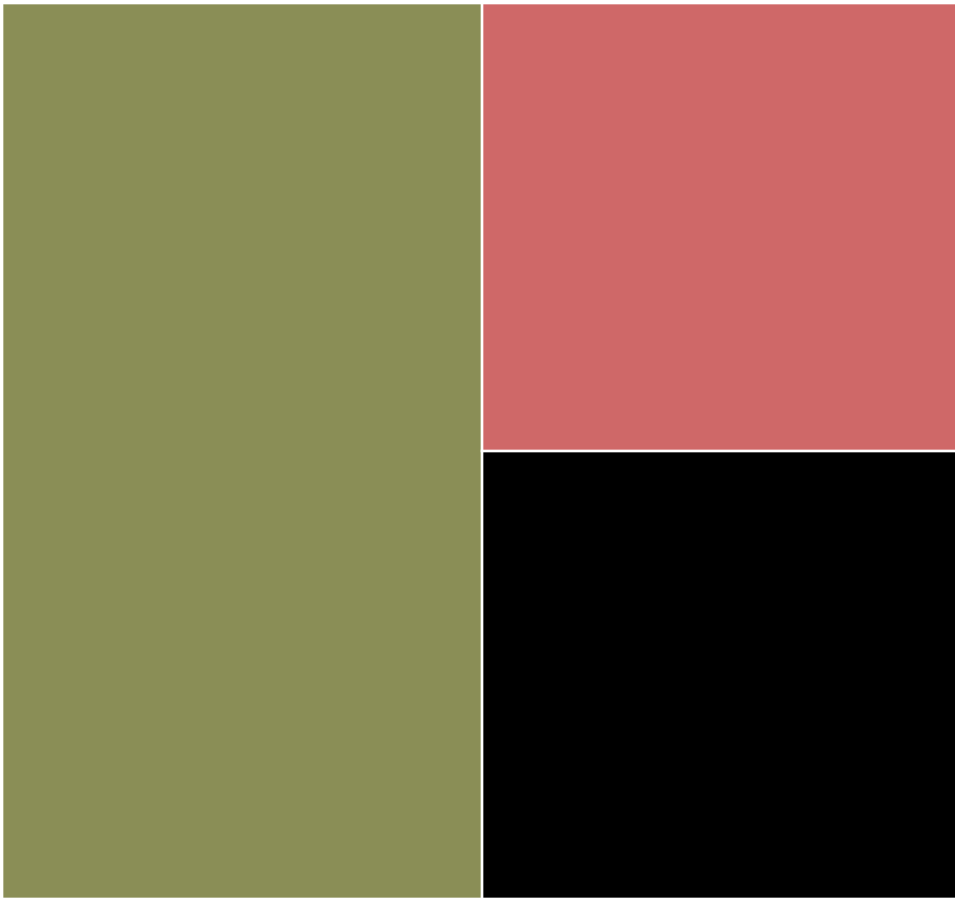
```
<html><head><title>My site</title></head>
<frameset cols = “30%, 70%”>
  <frame src=“nav.html” noresize scrolling=“no”>
  <frame name = “viewer” src=“http://www.google.com” noresize>
</frameset>
</html>
```

nav.html

```
<html><body>
<a href=“http://www.google.com” target=“viewer”>google</a><br>
<a href=“http://www.yahoo.com” target=“viewer”>yahoo</a><br>
<a href=“http://www.altavista.com” target=“viewer”>altavista</a><br>
<a href=“http://www.msn.com” target=“viewer”>msn</a><br>
</body></html>
```

Example

Example 1



Example 2



Example

index.html

```
<html><head><title>My site</title></head>
<frameset cols = “30%, 70%”>
  <frame src=“nav.html” scrolling=“no”>
  <frameset rows = “20%, *”>
    <frame src=“title.html” noresize>
    <frame name = “viewer” src=“http://www.google.com” noresize>
  </frameset>
</frameset>
</html>
```

title.html

```
<html><body>
  <h1>Welcome to My Bookmarks !</h1>
</body></html>
```

Example

test.html

```
<html>
<head><title>HTML Target Frames</title></head>
<frameset cols="200, *">
  <frame src="menu.html" name="menu_page" />
  <frame src="main.html" name="main_page" />
</frameset>
<body>
  Your browser does not support
</body>
</html>
```



Example

main.html

```
<html>  
<body bgcolor="#b5dcb3">  
  <h3>This is main page and content from any link will be displayed here.</h3>  
  <p>So now click any link and see the result.</p>  
</body>  
</html>
```

menu.html

```
<html>  
<body bgcolor="#4a7d49">  
  <a href="http://www.google.com" target="main_page">Google</a><br /><br />  
  <a href="https://mail.google.com/" target="main_page">G-Mail</a><br /><br />  
  <a href="http://news.bbc.co.uk" target="main_page">BBC News</a>  
</body>  
</html>
```

