

INTRODUCTION TO HTML

- ☐ HTML is the standard markup language for creating Web pages.
- ☐ HTML stands for Hyper Text Markup Language
- ☐ HTML describes the structure of Web pages using markup
- ☐ HTML elements are the building blocks of HTML pages
- ☐ HTML elements are represented by tags
- ☐ HTML tags label pieces of content such as "heading", "paragraph", "table", and so on
- ☐ Browsers do not display the HTML tags, but use them to render the content of the page

HTML TAGS

- ☐ HTML tags are element names surrounded by angle brackets:
`<tagname>content goes here...</tagname>`
- ☐ HTML tags normally come in pairs like `<p>` and `</p>`
- ☐ The first tag in a pair is the start tag, the second tag is the end tag
- ☐ The end tag is written like the start tag, but with a forward slash inserted before the tag name

STRUCTURE OF HTML DOCUMENT

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
<h1>My First Heading</h1>
<p>My first paragraph.</p>
</body>
</html>
```

- ☐ The <!DOCTYPE html> declaration defines this document to be HTML5
- ☐ The <html> element is the root element of an HTML page
- ☐ The <head> element contains meta information about the document
- ☐ The <title> element specifies a title for the document
- ☐ The <body> element contains the visible page content
- ☐ The <h1> element defines a large heading
- ☐ The <p> element defines a paragraph

EXAMPLE:

```
<!DOCTYPE html>
<html>
<body>
<h1>My First Heading</h1>
<p>My first paragraph.</p>
</body>
</html>
```

HTML HEADERS

- ☐ Header tags are used to give headings in HTML document
- ☐ Headings are defined with the <h1> to <h6> tags.
 - <h1> defines the most important heading.
 - <h6> defines the least important heading. and so on.
- ☐ Search engines use the headings to index the structure and content of your web pages.
- ☐ Users skim your pages by its headings. It is important to use headings to show the document structure.

EXAMPLE:

```
<!DOCTYPE html>
<html>
<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>
```

OUTPUT:

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

HTML LINKING:

- ☐ Links are found in nearly all web pages. Links allow users to click their way from page to page.
- ☐ HTML links are hyperlinks.
- ☐ You can click on a link and jump to another document.
- ☐ When you move the mouse over a link, the mouse arrow will turn into a little hand.
- ☐ In HTML, links are defined with the <a> tag:

```
<a href="url">link text</a>
```

EXAMPLE:

```
<!DOCTYPE html>
<html>
<body>
<h2>HTML Links</h2>
<p><a href="https://www.w3schools.com/html/">Visit our HTML tutorial</a></p>
```

</body>

</html>

OUTPUT:

HTML Links

[Visit our HTML tutorial](#)

After clicking the link



HTML IMAGES

- ☐ Images can improve the design and the appearance of a web page.

HTML IMAGES SYNTAX

- ☐ In HTML, images are defined with the tag.
- ☐ The tag is empty, it contains attributes only, and does not have a closing tag.
- ☐ The src attribute specifies the URL (web address) of the image:

- o

THE ALT ATTRIBUTE

- ☐ The alt attribute provides an alternate text for an image, if the user for some reason cannot view it (because of slow connection, an error in the src attribute, or if the user uses a screen reader).

- The value of the alt attribute should describe the image:

Example

```

```

- If a browser cannot find an image, it will display the value of the alt attribute: Image Size - Width and Height
- You can use the style attribute to specify the width and height of an image.

Example

```

```

- Alternatively, you can use the width and height attributes:

Example

```

```

- The width and height attributes always defines the width and height of the image in pixels.

IMAGES IN ANOTHER FOLDER

- If not specified, the browser expects to find the image in the same folder as the web page.
- However, it is common to store images in a sub-folder. You must then include the folder name in the src attribute:

Example

```

```

IMAGES ON ANOTHER SERVER

- Some web sites store their images on image servers.
- Actually, you can access images from any web address in the world:

Example

```

```

ANIMATED IMAGES

- HTML allows animated GIFs:

Example

```

```

IMAGE AS A LINK

- To use an image as a link, put the tag inside the <a> tag:

Example

```
<a href="default.asp">  </a>
```

IMAGE MAPS

- Use the <map> tag to define an image-map. An image-map is an image with clickable areas.

Example

```
  
<map name="workmap">  
  <area shape="rect" coords="34,44,270,350" alt="Computer" href="computer.htm">  
  <area shape="rect" coords="290,172,333,250" alt="Phone" href="phone.htm">  
  <area shape="circle" coords="337,300,44" alt="Coffee" href="coffee.htm">  
</map>
```

- The name attribute of the <map> tag is associated with the 's usemap attribute and creates a relationship between the image and the map.
- The <map> tag contains a number of <area> tags, that defines the clickable areas in the image-map.

BACKGROUND IMAGE

- To add a background image on an HTML element, use the CSS property background-image:

Example

- To add a background image on a web page, specify the background-image property on the BODY element:

```
<body style="background-image:url('clouds.jpg')">  
<h2>Background Image</h2>  
</body>
```

SPECIAL CHARACTERS AND LINE**BREAKS HTML ENTITIES**

- Some characters are reserved in HTML.

- ☐ If you use the less than (<) or greater than (>) signs in your text, the browser might mix them with tags.
- ☐ Character entities are used to display reserved characters in HTML.
- ☐ A character entity looks like this: &entity_name;
OR
&#entity_number;
- ☐ To display a less than sign (<) we must write: < or <
- ☐ Advantage of using an entity name: An entity name is easy to remember
- ☐ Disadvantage of using an entity name: Browsers may not support all entity names, but the support for numbers is good.

LINE BREAKING

- ☐ The **HTML
 element** produces a line break in text (carriage-return). It is useful for writing a poem or an address, where the division of lines is significant.

EXAMPLE:

Mozilla Foundation

1981 Landings Drive

Building K

Mountain View, CA 94043-0801

USA

OUTPUT

Mozilla Foundation
1981 Landings Drive
Building K
Mountain View, CA 94043-0801
USA

NON-BREAKING SPACE

- ☐ A common character entity used in HTML is the non-breaking space:
- ☐ A non-breaking space is a space that will not break into a new line.
- ☐ Two words separated by a non-breaking space will stick together (not break into a new

line).

- ☐ This is handy when breaking the words might be disruptive.

Examples:

§ 10

10 km/h

10 PM

- ☐ Another common use of the non-breaking space is to prevent that browsers truncate spaces in HTML pages.
- ☐ If you write 10 spaces in your text, the browser will remove 9 of them. To add real spaces to your text, you can use the ` ` character entity.
- ☐ The non-breaking hyphen (`‑`) lets you use a hyphen character (?) that won't break.

EXAMPLE:

Char	Number	Entity	Description
©	©	©	COPYRIGHT SIGN
®	®	®	REGISTERED SIGN
€	€	€	EURO SIGN
™	™	™	TRADEMARK
←	←	←	LEFTWARDS ARROW
↑	↑	↑	UPWARDS ARROW
→	→	→	RIGHTWARDS ARROW
↓	↓	↓	DOWNWARDS ARROW
♠	♠	♠	BLACK SPADE SUIT
♣	♣	♣	BLACK CLUB SUIT
♥	♥	♥	BLACK HEART SUIT
♦	♦	♦	BLACK DIAMOND SUIT

UNORDERED LIST

- ☐ An unordered list starts with the tag. Each list item starts with the tag.
- ☐ The list items will be marked with bullets (small black circles) by default:
- ☐ Unordered HTML List - Choose List Item Marker
- ☐ The CSS list-style-type property is used to define the style of the list item marker:

Value Description

- disc Sets the list item marker to a bullet (default)
- circle Sets the list item marker to a circle

square Sets the list item marker to a square
none The list items will not be marked

Example - Disc

```
<ul style="list-style-type:disc">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>
```

Example - Circle

```
<ul style="list-style-type:circle">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>
```

Example - Square

```
<ul style="list-style-type:square">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>
```

Example - None

```
<ul style="list-style-type:none">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>
```

ORDERED HTML LIST

- ☐ An ordered list starts with the tag. Each list item starts with the tag.
- ☐ The list items will be marked with numbers by default:

Example

```
<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

HTML DESCRIPTION LISTS

- ☐ HTML also supports description lists.
- ☐ 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 (name), and the <dd> tag describes each term:

Example

```
<dl>
  <dt>Coffee</dt>
  <dd>- black hot drink</dd>
  <dt>Milk</dt>
  <dd>- white cold drink</dd>
</dl>
```

SIMPLE HTML PROGRAMS**1. Program to implement concept of header**

```
<!DOCTYPE html>
<html>
  <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>

OUTPUT:

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

2. Program to apply styles for paragraph

```
<!DOCTYPE html>
<html>
<body>
<p>I am normal</p>
<p style="color:red;">I am red</p>
<p style="color:blue;">I am blue</p>
<p style="font-size:36px;">I am big</p>
</body>
</html>
```

OUTPUT:

I am normal

I am red

I am blue

I am big

3. Program to apply background color

```
<!DOCTYPE html>
<html>
<body style="background-color:powderblue;">
<h1>This is a heading</h1>
<p>This is a paragraph.</p>
```



```
</body>
```

```
</html>
```

OUTPUT:



