

## IT ERA FINALS

The Internet is a global web of computers connected to each other by wires, (mostly phone lines). If you look at a map of big cities, smaller towns, and scattered houses, each is connected together with roads, railways, etc. This is similar to the Internet, except with the Internet, wires connect computers. The Internet is a superhighway.

Some ways to use the Internet: E-mail, Research, Shopping, News, Games, Ed-line.

Internet Terms – WWW, Browser, Search Engine, URL, Domain, html.

- The World Wide Web (short for Web) is a system of interlinked hypertext documents accessed via the Internet. The World Wide Web was created in 1989 by English scientist Tim Berners-Lee, working at the European Organization for Nuclear Research (CERN) in Geneva, Switzerland, and released in 1992.
- Browser - Software program that allows a person to view WWW documents. Examples of browsers are Netscape, Microsoft Internet Explorer, Mosaic, Mac web, and Net cruiser.
- Search Engine - A web site that will help you search the Internet for key words, subjects, etc. A search engine is an information retrieval system designed to help find information stored on a computer system. Web search engines provide an interface to search for information on the World Wide Web. Information may consist of web pages, images and other types of files.
- The very first tool used for searching on the (pre-web) Internet was Archie. It was created in 1990 by Alan Emtage.
- The first Web search engine was Wandex, developed by Matthew Gray at MIT in 1993.
- Aliweb also appeared in 1993 but released in early 1994. Used a crawler to find web pages for searching, but search was limited to the title of web pages only.

One of the first "full text" crawler-based search engines was WebCrawler, which came out in 1994.

Also in 1994 Lycos (which started at Carnegie Mellon University) was launched, and became a major commercial endeavor.

- Google search - Web search engine owned by Google, Inc. Google search was originally developed by Larry Page and Sergey Brin in 1997.
- Yahoo! Search - The two founders of Yahoo!, David Filo and Jerry Yang, Ph.D. candidates in Electrical Engineering at Stanford University.
- MSN Search - The most recent major search engine evolved into Live Search, owned by Microsoft.

Examples of search engines:

1. Google: Google is the most widely used search engine globally. It offers a simple interface and provides relevant search results based on user queries.
2. Bing: Bing is a search engine developed by Microsoft. It provides web search, image search, video search, and map search, among other features.
3. Yahoo: Yahoo Search is another popular search engine that provides search services, including web, image, and video search.
4. Baidu: Baidu is the most popular search engine in China and offers similar services to Google, including web search, image search, and multimedia content search.

5. Yandex: Yandex is a Russian search engine that offers various services, including web search, image search, video search, and map services.
6. DuckDuckGo: DuckDuckGo is known for its privacy-focused search capabilities. It does not track users or store their personal information, making it a popular choice for those concerned about online privacy.
7. Ask.com: Ask.com, previously known as Ask Jeeves, is a question-answering-focused search engine. It allows users to ask questions in natural language and provides relevant answers.
8. AOL Search: AOL Search is a search engine provided by AOL that offers web search, image search, and video search.

URL – (UNIFORM RESOURCE LOCATOR) The unique address of any web page. It tells your computer where the information is stored so it can be viewed.

Domain - A way to indicate what type of site you may be viewing. In the U.S. some common domains are .com-commercial, .org- non-profit and research organizations, .gov- government agency, .edu-education. More are constantly being added so these should only be used as guidelines to help you know what type of site you are on.

Domain Name - The following example illustrates the difference between a URL (Uniform Resource Locator) and a domain name: URL: <http://www.example.net>

Domain name: [www.example.net](http://www.example.net)

Registered domain name: [example.net](http://example.net),

Top level Domain: The last part of an Internet domain name; that is, the letters that follow the final dot of any domain name.