HTML Tags

Inline Frames (iframe)

- iframes are also called **floating frames**
- Like frames
- But can occur anywhere in the **<body> tag** of an html document
 - Unlike frames which should only occur in the **<frameset> tag**
- **<iframe> tag** defines a rectangular region within the document in which the browser can display a separate document
- **Tag format:**

<iframe></iframe>

HTML Tags

- Attributes of `iframe`

- **src** = “url”
- **name** = “name”
- **height** = “value”
- **width** = “value”
- **scrolling** = “value” { auto, yes, no }
- **noresize** [= “noresize”]
- **align** = “alignment” { left, right, middle, top, bottom }
- **allowtransparency** = “value”
- **frameborder** – whether or not the borders of that frame are shown = { 1(yes) or 0(no) }

Example

```
<html>
```

```
  <head>
```

```
    <title>iFrame sample</title>
```

```
  </head>
```

```
  <body>
```

```
    Below is the google site <br>
```

```
    <iframe height="600px" width="600px"
```

```
    src="http://www.google.com"
```

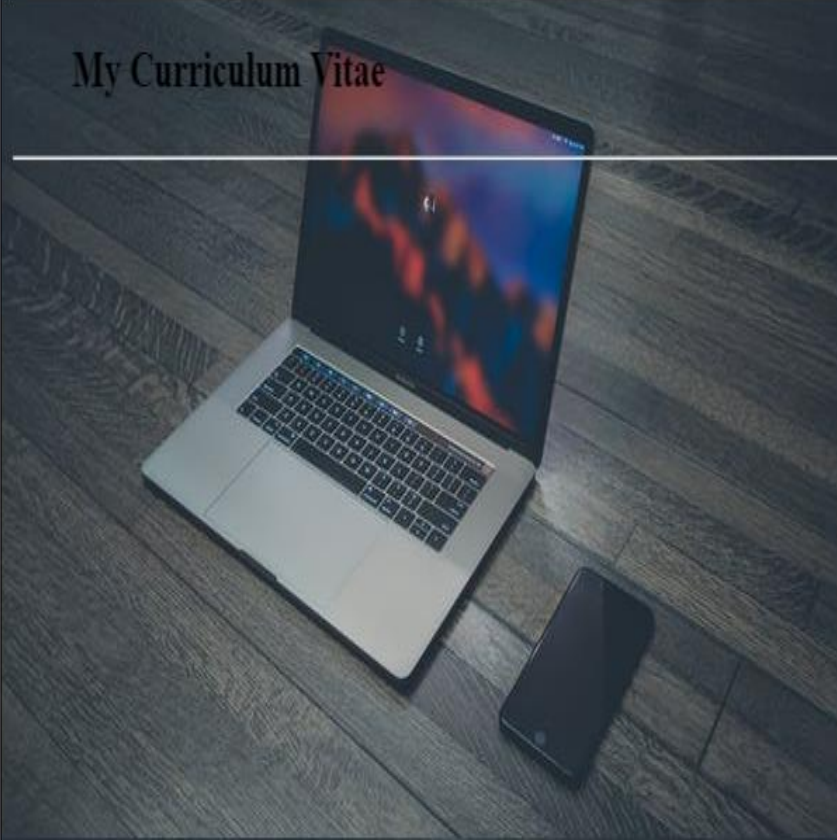
```
    scrolling="auto"></iframe>
```

```
  </body>
```

```
</html>
```

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My Curriculum Vitae



HTML Forms

- Used to gather data/input from users
- Client-side scripts can read input data
 - To validate the data, prior to sending to server
 - To use in local processing which may output web page content that is displayed on the client
- The input is usually sent to a server-side script for processing
- The data can be sent in two methods: GET & POST
- GET
 - for small and non-secure data
 - Is the default method
 - Data is sent as part of the request URL
 - ❖ Limitation in size of data

HTML Forms

- **POST**

- For large & secure data
- Input is sent as a data stream after the request URL

- **Tags**

- The **<form>** tag
 - Contains all **input elements** in the form
 - Defines the **method** of sending data
 - Defines the **server-side script** responsible for accepting the data

HTML Forms

- **Tag Format:**

`<form method="post" action="search.php" >`

....

