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college of commerce & management

B.Com III Year

Subject- Web Designing

SYLLABUS

Class – B.Com. III Year

Subject – Web Designing

Unit I	Web page overview, Elements of a web page. Types of Sites, personal sites, small business sites, large business sites, online business sites, Educational institution sites, Government sites, Blogs, twitter, Matching format to audience, creating guidelines; creating a site structure, writing for the web, download time, methods for creating pages, publishing a site, Addressing a web site, Absolute & Relative addresses, URL. Static and dynamic websites.
Unit II	Head content, adding a title, Body content, Paragraph breaks, Line breaks, Horizontal lines, Fonts and text size, Text color, Headings, Aligning text, Lists, Background color.
Unit III	About HTML editors, Net beans, Dream Viewer, the editing environment, effective page design, Uniform style, finding design ideas, Heading, Lists, using white space, splitting the text, colors and background, creating pages with Save As.
Unit IV	Frames and tables, animation effects, creating forms, Images, Image formats for the web, obtaining images, image size, editing images, thumbnails, images and text, rollover images, Navigation, types of hyperlinks, navigation bars, linking to external sites, email links, creating image maps, image maps in action, site maps, three-click navigation, site linkage.
Unit V	CSS: creating and editing cascading style sheets, adding sound - types of sound files, linking to sound files, embedding sound files, Video, Analog video, . Digital video, webcams, animation, downloading animations, flash Publishing, testing, transferring to the web, registering a site, marketing a site, maintaining a site, Domain names, web hosting. Tax Management: Introduction. Difference between Tax Planning and Tax Management Area of Tax Management. Preparation of Return. Payment of Tax. Advance payment of Tax Tax Deduction at source etc. Assessment. Procedure Penalties and Prosecutions Appeal and registry.



UNIT-I

Web designing

Web page overview: - web page or webpage is a document commonly written in HTML (Hypertext Markup Language) that is accessible through the Internet or other networks using an Internet browser. A web page is accessed by entering a URL address and may contain text, graphics, and hyperlinks to other web pages and files.

The term web page usually refers to what is visible, but may also refer to the contents of the source code itself, which is usually a text file containing hypertext written in HTML or a comparable markup language. Most desktop web browsers include the ability to view the source code, but this ability may be missing or hidden on mobile browsers. Web browsers will frequently have to access multiple web resource elements, such as style sheets, scripts, and images, while presenting each web page.

A website will typically contain a group of web pages that are linked together, or have some other coherent method of navigation. The most important web page on a website is the index page. Depending on the web server settings, the index page can have any name, but the most common names are index.html and index.php. When a browser visits the homepage of a website or any URL pointing to a directory rather than a specific file, the web server serves the index page. If no index page is defined in the configuration or no such file exists on the server, either an error or directory listing will be served to the browser.

Websites and the web pages that comprise them are usually found with assistance from a search engine, but they can receive traffic from social media and other sources. On a network, a web browser can retrieve a web page from a remote web server. The web browser uses the Hypertext Transfer Protocol (HTTP) to make such requests to the web server. The web server may restrict access to a private network (for example, a corporate intranet).

A static web page is delivered exactly as stored, as HTML-formatted web content in the web server's file system. In contrast, a dynamic web page is generated by a web application, driven by server-side software, running on the client-side (on the web browser), or both. Dynamic web pages help the browser (the client) to enhance the web page through user input to the server.

Static web pages:

Static web pages are often HTML documents stored as files in the file system and made available by the web server over HTTP (nevertheless URLs ending with ".html" are not always static). However, loose interpretations of the term could include web pages stored in a database, and could even include pages formatted using a template and served through an application server, as long as the page served is unchanging and presented essentially as stored.

Static web pages are suitable for the contents that never or rarely need to be updated, though modern web template systems are changing this. Maintaining large numbers of static pages as files can be impractical without automated tools, such as static site generators. Another way to manage static



pages is Online compiled source code playgrounds, e.g. GatsbyJS and GitHub may be utilized for migrating a WordPress site into static web pages.[5] Any personalization or interactivity has to run client-side, which is restricting.

Advantages of a static website

- Provide improved security over dynamic websites (dynamic websites are at risk to web shell attacks if a vulnerability is present)
- Improved performance for end users compared to dynamic websites
- Fewer or no dependencies on systems such as databases or other application servers
- Cost savings from utilizing cloud storage, as opposed to a hosted environment

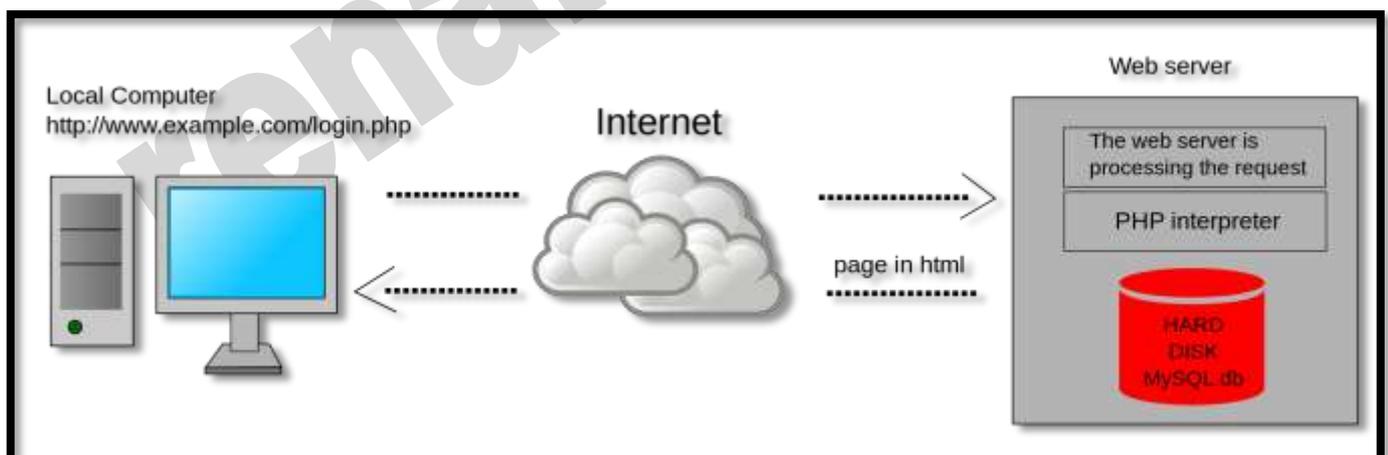
Disadvantages of a static website

- Dynamic functionality must be performed on the client side

Dynamic web page:

A server-side dynamic web page is a web page whose construction is controlled by an application server processing server-side scripts. In server-side scripting, parameters determine how the assembly of every new web page proceeds, including the setting up of more client-side processing.

A client-side dynamic web page processes the web page using HTML scripting running in the browser as it loads. JavaScript and other scripting languages determine the way the HTML in the received page is parsed into the Document Object Model, or DOM, that represents the loaded web page. The same client-side techniques can then dynamically update or change the DOM in the same way. Even though a web page can be dynamic on the client-side, it can still be hosted on a static hosting service such as GitHub Pages or Amazon S3 as long as there isn't any server-side code included.



Elements of web pages

The term web page usually refers to what is visible, but may also refer to the contents of the source code itself, which is usually a text file containing hypertext written in HTML or a comparable markup



language. Most desktop web browsers include the ability to view the source code, but this ability may be missing or hidden on mobile browsers. Web browsers will frequently have to access multiple web resource elements, such as style sheets, scripts, and images, while presenting each web page.

- Primary Text.
- Page Header.
- Navigation.
- Contact Options.
- Graphics and White Space.
- Analytics.
- Footer.

Primary text:

Primary text works as an introduction to both potential and existing customers, informing them about your business and what services you offer over your opponent. The text should be written so that it is search engine user-friendly to assist visitors to find your website, though extreme or unnatural keywords should be avoided as they can turn off visitors and may bother search engine rankings.

Page header:

Headers are the titles of the articles that are part of the page. These are handled by a paragraph of two or three lines. This is a report that explores to attract the attention of users.

Navigation:

Navigation is necessary for an adequate homepage. Whether the navigation surfaces as simple links or drop-down lists, it needs to be easily accessible for visitors to use without having to scroll down the page just to obtain it. Navigation links and menus can be established vertically or horizontally on your homepage, with a vertical adjustment being better for longer lists except certain drop-down menus are used.

Contact option:

Providing potential and existing customers a way to contact someone in your firm is a key element of your website. Customers shouldn't have to waste a long time searching for contact information, each at the very least, a link should appear on your homepage that leads visitors to online information or a list of contact options.

Graphics and white space:



Images and white space do as much to shape the reality of visitors to a website's homepage as the page text and navigation. The active use of appropriate images and space not only shapes the homepage's text but also maintains the primary text to draw the attention of visitors. Large squares of text without white space and images to shape them can turn off visitors, sometimes to the point of making them drop the site rather than reading your substance.