[www.example.com](http://www.example.com) - Com is the top level domain

Groups of top level domain

1. infrastructure top-level domain: This group consists of one TLD, the Address and Routing Parameter Area (ARPA). Arpa
2. country-code top-level domains (ccTLD): Used by a country or a dependent territory. It is two letters long. .ph – Philippines .au- Australia .us-United States .ar – Argentina .gu-Guam
3. Sponsored top-level domains (sTLD): These domains are proposed and sponsored by private agencies or organizations that establish and enforce rules restricting the eligibility to use the TLD. .edu – Education .gov – Government .mil – Military .int - International Treaties .asia - Companies, organizations and individuals in the Asia-Pacific region
4. Generic top-level domains (gTLD): Generic domains are essentially open for registration to anyone in the world. .com - Commercial organization .info - Informational sites .net - Network infrastructures .org – Organizations
5. Generic-restricted top level domains. Registrations within them are supposed to require proof of eligibility within the guidelines set for each. .biz - Business use .pro – Profession .name - Families and individuals

Second-level domain (SLD) - Second-level domains commonly refer to the organization that registered the domain name with a domain name registrar. For example, in wikipedia.org, wikipedia is the second-level domain of the .org TLD.

Some domain name registries introduce a second-level hierarchy to a TLD that indicates the type of organization intended to register an SLD under it. For example: www.spusurigao.edu.ph

Surigao - SLD .ph – TLD .edu - second level hierarchy of TLD

## Basic Structure of HTML

- HTML is a language for describing web pages.
- HTML stands for Hyper Text Markup Language
- HTML is not a programming language, it is a markup language
- A markup language is a set of markup tags
- HTML uses markup tags to describe web pages

## HTML Tags

- HTML markup tags are usually called HTML tags
- HTML tags are keywords surrounded by angle brackets like <html>
- HTML tags normally come in pairs like <b> and </b>
- The first tag in a pair is the start tag, the second tag is the end tag
- Start and end tags are also called opening tags and closing tags.

To identify an HTML document that the browser should display:

Element	Use	Nesting of document tags
<HTML> </HTML>	Indicates that this is an HTML Document	<HTML>
<HEAD> </HEAD>	Provides heading information about the document	<HEAD> <TITLE> </TITLE> </HEAD>
<TITLE> </TITLE>	Gives a descriptive title for the document (this title does not appear as part of the document)	<BODY> </BODY> </HTML>
<BODY> </BODY>	Everything that you want to be rendered by the browser must be part of the BODY element.	

## Example 1

```
<html>
```

```
<body>
```

```
<h1>My First Heading</h1>
```

```
<p>My first paragraph</p>
```

```
</body>
```

```
</html>
```

- The text between <html> and </html> describes the web page
- The text between <body> and </body> is the visible page content
- The text between <h1> and </h1> is displayed as a heading
- The text between <p> and </p> is displayed as a paragraph\

HTML headings are defined with the <h1> to <h6> tags.

HTML paragraphs are defined with the <p> tag.

.HTM or .HTML File Extension?

When you save an HTML file, you can use either the .htm or the .html file extension. There is no difference, it is entirely up to you.

How to start typing the HTML doc.?

- Click Programs
- Click Accessories
- Click Notepad
- Type the HTML program

Heading, Paragraph, Line Break

- To insert a heading to your document type it in the body section

<h1></h1>

## FONT SIZES

<h2></h2>

- Font attribute used to change the size of the text

<h3></h3>

Example:

<h4></h4>

<FONT SIZE="1">Test text</FONT>

<h5></h5>

- Font size is from 1 to 7.

<h6> </h6>

<p> - Defines a paragraph

<br /> - Inserts a single line break

## Horizontal Ruled Line

- Draws a horizontal line across a web page

Example:

• <hr width=500 size=100 color=blue noshade>

## HTML Fonts

<p>

<font size="2" face="Verdana">

This is a paragraph.

</font>

</p>

<p>

<font size="3" face="Times">

This is another paragraph.

</font>

</p>

## FONT COLOR

- Font attribute used to change the color of the text.

Example:

<FONT COLOR="#0000FF">Test text.</FONT>

<FONT COLOR="blue">Test text.</FONT>

## Font color

Color	Color Code	Color	Color Code
Red	#FF0000	White	#FFFFFF
Turquoise	#00FFFF	Light Grey	#C0C0C0
Light Blue	#0000FF	Dark Grey	#808080
Dark Blue	#0000A0	Black	#000000
Light Purple	#FF0080	Orange	#FF8040
Dark Purple	#800080	Brown	#804000
Yellow	#FFFF00	Burgundy	#800000
Pastel Green	#00FF00	Forest Green	#008000
Pink	#FF00FF	Grass Green	#408080

## FONT FACE

- Font attribute used to change the font design.

Example:

<FONT FACE="arial">Test text</FONT>

## HR (horizontal line)

Attribute	Value	Description
align	left center right	Specifies the alignment of a hr element
noshade	noshade	Specifies that a hr element should render in one solid color (noshaded), instead of a shaded color
size	Pixels %	Specifies the height of a hr element
width	pixels %	Specifies the width of a hr

## Body Tag Attributes

- BACKGROUND - identifies an image file that will be tiled to form the background for the page
- TEXT - specifies a color for normal text
- BGCOLOR - Specifies a color for the page background (will not appear if the BACKGROUND attribute is also used)
- Color Background –

```
<html>
<body bgcolor="yellow">

</body>

</html>
```

## Example

```
<p>The below image floats to the right.</p>
<p>
  
  This is demo text. This is demo text.
  This is demo text. This is demo text.
  This is demo text. This is demo text.
  This is demo text. This is demo text.
  This is demo text. This is demo text.
  This is demo text. This is demo text.
  This is demo text. This is demo text.
  This is demo text. This is demo text.
  This is demo text. This is demo text.
</p>
```

## Marquee

- Use to add an animation effect to text/displays a scrolling effect
- Marquee attributes:
  - behavior (scroll, slide)
  - width indicates up to what part of the screen the text will move in a left to right direction
  - height indicates up to what part of the screen the text will move in a up-down direction
  - bgcolor specifies the background color of the text
  - Direction specifies the path or route of a text movement (up,down, right, left)
  - Loop indicates the number of times u want the text to animate.

## Image

- The <img> tag embeds an image in an HTML page.

Attribute	Value	Description
alt	text	Specifies an alternate text for an image
src	URL	Specifies the URL of an image
height	pixels %	Specifies the height of an image
width	pixels %	Specifies the width of an image
border	pixels	Specifies the width of the border around an image

Attribute	Value	Description
align	top bottom middle left right	Specifies the alignment of an image according to surrounding elements

```

```

- BACKGROUND IMAGE

```
< body background="nature1.jpeg">
```

## Example

```
<style>
body {
  background-image: url('nature1.jpeg');
  background-repeat: no-repeat;
  background-attachment: fixed;
  background-size: cover;
}
</style>
```

- <marquee behavior=scroll width=100% height=100% bgcolor=blue loop=infinite direction=up> text here </marquee>
- Marquee that blinks
  - <marquee scrollamount=400 scroll delay=500> </marquee>
- Marquee that comes from the middle
  - <marquee direction=left width=50%> </marquee>
- For faster animation
  - <marquee scrollamount=20> </marquee>
- Text that moves upward/downward like in acknowledgements:
  - <marquee width=100% height= 80% behavior=scroll direction=up> </marquee>

## LINKS

- Hyperlinks can point to any resource on the web: an HTML page, an image etc. An anchor is a term used to define a hyperlink destination inside a document. The HTML anchor element `<a>`, is used to define both hyperlinks and anchors. `<a href="url">Link text</a>`
- The `<a>` tag defines an anchor. An anchor can be used in two ways: To create a link to another document, by using the href attribute. To create a bookmark inside a document, by using the name attribute. By default, links will appear as follows in all browsers: An unvisited link is underlined and blue. A visited link is underlined and purple.
- href attribute - The href attribute defines the link "address".

`<a href="http://www.w3schools.com/">VisitW3Schools!</a>`


- Tables are defined with the `<table>` tag. Table is divided into rows (with the `<tr>` tag), and each row is divided into data cells (with the `<td>` tag). The letters td stands for "table data," which is the content of a data cell.