`</form>`

- **Attributes:**

- **name**="name"
- **method**="method" {get, post} -> used to upload data
- **action**="url" {url of the server-side script to post data to or backend script ready to process your passed data}
- **enctype**="enctype" {multipart/form-data, text/plain, ... }
 - multipart/form-data – **used when uploading files**

HTML Forms

- **<input> tag:**
 - used to **define input fields** in a form
 - several types of input fields, such as:
{**textbox, listbox, checkbox, radio, button, select, ...**}
- **Attributes:**
 - **name**=“name” --> Used to give a name to the control
 - **type**=“type” --> {**text, hidden, password, file, submit, reset, button, checkbox, radio, image, ...**}
 - **value**=“value” --> Used to provide an initial value
 - **disabled**=“disabled”
 - **checked**=“checked”
 - **Size**--> Allows to specify the width of the text

HTML Forms

- **The possible input types:**
 - **text** – input text box [[Single line](#), [Multiline](#) or [Password](#)]
 - **hidden** – a hidden field for storing values
 - **password** – password input box
 - **file** – input box for file uploading (browse)
 - **submit** – a button that submits the form
 - **reset** – a button that resets form fields to their original values
 - **button** – a general purpose button
 - **checkbox** – a check box
 - **radio** – a radio button (option button)
 - **image** – an image button that submits the form

HTML Forms

- **HTML5 added several new input types:**

- `<input type="color">`
- `<input type="date">`
- `<input type="datetime-local">`
- `<input type="email">`
- `<input type="month">`
- `<input type="number">`
- `<input type="range">`
- `<input type="search">`
- `<input type="tel">`
- `<input type="text">`
- `<input type="time">`
- `<input type="url">`
- `<input type="week">`

HTML Forms

- Example for input fields:

First name:

Last name:

User name:

User password:

E-Mail:

Search:

Birthday:

Color:

☒ Male

☐ Female

Submit

Login

Cancel

Hobbies:

☐ Swimming

☐ Football

☐ Volleyball

HTML Forms

- Other input fields
 - **<textarea> tag**
 - used to input a large block of text/Multiline input field
 - **Tag format:**
<textarea>...</textarea>
- **Attributes:**
 - **name**=“name”
 - **cols**=“num_columns”
 - **rows**=“num_rows”
 - **readonly**=“readonly”
 - **wrap**=“wrap_type” {off, hard, soft, virtual, physical}

HTML Forms

- **<select> tag**
 - used to create a select box/ defines **drop-down list**
- **Tag format:**
 - **<select>**
 - <option>...</option>**
 - <option>...</option>**
 - ...
 - </select>**
- **Attributes:**
 - **<select>**
 - **name**="name"
 - **multiple**="multiple" {enables selection of multiple items}
 - **disabled**="disabled"

HTML Forms

- **<option>**
 - **value**=“value”
 - **selected**=“selected”
 - **disabled**=“disabled” {browser compatibility: Firefox ?}
- Ex.
 1. `<select name=“department”>`
`<option value=“1”>Computer Science</option>`
`<option value=“2”>Information Tech.</option>`
`<option value=“3”>Computer Eng. </option>`
`</select>`
 2. Modify the above input so that **Information Tech.** is selected by default.

HTML Forms

- **Submit & Reset buttons**

- Submit the data to a form handler
- The **value** attribute is the caption of the buttons
- To be submitted correctly, each **input field** must have **name attribute**.
- The common way to submit a form to a server, is by using a **submit** button.

Ex. `<input type="submit" value="ok">`

- inserts a button with the caption (label) **ok**.

- file upload fields

Ex. `<input type="file" name="doc">`

HTML Forms

- **<label> tag**
 - used to give labels to input fields
 - Ex.

<label>First Name:

`<input type="text" name="fname">`

</label>

HTML Forms

- **<fieldset> tag**
 - used to group input fields in a form
 - the title/label of the group is set using the **<legend>** tag
 - **Tag format:**

```
<fieldset>  
  <legend>...</legend>  
  ... one or more input fields ...  
</fieldset>
```
- **Attributes:**
 - **<legend>**
 - align="alignment" {left, center, right}

HTML Forms

- Example for input types:

This is a textarea example....|

Login Page

Username:

Password:

Login

Cancel

Personal Information

First Name:

Last Name:

Age:

Gender:

☐

Male

☐

Female

Department:

Select Department



Hobbies:

☐

Swimming

☐

Football

☐

Volleyball

☐

Basket

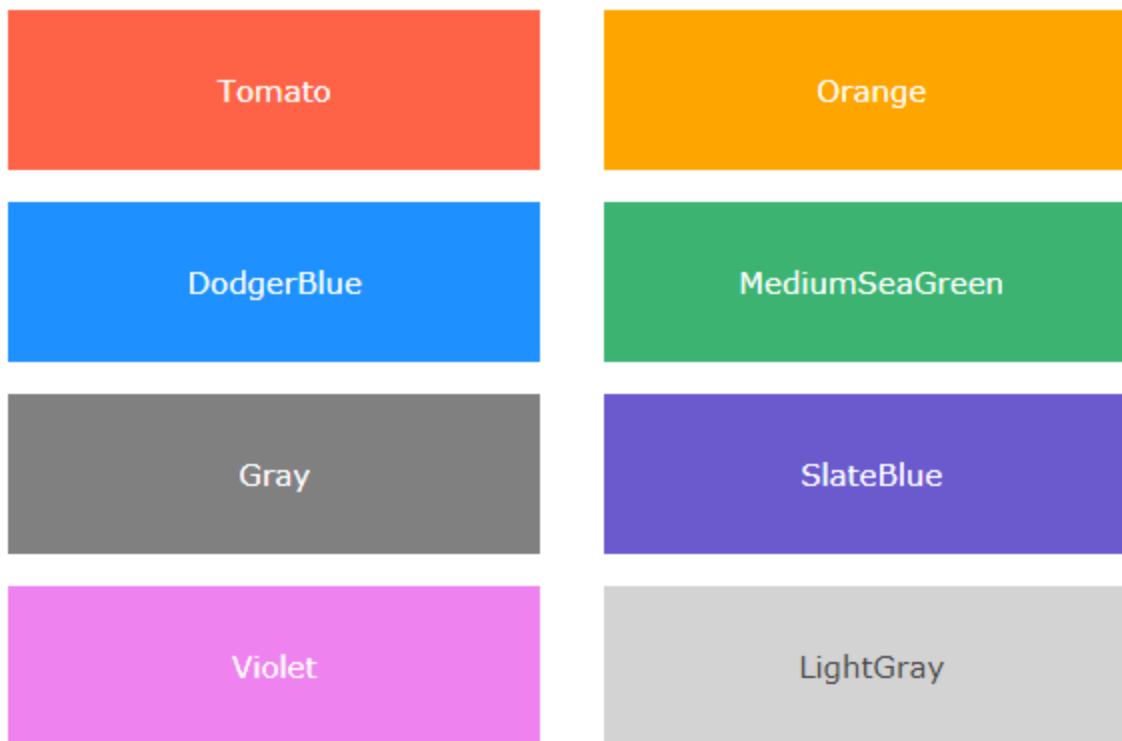
Register

Exercise

- Create an HTML page which displays student registration screen with
 - a **name** field
 - an **ID** field
 - a **department** field {select box with values:
 1. Computer Science
 2. Information Technology
 3. Computer Engineering}
 - a **semester** field {select box with values:
 1. I
 2. II}
 - an **academic year** field {select box with values: 1998-2000, 2000 default}
 - a button to submit the form
 - a button to reset the form

HTML Color

- HTML colors are specified using predefined **color names**, or **RGB**, **HEX**, **HSL**, **RGBA**, **HSLA** values.



- Hex color codes**: the intensity of red, green and blue

XX XX XX

Blocks (Divisions)

- In HTML, we can create divisions of an HTML document using the `<div>` tag.
- A `<div>` is a logical block tag that has no predefined meaning or rendering
- Very important for page layout design
- The `<div>` tag works well with CSS
- **Format**
 - `<div> ... </div>`
- **Attributes:**
 - `align="alignment"` {left, right, center} - define content align.

HTML Marquee

- Marquee Tag is a non-standard HTML element which is used to scroll a image or text horizontally or vertically.
- It scrolls the image or text up, down, left or right automatically.
- **Format**
 - `<marquee> </marquee>`
- **Supporting browsers**



HTML Marquee

Attribute	Description
behavior	It facilitates user to set the behavior of the marquee to one of the three different types: scroll, slide and alternate.
direction	defines direction for scrolling content. It may be left, right, up and down.
width	defines width of marquee in pixels or %.
height	defines height of marquee in pixels or %.
hspace	defines horizontal space in pixels around the marquee.
vspace	defines vertical space in pixels around the marquee.
scrolldelay	defines scroll delay in seconds.
scrollamount	defines scroll amount in number.
loop	defines loop for marquee content in number.
bgcolor	defines background color. It is now <i>deprecated</i> .

HTML Video

- The HTML video tag is **used for streaming video files** such as a movie clip, song clip on the web page.
- Video formats supported for HTML video tag: **mp4, webM, ogg**
- **Format**

<video controls>

<source src="movie.mp4" type="video/mp4">

Your browser does not support the html video tag.

</video>

HTML Video

Attribute	Description
controls	It defines the video controls which is displayed with play/pause buttons.
height	It is used to set the height of the video player.
width	It is used to set the width of the video player.
poster	It specifies the image which is displayed on the screen when the video is not played.
autoplay	It specifies that the video will start playing as soon as it is ready.
loop	It specifies that the video file will start over again, every time when it is completed.
muted	It is used to mute the video output.
preload	It specifies the author view to upload video file when the page loads.
src	It specifies the source URL of the video file.



END OF CHAPTER TWO

Next: **Chapter Three: CSS**