



REPUBLIC OF ZAMBIA



COSTAZ MANSA

WEB DESIGNING USING HTML



SOME LANGUAGES USED FOR WEBSITE DEVELOPMENT



HTML

What is html?

- ❖ **Html stands for Hyper Text Markup Language.**
- ❖ **It is one of the languages used to create websites**
- ❖ **HTML is used to give content to a web page and instructs web browsers on how to structure that content.**
- ❖ **Html can be combined with other web languages to make it presentational and responsive.**
- ❖ **Html has a file extension .html.**

TAGS

- ❖ **HTML uses angle tags `<>` which are classified as opening tags `<>` and closing tags, which contain a forward slash `</>`**
- ❖ **Text is inserted between these opening and closing tags.**
- ❖ **Tags defines the layout, look and feel of the website.**
- ❖ **An example on the use of tags is a paragraph:**

```
<p> Costaz is the best association</p>
```
- ❖ **If you know how to use tags correctly, then making a website will be easier and quicker.**

CHOOSING YOUR TEXT EDITOR

- ❖ There are many text editors to pick from in order to code or edit html files. Just pick your favorite among many



CHOOSING YOUR BROWSER



**Mozilla
Firefox**



**Google
Chrome**



**Microsoft
Internet
Explorer**

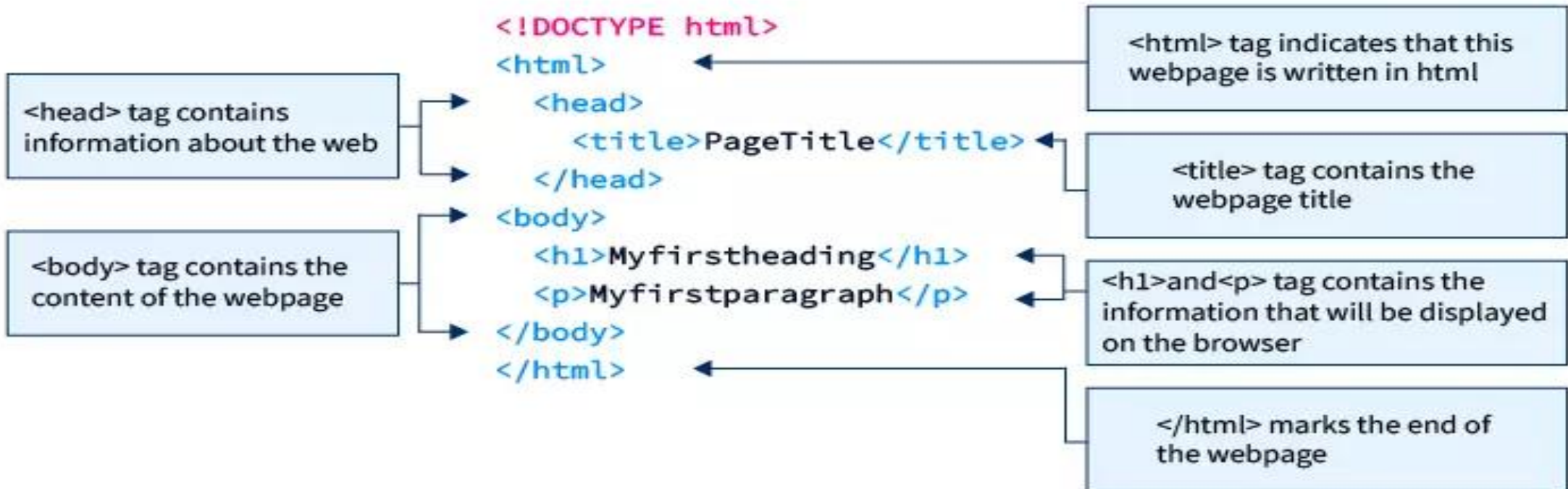


**Apple
Safari**



Opera

STRUCTURE OF A WEB PAGE



BASIC TAGS

- ❖ **Meta tag:** meta tag tells the browser the types of characters one is using. It also defines information about a file.
- ❖ This tag is put just after the head tag

E.G `<meta charset="UTF-8">`

TITLE TAG

- ❖ This is the identity of the content of the page
- ❖ The title is critical and should be chosen well
- ❖ It has a bearing on ranking of content it represents in some search engines
- ❖ As an identity of the page, the title will also appear
- ❖ in lists under favorites, History and Bookmark
- ❖ The title will appear on top of your webpage on the browser

BODY TAG

- ❖ The body tag is where every content displayed on the browser is found.
- ❖ Information to do with the body tag may include headers, paragraphs, links, images, videos, among others.

TEXT FORMATTING

- ❖ In HTML, special tags are used to format text
- ❖ Create paragraphs,
- ❖ Move to next line
- ❖ And create headings e.g.
 - Bold Face , <i> Italics </i>, <u> Underline </u>
 - <p> New Paragraph </p>
 -
 Next Line/ line break

HEADERS

- ❖ Headers in html provide the webpage with different font sizes.
- ❖ H1 to h6 level headers are used in html.
- ❖ The bigger the header, the smaller the size.
- ❖ H1 is the largest heading style while h6 is the smallest.

E.g. `<h1> Names of workshop participants</h1>`

NESTED TAGS

- ❖ Nested tags are tags that are organized as sub-tags under a main tag.
- ❖ With nested tags, there is a main tag and one or more sub-tags.
`<h1>Creations</h1>`
- ❖ When closing the tags after the inserted text the last tag used is closed first

NESTED TAGS

- ❖ Nested tags are tags that are organized as sub-tags under a main tag.
- ❖ With nested tags, there is a main tag and one or more sub-tags.

```
<h1><b>Creations</b></h1>
```

```
<p>This is my <b><i>paragraph</i></b></p>
```
- ❖ When closing the tags after the inserted text the last tag used is closed first

TEXT ALIGNMENT

- ❖ The ALIGN attribute can be inserted in the <p> and <h> tags to align text right, left, justify and center.

For example, <h1 ALIGN="CENTER"> Ministry of Education </h1>

- ❖ This creates a biggest header which is also centered.

COMMENTS

- ❖ Comments are useful in explaining some important aspects of the html code.
- ❖ They serve a purpose of reminding the html writer certain codes or the second person to know what the programmer meant by that code
E.g. To create a comment, use the following tag `<!--comment-->`
- ❖ Note that comments are not rendered by the browser.

PAGE FORMATTING

Use of colors

❖ Individual elements in html can be styled by the use of colors.

Examples `<p style="color: blue;"> Page formatting is cool</p>`

`<body style="background-color:burlywood;">`

❖ The above two examples are for inline style.

❖ To style the same, you can use internal style.

❖ This is done in the head, immediately after the title. Selectors are used.

Examples: `<style>`

`body{`

`background-color: burlywood;`

`}`

`</style>`

PAGE FORMATTING CONT..

Use of colors

- ❖ One can change colors for the body, the header or paragraphs
- ❖ Ordinary colors or background colors can be made.

Example: Using your favorite text editor, create the following codes:

```
<body style="background-color: lightblue;">
```

```
<h2 style="color: Green;"> You can style html<h2>
```

```
<p style="color: red; background-color: blue;">
```

LINKS

- ❖ A link is a digital reference to data that the user can follow or be guided to by clicking or tapping.
- ❖ A hyperlink points to a whole document or to a specific element within a document.
- ❖ A link has three parts: **destination**, a **label** and a **target**
- ❖ You can link webpages in the same computer, on a different server, to an image, video or pdf file.

EXAMPLES OF LINKS

`Google Home page`

- ❖ In the above code, <https://www.google.com> is the **destination**.
- ❖ The destination specifies the address of the Web page or file the user will access when the link is clicked
- ❖ The **label** is the text that will appear underlined or highlighted on the page. This can be nested with other tags if you want.
- ❖ `Google Home page` will open the page on a new tab.

EXAMPLES OF LINKS CONT.....