Analytics:

Analytics is installed on your server or through a third-party analytics service, be prepared to tell where visitors are appearing from, where they are going and how long they are using on your homepage helps you learn how to properly serve their needs and appeal to their attention.

Footer:

The footers on the websites include information about the regulations, the conditions and the terms of use. In this segment, you can also find the period in which the page has lived operative.

Types of sites

Once upon a time there were text-only websites which were used by government agencies and public institutions for information purposes only. Since the expansion of the World Wide Web, all kinds of websites have popped up on the scene. In fact, there are so many types of websites nowadays; sometimes it's difficult to decide which type of web design is the right one for you. We have put together a breakdown of the ten most popular kinds of websites to help you make that decision.

- **E-commerce**

An E-commerce website is an online shop where people can order goods and make payments from the comfort of their own homes. If you have products to sell and would like to enjoy the benefits of not having to run a traditional bricks-and-mortar shop with things like overheads to consider, then this is definitely the way forward.

- **Blogs and Personal**

Personal websites have been a favourite for families and people who wish to document the big occasions of their lives such as weddings, new babies or their travels. These days, the modern alternative; blogging has become an extremely popular. Blogs are usually updated frequently and older posts can be viewed through archives.

- **Informational**

Information websites are particularly helpful. People no longer have to visit libraries and take out books for basic information. Any question that comes into someone's mind nowadays is often swiftly followed up with a quick search on Google to find their answer. A great deal can be learned online and many people are now researching and self-teaching with online tutorials, hacks and tips from such websites.



- **Online Community**

Community forums are a great way to get in touch and share ideas with people with the same interests or from similar backgrounds through the Internet. This interactive feature can be the main focus of the website, or just a part of it so that visitors can discuss what the site is about.

- **Photo Sharing**

Websites such as Pixabay.com allow people to upload and download photos for free. You can get paid with advertising on a photo-sharing website or by selling good quality high resolution images that people will want to purchase, perhaps for commercial purposes.

- **Resume**

Much better than just listing your skills on paper, an interactive online resume showcases who you are, not just your qualifications, giving you much more control over your first impressions with prospective employers.

- **Portfolio**

Ideal for showcasing your work, everyone from landscape photographers to fashion models have an online portfolio these days to show off their talent to potential employers.

- **Catalogue and Brochure**

If you have a product or a service that does not require payment online, then an online catalogue or brochure will enable you to display what you have on offer and attract potential clients. Spreading the word about a business used to be limited to television, print or radio, however a website gives a much wider reach. Online brochures are a great idea for dental surgeries, hair salons, holiday destinations and manufacturers.

- **Business Directory**

Instead of flicking through the pages of a massive phone directory to find services and businesses, in this day and age we use online directory websites. They can be dedicated to a specific location, topic or industry. Directory websites serve as useful lists of resources.

- **Bio**

Authors and writers have their own websites which include their biography, a catalogue of their works with reviews and comments, as well as links to their social media, blog and places their publications are being sold online. This is especially useful in the world of publishing and establishment of a fan base.

Once upon a time there were text-only websites which were used by government agencies and public institutions for information purposes only. Since the expansion of the World Wide Web, all kinds of websites have popped up on the scene. In fact, there are so many types of websites nowadays;



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Personal web page:-

Personal web pages are World Wide Web pages created by an individual to contain content of a personal nature rather than content pertaining to a company, organization or institution. Personal web pages are primarily used for informative or entertainment purposes but can also be used for personal career marketing (by containing a list of the individual's skills, experience and a CV), social networking with other people with shared interests, or as a space for personal expression.

These terms do not usually refer to just a single "page" or HTML file, but to a collection of webpages and related files under a common URL or Web address. In strictly technical terms, a site's actual home page (index page) often only contains sparse content with some catchy introductory material and serves mostly as a pointer or table of contents to the more content-rich pages inside, such as résumés, family, hobbies, family genealogy, a web log/diary ("blog"), opinions, online journals and diaries or other writing, examples of written work, digital audio sound clips, digital video clips, digital photos, or information about a user's other interests. Many personal pages only include information of interest to friends and family of the author. However, some webpages set up by hobbyists or enthusiasts of certain subject areas can be valuable topical web directories.

Small business:-

Small businesses are privately owned corporations, partnerships, or sole proprietorships that have fewer employees and/or less annual revenue than a regular-sized business or corporation. Businesses are defined as "small" in terms of being able to apply for government support and qualify for preferential tax policy varies depending on the country and industry. Small businesses range from fifteen employees under the Australian Fair Work Act 2009, fifty employees according to the definition used by the European Union, and fewer than five hundred employees to qualify for many U.S. Small Business Administration programs. While small businesses can also be classified according to other methods, such as annual revenues, shipments, sales, assets, or by annual gross or net revenue or net profits, the number of employees is one of the most widely used measures.