## An image as a link

```
<html>
<body>
```

```
<p>Create a link of an image:
<a href="default.htm">

</a></p>
```

Create a link of an image: 

No border around the image, but still a link. 

```
<p>No border around the image, but still a
link:
<a href="default.htm">

</a></p>

</body>
</html>
```

## An image as a link

```
<html>
<body>
<p>
You can also use an image as a link:
<a href="lastpage.htm">

</a>
</p>
</body>
</html>
```

## Table tags

Caption	Gives the title or caption of the table
TH	Table header, gives the heading for a row or column
TD	Table data, gives the data contents
TR	Table row, defines the table row

## Table attributes

Align	Specifies the alignment of a table according to surrounding text
Bgcolor	Specifies the background color for a table
Border	Specifies the width of the borders around a table
Cellpadding	Specifies the space between the cell wall and the cell content
Cellspacing	Specifies the space between cells
Width	Specifies the width of a table
Background	Specifies a background image for a table
Bordercolor	Specifies the color of the border for a table

## Headings in a Table

```
<table border="1">
  <tr>
    <th>Heading</th>
    <th>Another Heading</th>
  </tr>
  <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>
</table>
```

Heading	Another Heading
row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

## Empty Cells

```
<html>
<body>
<table border="1">
  <tr>
    <td>Some text</td>
    <td>Some text</td>
  </tr>
  <tr>
    <td></td>
    <td>Some text</td>
  </tr>
</table>
```

Some text	Some text
	Some text

The no-breaking space entity starts with an ampersand ("&"), then the letters "nbsp", and ends with a semicolon (";")

Example:

```
<table border="1">
<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>
</table>
```

row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

```
<h4>A background color:</h4>
<table border="1" bgcolor="red">
```

```
  <tr>
    <td>First</td>
    <td>Row</td>
  </tr>
  <tr>
    <td>Second</td>
    <td>Row</td>
  </tr>
</table>
```

A background color:

First	Row
Second	Row

```
<h4>A background image:</h4>
<table border="1"
```

```
  background="bgdesert.jpg">
  <tr>
    <td>First</td>
    <td>Row</td>
  </tr>
  <tr>
    <td>Second</td>
    <td>Row</td>
  </tr>
</table>
```

A background image:

First	Row
Second	Row

```
<h4>With cellpadding: </h4>
<table border="1" cellpadding="10">
```

```
  <tr>
    <td>First</td>
    <td>Row</td>
  </tr>
  <tr>
    <td>Second</td>
    <td>Row</td>
  </tr>
</table>
```

Without cellpadding:

First	Row
Second	Row

With cellpadding:

First	Row
Second	Row

<h4>With cellspacing:</h4>

```
<table border="1"
cellspacing="10">
```

```
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
```

```
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
```

```
</table>
```

Without cellspacing:

First	Row
Second	Row

With cellspacing:

First	Row
Second	Row

Colspan - Define table cells that span more than one column.

Rowspan - Define table cells that span more than one row.

Align - Specifies alignment of data in a cell.

HTML Code:

```
<table border = 3 cellpadding = 20 align = center>
  <tr>
    <td colspan = 2> A </td>
    <td> B </td>
  </tr>
  <tr>
    <td> C </td>
    <td> D </td>
    <td rowspan = 2> E </td>
  </tr>
  <tr>
    <td> F </td>
    <td> G </td>
  </tr>
</table>
```

Exercise 1. Display the output

Table border is 3, cellpadding is 10, align table at the cent

A		B
C	D	E
F	G	

Cell that spans two rows

```
</body>
</html>
<h4>Cell that spans two rows:</h4>
<table border="1">
  <tr>
    <th>First Name:</th>
    <td>Bill Gates</td>
  </tr>
  <tr>
    <th rowspan="2">Telephone:</th>
    <td>555 77 854</td>
  </tr>
  <tr>
    <td>555 77 855</td>
  </tr>
</table>
</body>
</html>
```

Cell that spans two rows:

First Name:	Bill Gates
Telephone:	555 77 854
	555 77 855

Cell that spans two columns

```
<html>
<body>

<h4>Cell that spans two columns:</h4>
<table border="1">
  <tr>
    <th>Name</th>
    <th colspan="2">Telephone</th>
  </tr>
  <tr>
    <td>Bill Gates</td>
    <td>555 77 854</td>
    <td>555 77 855</td>
  </tr>
</table>
</body>
</html>
```

Cell that spans two columns:

Name	Telephone	
Bill Gates	555 77 854	555 77 855