Basic HTML
Scripting and Computer Environment - Lecture 06

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Basic HTML
Simple tags
Text formatting and tables
Miscellaneous

Introduction
Hello World
Parts of HTML page
Tips

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Introduction

HTML (or HyperText Markup Language) is used to created web pages. Browsers interpret HTML pages to determine what are the contents of the page and how it should be displayed.

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Introduction

HTML (or HyperText Markup Language) is used to created web pages. Browsers interpret HTML pages to determine what are the contents of the page and how it should be displayed.

HTML is a markup language and not a programming language. There are no conditional statements or loops or variables in HTML

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Introduction

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What we finally see when we browse some website is either static HTML or HTML output of dynamic page. All web site in this sense use HTML. The HTML code can be augmented by style sheets and javascript but some HTML code must be there.

Hello World

```
<html>
<head>
    <title>Hello World</title>
</head>
<body>
    Hello World
</body>
</html>
```

Refer sample file: hello_world.html

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Parts of HTML page

- head
    - title
- body
    - paragraph
    - headings
    - hyperlinks
    - images
    - lists
    - tables
    - form

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Tips

- Always close tags. In case of single tags end them with '/>.' and not '>'.

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Tips

- Always close tags. In case of single tags end them with '/>.' and not '>'.
- Use lowercase letters for all tag and attribute names.

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Tips

- Always close tags. In case of single tags end them with '/>.' and not '>'.
- Use lowercase letters for all tag and attribute names.
- Enclose attribute values in quotes. Both single and double quotes are acceptable.

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Tips

- Always close tags. In case of single tags end them with '/>.' and not '>'.
- Use lowercase letters for all tag and attribute names.
- Enclose attribute values in quotes. Both single and double quotes are acceptable.
- You can see source code of page you are seeing by using "View Source" option of browser.

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Headings and Paragraphs
Images, New lines and Horizontal rules
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2. Simple tags
   - Headings and Paragraphs
   - Images, New lines and Horizontal rules
   - Hyperlinks
   - Lists

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Headings and Paragraphs

Headings : Tags <h1> .. </h1> to <h6> .. </h6> can be
used to create different types of HTML headings.
(Refer sample file: headings.html)

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Headings and Paragraphs

Headings : Tags <h1> .. </h1> to <h6> .. </h6> can be used to create different types of HTML headings. (Refer sample file: headings.html)

Paragraphs : Tags <p> .. </p> can be used to define paragraphs. The paragraphs are vertically separated and can be aligned differently from other paragraphs. (Refer sample file: paragraphs.html)

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Images, New lines and Horizontal rules

Images : <img> tag can be used to display image inside
HTML document. (Refer sample file: images.html)

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Images, New lines and Horizontal rules

Images : $<$img$>$ tag can be used to display image inside HTML document. (Refer sample file: images.html)

New lines : $<$br $/>$ tag can be used to indicate to browser that following contents should be displayed on new line. Since HTML is white space in-sensitive, this tag is useful to start new line. (Refer sample file: newlines.html)

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Images, New lines and Horizontal rules

Images : \<img\> tag can be used to display image inside HTML document. (Refer sample file: images.html)

New lines : \<br /\> tag can be used to indicate to browser that following contents should be displayed on new line. Since HTML is white space in-sensitive, this tag is useful to start new line. (Refer sample file: newlines.html)

Horizontal rule : \<hr\> tag can be used to display a horizontal line. (Refer sample file: horizontal_rules.html)

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Hyperlinks

Anchor hyperreferences : <a> tag can be used to link to other documents/pages using their absolute or relative path. (Refer sample file: links.html)

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Hyperlinks

Anchor hyperreferences : <a> tag can be used to link to other documents/pages using their absolute or relative path. (Refer sample file: links.html)

Anchor names : <a> tag can be used to create point in page to which one can refer using other <a> tags. (Refer sample file: links2.html)

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Hyperlinks

Anchor hyperreferences : <a> tag can be used to link to other
documents/pages using their absolute or relative
path. (Refer sample file: links.html)

Anchor names : <a> tag can be used to create point in page to
which one can refer using other <a> tags. (Refer
sample file: links2.html)

Anchor hyperreferences : <a> tag can be used to refer to other
point in same document. (Refer sample file:
links.html)

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Lists - 1

Unordered lists : <ul> tag can be used to start unordered list.
 tags can be used to start and end individual
items in unordered list. Ordered list can be of
numbers, small alphabets, capital alphabets, small
roman numbers and capital roman numbers. (Refer
sample file: lists.html)

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Lists - 1

Unordered lists : <ul> tag can be used to start unordered list.
 tags can be used to start and end individual
items in unordered list. Ordered list can be of
numbers, small alphabets, capital alphabets, small
roman numbers and capital roman numbers. (Refer
sample file: lists.html)