- ❖ You can also access a picture or pdf file using a link

Example: `cat`

`<h1>progress in cs</h1>`

ANCHORS

- ❖ To create an anchor, type ` label ` at the point in the Web page where you want the user to jump to
- ❖ To create the link, type ` label ` at the point in the text where you want the link to appear

Example: `Chapter Two
`

EXAMPLE OF ANCHORS

- `Chapter Two
`

Link

Table of Contents

[Introduction](#)

[Chapter One](#)

[Chapter Two](#)

- `Chapter Two
`

Anchor

Introduction

(Text for
Introduction)

Chapter 1

IMAGES

- ❖ Images can be displayed on your webpage according to your preferences.
- ❖ You can even resize as per your wish in terms of width and height
- ❖ Borders can be added to an image too using pixels.

Example ``

- ❖ Some browsers don't support images. So, the ALT attribute can be used to create text that appears instead of the image.

VIDEOS AND YOUTUBE FRAMES

- ❖ Videos saved on your computer can be put into your website.

- ❖ A you tube video can be used as well in form of a link.

Example: `< video src="Lukwesa.mp4">Nice song</video>`

- ❖ The video in the example above will not play since it is lacking control tools. Add video controls and the video will play.

`< video src="Lukwesa.mp4"controls width="300"> song</video>`

ADDING A THUMB NAIL TO A VIDEO

- ❖ Specific thumb nails can be added to the video on html

Examples

```
< video src="Lukwesa.mp4" poster="Thumb.jpg" controls width="300">song</video>
```

```
< video src="Lukwesa.mp4" poster="Thumb.jpg" autoplay controls width="300">song</video>
```

YOU TUBE FRAMES

- ❖ Instead of using videos, you tube frames may be used for your videos
- ❖ Go to you tube, click on share, the embed. This will give you codes
- ❖ Copy the iframe and paste it in your html code.
- ❖ When click on that link in the browser, a video will play.
- ❖ The width and height can be modified according your preferences

LISTING STYLES

- ❖ Html allows you to make listing styles just as you will do it in ms word
- ❖ There are two types of listing styles namely; **ordered ** and **unordered ** listing styles
- ❖ Ordered listing styles are numbered while unordered listing styles are rendered as bullets in the browser.

EXAMPLES OF LISTING STYLES

❖ Ordered listing styles

```
<ol>
```

```
<li> mangoes</li>
```

```
<li>oranges</li>
```

```
<li>Guavas</li>
```

```
</ol>
```

Results in the browser

1. mangoes

2. oranges

3. Guavas

EXAMPLES OF LISTING STYLES

❖ Unordered listing styles

```
<ul>
```

```
<li> mangoes</li>
```

```
<li>oranges</li>
```

```
<li>Guavas</li>
```

```
</ul>
```

Results in the browser

- Mangoes
- Oranges
- guavas

TABLES

- ❖ tables can be used to display rows and columns of data, create multi-column text, captions for images and sidebars
- ❖ the `<table>` tag is used to create a table;
- ❖ the `<tr>` tag defines the beginning of a row while the `<td>` defines the beginning of a cell
- ❖ Many people are challenged by the table tag. Otherwise, mastering it is not a big deal

ADDING BOARDERS TO TABLES

- ❖ The BORDER=n attribute allows you to add a border n pixels thick around the table
- ❖ The internal style below can be used to add a boarder

Example:

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

- ❖ Collapsing a boarder will enable a table to be formatted nicely into one boarder

EXAMPLE OF A SIMPLE TABLE

```
<!doctype html>
<html>
<head>
<style>
table, th, td {
border: 1px solid black;
border-collapse: collapse;
}
</style>
<title> tables</title>
</head>
```

```
<body>
<h2>Collapsed Borders</h2>
<table style="width:70%">
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
<tr>
<td>Pants</td>
<td>2</td>
</tr>
</table>
</html>
</body>
```

ADJUSTING THE TABLE WIDTH

- ❖ when a web browser displays a table, it often adds extra space. to eliminate this space use the width=n attribute in the <table> and <td> tags
- ❖ keep in mind that a cell cannot be smaller than its contents and if you make a table wider than the browser window, users will not be able to see parts of it

CENTERING A TABLE

❖ there are two ways to center a table

❖ ✓ type `<table align="center;">`

❖ ✓ enclose the `<table>` tags in opening and closing `<center>` tags as follows: `<center>`

`<table>`

`</table>`

`</center>`

WRAPPING TEXT AROUND A TABLE

- ❖ it is possible to wrap text around a table. this technique is often used to keep images and captions together within an article
- ❖ to wrap text around a table, type: `<table align="left;">`
to align the table to the left while the text flows to the right
- ❖ •create the table using the `<tr>`, `<td>` and the closing `</table>` tags as you normally would.

