

# Web Design & Development I

## IDD103

### Introduction to HTML5



Prepared by Mr. Kinley Tshering

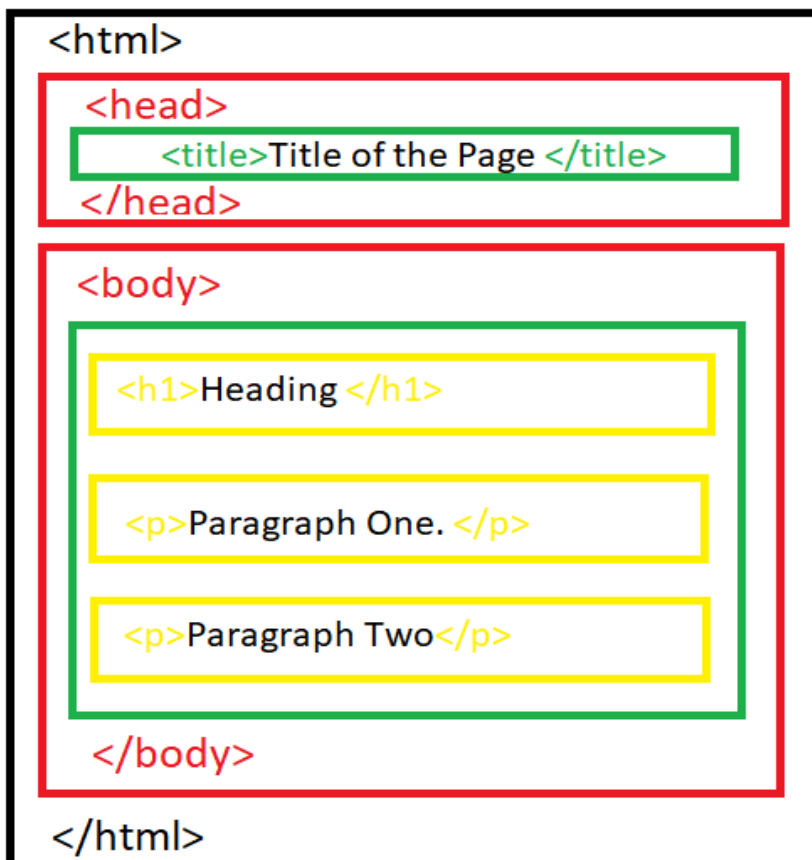
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## What is HTML5?

- HTML stands for Hyper Text Markup Language.
- It is used to design web pages using markup language.
- Hypertext defines the link between the web pages.
- Markup language is used to define the text document within a tag which defines the structure of web pages.
- HTML5 means that it is the fifth and current version of HTML.

## HTML Page Structure



- The HTML structure is composed of two parts.
  - A declarative header section.
  - A body, which contains the document's actual content.
- The content inside the `<title>` elements will be shown in the browser's title bar.
- The content inside the `<body>` section will be displayed in the browser.

## HTML Comments

- HTML comments are not displayed in the browser.
- Comments help document HTML source code.
- It can also hide more than one line, everything between the `<!--` and the `-->` will be hidden from the display.
- Example:

```
<!--This is Comment-->
```

## The `<!DOCTYPE>` Declaration

- All HTML documents must start with a document type declaration: `<!DOCTYPE html>`
- The `<!DOCTYPE>` declaration represents the document type, and helps browsers to display web pages correctly.
- It must only appear once, at the top of the page (before any HTML tags).
- The `<!DOCTYPE>` declaration for HTML5 is:

```
<!DOCTYPE html>
```

## HTML Headings

- A HTML heading is defined as a title or a subtitle which displays on the webpage.
- Six different HTML headings are defined with the `<h1>` to `<h6>` tags.
- h1 is the largest heading tag and h6 is the smallest one. So h1 is used for most important heading and h6 is used for least important.

Example

Output

```
<!DOCTYPE html>
<head>
  <title>headings</title>
</head>
<body>
  <h1>Heading 1</h1>
  <h2>Heading 2</h2>
  <h3>Heading 3</h3>
  <h4>Heading 4</h4>
  <h5>Heading 5</h5>
  <h6>Heading 6</h6>
</body>
</html>
```

# Heading 1

## Heading 2

### Heading 3

#### Heading 4

##### Heading 5

###### Heading 6

## HTML Paragraphs

- The HTML `<p>` element defines a paragraph.
- A paragraph always starts on a new line, and browsers automatically add some white space (a margin) before and after a paragraph.
- Example:

```
<!DOCTYPE html>
<head>
  <title>Paragraph</title>
</head>
<body>
  <p>The HTML paragraph one</p>
  <p>A paragraph always start on a new line</p>
</body>
</html>
```

### Output

The HTML paragraph one

A paragraph always start on a new line

## HTML Links - Hyperlinks

- A link from a hypertext document to another location, activated by clicking on a highlighted word or image.
- When you move the mouse over a link, the mouse arrow will turn into a little hand.
- The HTML `<a>` element defines a link.
- Syntax:

```
<a href=""></a>
```

- Example:

```
<a href="KCC_about.html">About</a>
```

- href attribute indicates the link's destination.
- The link text is the part that will be visible to the reader.