Ordered lists : <ol> tag can be used to start ordered list.
tags can be used to start and end individual items in
ordered list. Ordered list can have three types of
bullets disc, circle or square. (Refer sample file:
lists.html)

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Lists - 2

Definition lists : <dl> tag can be used to start definition list. <dt> tag can be used to start and end definition term in definition list. <dd> tag can be used to start and end definition description of each definition term in definition list. (Refer sample file: lists.html)

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Text formatting - 1

Common text formatting tags:

$<b>$: Bold text

$<big>$: Big text

$<em>$: Emphasized text

$<i>$: Italic text

$<small>$: Small text

$<strong>$: Strong text

$<sub>$: Subscripted text

$<sup>$: Superscripted text

$<ins>$: Inserted text

$<del>$: Deleted text

Refer sample file: text_formatting.html

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Text formatting - 2

Computer text formatting tags:

<code> : To display computer code

<kbd> : To display keyboard text

<samp> : To display sample code

<tt> : To display teletype text

<var> : To display variables

<pre> : To display preformatted text

Refer sample file: text_formatting.html

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Text formatting - 3

Citations, Quotations, and Definition tags:

<abbr> : For abbreviation

<acronym> : For acronym

<address> : For displaying address

<bdo> : To change text direction

<blockquote> : To write long quotation

<q> : To write short quotation

<cite> : To write a citation

<dfn> : To write definition

Refer sample file: text_formatting.html

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Text formatting - 4

Deprecated tags (avoid using these):

<center> : For centering enclosed contents

<font> : For changing font style, face or size

<basefont> : For defining default font style, face or size for page

<s> : To strike text

<strike> : To strike text

<u> : To underline text

Deprecated attributes (avoid using these):

color= : For defining foreground color

bgcolor= : For defining background color

align= : For stating alignment of contents of container tag

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Text formatting - 5

Most HTML tags support style attribute to which we can assign
CSS (Cascaded Style Sheet) style values for formatting. Some
examples of styles based formatting are:

- background-color:yellow
- color:black
- text-align:center
- font-size:10px
- font-family:Times
- text-decoration:underline

Refer sample file: style introduction.html

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Tables - 1

Tables can be displayed using HTML with the help of following tags:

<table> : This tag is used to start / end table.

<thead> : This tag is used to start / end table header.

<tbody> : This tag is used to start / end table body.

<tfoot> : This tag is used to start / end table footer.

<tr> : This tag is used to start / end new row in table header, body or footer.

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Tables - 2

Tables can be displayed using HTML with the help of following tags:

<th> : This tag can be used to start / end heading in table header section inside table row. Heading for different columns, go into separate <th> tag pairs inside same <tr>.

<td> : This tag can be used to start / end data of one cell of one row in table body. This tag can be used many times inside same <tr> tag, once for specifying data of each cell (column).

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Tables - 3

```
<table border="1">
    <thead>
        <tr>
            <th>Heading</th>
            <th>Another Heading</th>
        </tr>
    </thead>
    <tbody>
        <tr>
            <td>row 1, cell 1</td>
            <td>row 1, cell 2</td>
        </tr>
    </tbody>
</table>
```

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Tables - 4

```
<table>
    <!-- Optional table head -->
    <tbody>
        <tr>
            <td>row 1, cell 1</td>
            <td>row 1, cell 2</td>
        </tr>
        <tr>
            <td>row 2, cell 1</td>
            <td>row 2, cell 2</td>
        </tr>
    </tbody>
</table>
```

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Tables - 5

- Most table tags accept style attribute for formatting data inside that tag.
- <thead>, <tbody> and <tfoot> are not widely supported yet. This is expected to change soon as per w3schools website.
- <tfoot> must appear before <tbody> within a table, so that a browser can render the foot before receiving all the rows of data.
- Tables also take border, cellspacing, cellpadding and width attributes.

Refer sample file: tables.html

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HTML color names

The W3C HTML and CSS standards have listed only 16 valid color names: aqua, black, blue, fuchsia, gray, green, lime, maroon, navy, olive, purple, red, silver, teal, white, and yellow.

You can see more than 100 non-standard color names supported by most browsers at w3schools website

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HTML special characters

There are few special characters like $<$, $>$ which are interpreted by browsers as start and end of tag and hence they do not get displayed by browser, if we type them as normal text. The following special characters can be typed using HTML escape sequences or HTML entities:

- $<$: <
- $>$: >
- ' ' :   (Space that wont get combined with other space characters)
- " : "

For more complete list you can visit w3schools website

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HTML comments

- To comment some text inside HTML document we can use
  $<$!– comment –$>$.
- The HTML comments can be seen by viewers if they use view
  source option in browser and hence is popular technique in
  on-line treasure hunt competitions to hide clues.
- The javascript code inside HTML comments would still get
  interpreted by browser. This feature is provided to protect old
  browsers which did not understand javascript. To them
  javascript code would look like comment.