ADDING SPACE AROUND A TABLE

- ❖ •to add space around a table, use the `hspace=n` and `vspace=n` attributes in the `<table>` tag

Example: `<table hspace=20 vspace=20>`

SPANNING CELLS ACROSS COLUMNS

- ❖ It is often necessary to span one cell across many columns. For example, you would use this technique to span a headline across the columns of a newspaper article
- ❖ To span a cell across many columns, type `<TD COLSPAN=n>`, where `n` is the number of columns to be spanned

SPANNING CELLS ACROSS ROWS

❖ to span a cell across many rows, type `<td rowspan=n>`, where n is the number of rows

ALIGNING CELL CONTENT

- ❖ By default, a cell's contents are aligned horizontally to the left and vertically in the middle
- ❖ Use `VALIGN=direction` to change the vertical alignment, where "direction" is top, middle, bottom or baseline
- ❖ Use `ALIGN=direction` to change the horizontal alignment where "direction" is left, center or right.

CONTROLLING CELL SPACING

- ❖ cell spacing is the space between cells while cell padding is the space around the contents of the cell
- ❖ to control both types of spacing, use the `cell spacing=n` and `cell padding=n` attributes in the `<table>` tag

CHANGING A CELLS COLOR

❖ To change a cell's color, add the Bg-color="color" attribute to the <TD> tag

Example:<TD BGCOLOR="blue;">

❖ This is an inline css style.

DIVIDING A TABLE INTO COLUMN GROUPS

- ❖ A table can be divided into two kinds of column groups: structural and non-structural
- ❖ Structural column groups control where dividing lines are drawn; while non-structural groups do not

COLUMN GROUPS

- ❖ To create structural column groups, type: `<COLGROUP SPAN=n>` after the `<TABLE>` tag, where n is the number of columns in the group
- ❖ To create non-structural column groups, type `<COL SPAN=n>` where n is the number of columns in the group

DIVIDING TABLE INTO HORIZONTAL SECTIONS

- ❖ You can also create a horizontal section consisting of one or more rows. This allows you to format the rows all at once.
- ❖ To create a horizontal section, type: `<thead>`, `<tbody>` or `<tfoot>` before the first `<TR>` tag of the section.
- ❖ Netscape does not support these tags

CONTROLLING LINE BREAKS

- ❖ Unless you specify otherwise, a browser will divide the lines in a cell as it sees fit.
- ❖ The NOWRAP attribute placed within the <TD> tag forces the browser to keep all the text in a cell on one line

Example: `<td nowrap>Manda Hill`

CONTROLLING LINE BREAKS

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- ❖ The NOWRAP attribute placed within the <TD> tag forces the browser to keep all the text in a cell on one line

Example: `<td nowrap>Manda Hill`

INPUT AND FORMS

- ❖ Input tags allows website users to put information on the browser which will be submitted to a web server.
- ❖ Text boxes, text areas, check boxes, radio buttons, drop down menus and many more are used for users to interact with and input information.
- ❖ A form is an area of a web page that allows users to enter information into fields
- ❖ A form may be used to collect personal information, opinions polls, user preferences and other kinds of information.

BASIC COMPONENTS OF A WEB FORM

❖ There are two basic components of a web form namely:

1. **the shell** - the part that the user fills out
2. **script** - which processes the information

EXAMPLE OF A FORM

FORM EXAMPLE

```
<form>
```

```
First name: <br>
```

```
<input type = "text" name = "firstname" ><br>
```

```
Lastname: <br>
```

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

```
</form>
```

First name:

Lastname:

THE FORM SHELL

❖ A Form shell has three important parts:

- (a) The <FORM> tag, which includes the address of the script which will process the form.
- (b) The form elements, are objects like text boxes and radio buttons
- (c) The submit button which triggers the script to send the entered information to the server.