## HTML Links - target attribute

- Example:

```
<a href="KCC_about.html" target="_blank">About</a>
```

- The target attribute specifies where to open the linked document.

Target Attributes	Description
<code>_self</code>	Default. Opens the document in the same window/tab as it was clicked
<code>_blank</code>	Opens the document in a new window or tab
<code>_parent</code>	Opens the document in the parent frame
<code>_top</code>	Opens the document in the full body of the window

## Absolute URL

- In Absolute URL a full web address will be in the href attribute.
- Example:

```
<a href="https://www.gcit.edu.bt/">GCIT</a>
```

## Relative URL

- A local link to a page within the same website
- Example:

```
<a href="KCC_about.html">About</a>
```

## HTML Image

- The HTML **<img>** tag is used to embed an image in a web page.
- Images are not technically inserted into a web page but linked to web pages.
- Example:

```

```

- src attributes specifies the path to the image
- alt attributes specifies an alternate text for the image

### Image as a link

- Image as a link means putting **<img>** tag inside the **<a>** tag.
- Example:

```
<a href="index.html">  
      
</a>
```

## Links to Email Address

- Use mailto inside href attributes to let them send a new email or creates links that opens the user's email
- Example:

```
<a href="mailto:KCC@example.com">KCC@example.com</a>
```

# HTML Lists

- HTML lists allow web developers to group a set of related items in lists.
- There are Three type of list are there
  - Unordered List
  - Ordered List
  - Description List

## Unordered List

- An unordered list starts with the **<ul>** tag.
- Each list item starts with the **<li>** tag embedded inside **<ul>** tag.

### Example

```
<ul>  
  <li>List Item One</li>  
  <li>List Item Two</li>  
  <li>List Item Three</li>  
</ul>
```

### Output

- List Item One
- List Item Two
- List Item Three

## Ordered List

- An ordered list starts with the **<ol>** tag.
- Each list item starts with the **<li>** tag embedded inside **<ol>** tag.

### Example

```
<ol>  
  <li>List Item One</li>  
  <li>List Item Two</li>  
  <li>List Item Three</li>  
</ol>
```

### Output

1. List Item One
2. List Item Two
3. List Item Three

## Description List

- A description list is a list of terms, with a description of each term.
  - The **<dl>** tag defines the description list
  - The **<dt>** tag defines the term
  - The **<dd>** tag describes each term

### Example

### Output

```
<dl>
  <dt>GCIT</dt>
  <dd>Location: Mongar</dd>
  <dt>Sherubtse</dt>
  <dd>Location: Tashigang</dd>
</dl>
```

GCIT  
 Location: Mongar  
 Sherubtse  
 Location: Tashigang

## HTML <hr> tag

- The **<hr>** tag defines a thematic break to display as horizontal rule used to separate content in an HTML page

### Example

```
<p>defines a thematic break to display as horizontal
rule</p>
<hr>
<p>it is used to separate content in an HTML page</p>
```

### Output

defines a thematic break to display as horizontal r

---

it is used to separate content in an HTML page

## HTML <pre> tag

- The **<pre>** tag defines preformatted text
- Text in a **<pre>** element is displayed in a fixed-width font, and the text preserves both spaces and line breaks.
- The text will be displayed exactly as written in the HTML source code.

### Example

```
<pre>
  Text in a pre element
  is displayed in a fixed-width
  font, and it preserves
  both      space and
  line breaks
</pre>
```

### Output

Text in a pre element  
 is displayed in a fixed-width  
 font, and it preserves  
 both space and  
 line breaks



## HTML figure and figcaption

- The **<figure>** tag specifies self-contained content, like illustrations, diagrams, photos, code listings, etc.
- The **<figcaption>** element is used to add a caption for the <figure> element.

Example

```
<figure>  
    
  <figcaption>Fig.1 - Coffee</figcaption>  
</figure>
```

Output



Fig.1 - Coffee

## HTML <div> tag

- The **<div>** tag defines a division or a section in an HTML document.
- The **<div>** tag is used as a container for HTML elements - which is then styled with CSS or manipulated with JavaScript.
- The **<div>** tag is easily styled by using the class or id attribute.
- Any sort of content can be put inside the **<div>** tag!

#####Thankyou#####