CREATING THE SHELL

- ❖ To create a form shell, type `<FORM METHOD=POST ACTION="script_url">` where "script_url" is the address of the script
- ❖ Create form elements
- ❖ End with a closing `</FORM>`

CREATING TEXT BOXES

❖ To create a text box, type:

```
<input type="text" name="name" value="value" size=n maxlength=n>
```

❖ The NAME, VALUE, SIZE and MAXLENGTH attributes are optional

TEXT BOX ATTRIBUTES

- ❖ The NAME attribute is used to identify the text box to the processing script
- ❖ The VALUE attribute is used to specify the text that will initially appear in the text box
- ❖ The SIZE attribute is used to define the size of the box in characters
- ❖ The MAXLENGTH attribute is used to define the maximum number of characters that can be typed in the box

CREATING LARGER TEXT AREAS

- ❖ To create larger text areas, type:

```
<textarea name="name" ROWS=n1 COLS=n2 WRAP> Default Text </textarea>
```

where n1 is the height of the text box in rows and n2 is the width of the text box in characters.

- ❖ The `WRAP` attribute causes the cursor to move automatically to the next line as the user types

AN EXAMPLE OF A LARGER TEXT AREA

```
<b>Comments</b>
```

```
<br>
```

```
<textarea name="Comments" ROWS=10 COLS=50 WRAP>
```

```
</textarea>
```

CREATING RADIO BUTTONS

- ❖ Radio buttons let a user select only one of a limited number of choices.
- ❖ To create a radio button; type the following in your text editor:

```
<INPUT TYPE="radio" NAME="name" VALUE="data"> Label,
```

where “data” is the text that will be sent to the server if the button is checked and “Label” is the text that identifies the button to the user

RADIO BUTTON EXAMPLE

```
<input type="radio" id="html" name="fav_language" value="HTML">
```

```
<label for="html">HTML</label><br>
```

```
<input type="radio" id="css" name="fav_language" value="CSS">
```

```
<label for="css">CSS</label><br>
```

```
<input type="radio" id="javascript" name="fav_language" value="JavaScript">
```

```
<label for="javascript">JavaScript</label>
```

CHECK BOXES

- ❖ Checkboxes are used to let a user select one or more options of a limited number of choices.

Tip: Always add the <label> tag for best accessibility practices!

```
<input type="checkbox" name="name" value="value">label
```

- ❖ if you give a group of radio buttons or checkboxes the same name, the user will only be able to select one button or box at a time

EXAMPLES OF CHECK BOXES

```
input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">
```

```
<label for="vehicle1"> I have a bike</label><br>
```

```
<input type="checkbox" id="vehicle2" name="vehicle2" value="Car">
```

```
<label for="vehicle2"> I have a car</label><br>
```

```
<input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">
```

```
<label for="vehicle3"> I have a boat</label><br>
```

CREATING DROP DOWN MENUS

- ❖ a drop-down menu is a menu that offers a list of options.

- ❖ to create a drop-down menu, type:

```
<select name="name" size="n multiple"> then type:
```

```
<option value="value">label
```

- ❖ in this case, the size attribute specifies the height of the menu in lines and multiple allows users to select more than one menu option

EXAMPLE OF A DROP DOWN MENU

which of these subjects do you like?

<select>

<option value="commerce"> commerce

<option value="biology"> biology

<option value="mathematics"> mathematics

<option value="chemistry"> chemistry

</select>

CREATING A SUBMIT BUTTON

- ❖ to create a submit button, type:

```
<input type="submit">
```

- ❖ if you would like the button to say something other than submit, use the value attribute

```
<input type="submit" value="buy now!">
```

- ❖ The above example will create a button that says "buy now!"

CREATING A RESET BUTTON

❖ to create a reset button,

```
<input type="reset">
```

❖ the value attribute can be used in the same way to change the text that appears on the button

NOTE

- ❖ This presentation is not exhaustive. We need to put in more in the next workshop.

SHALOM SHALOM.