Small businesses in many countries include service or retail operations such as convenience stores, small Grocery Stores, bakeries or delicatessens, hairdressers or trades people (e.g., carpenters, electricians), restaurants, guest houses, photographers, very small-scale manufacturing, and Internet-related businesses such as web design and computer programming. Some professionals operate as small businesses, such as lawyers, accountants, dentists and medical doctors (although these professionals can also work for large organizations or companies). Small businesses vary a great deal in terms of size, revenues and regulatory authorization, both within a country and from country to country. Some small businesses, such as a home accounting business, may only require a business license. On the other hand, other small businesses, such as day cares, retirement homes and restaurants serving liquor are more heavily regulated, and may require inspection and certification from various government authorities.



Large business sites:-

Large business involves large-scale corporate-controlled financial or business activities. As a term, it describes activities that run from "huge transactions" to the more general "doing big things". The concept first rose in a symbolic sense after 1880 in connection with the combination movement that began in American business at that time.[citation needed] United States corporations that fall into the category of "big business" as of 2015 include ExxonMobil, Walmart, Google, Microsoft, Apple, General Electric, General Motors, Citigroup, Goldman Sachs, and JPMorgan Chase. The largest German corporations as of 2012 included Daimler AG, Deutsche Telekom, Siemens, and Deutsche Bank. Among the largest companies in the United Kingdom as of 2012 are HSBC, Barclays, WPP plc, and BP. The latter half of the 19th century saw more technological advances and corporate growth in additional[clarification needed] sectors, such as petroleum, machinery, chemicals, and electrical equipment. Online business: - Online Business or e-business is any kind of business or commercial transaction that includes sharing information across the internet. Commerce constitutes the exchange of products and services between businesses, groups and individuals and can be seen as one of the essential activities of any business.

Government website

A type of website created and designed for a local, regional or national government to communicate information, update the public, provide their departmental contact details, roles and responsibilities, the name of key government ministers and their portfolio and other vital information for the operation of the government and information members of the public need to access and be aware of.

Twitter:-

Twitter is an American micro blogging and social networking service on which users post and interact with messages known as "tweets". Registered users can post, like, and retweet tweets, but unregistered users can only read them. Users access Twitter through its website interface, through Short Message Service (SMS) or its mobile-device application software ("app"). Twitter, Inc. is based in San Francisco, California, and has more than 25 offices around the world. Tweets were originally restricted to 140 characters, but were doubled to 280 for non-Asian languages in November 2017.

Twitter was created in March 2006 by Jack Dorsey, Noah Glass, Biz Stone, and Evan Williams, launched in July of that year. The service rapidly gained worldwide popularity. In 2012, more than 100 million users posted 340 million tweets a day, and the service handled an average of 1.6 billion search queries per day. In 2013, it was one of the ten most-visited websites and has been described as "the SMS of the Internet". As of 2018, Twitter had more than 321 million monthly active users.

Guidelines to create a website:-

- Simplicity
- Effective Design
- Easy Navigation
- Consistency



- Responsiveness
- Develop for Multiple Browsers
- Check for errors
- Proper content

Important elements of a website structure:-

- Develop a clear website hierarchy
- URL structure as per hierarchy
- Simple coding
- Minimum numbers of clicks
- Main pages link in header
- Comprehensive and simple internal linking structure

Steps to reduce the download time for your website

- Optimize images
- Don't Scale down images
- Compress and optimize your content
- Put Stylesheet references at the top
- Put script references at the bottom
- Place javascript and css in external files
- Minimize HTTP Requests
- Cache your Web Pages

The process of publishing a website:

- Register a domain name.
- Get web hosting.
- Uploading website to web server.

Website Address

A website address, also known as a URL (uniform resource locator), is an Internet or intranet name that points to a location where a file, directory or website page is hosted. Website addresses can represent the home page of a web site, a script, image, photo, movie or other file made available on a server for viewing, processing or download. They can also be embedded into the code of web pages in the form of hyperlinks to direct the user to other locations on the Internet.

There are two types of Web address:

Absolute Web address

Relative web address

Linking with absolute URLs



An absolute URL typically takes the following form:

protocol://domain/path

The protocol is usually `http://`, but can also be `https://`, `ftp://`, `gopher://`, or `file://`. The domain is the name of the website. For example, the domain name of Indiana University's central web server is `www.indiana.edu`. The path includes directory and file information. You must use absolute URLs when referring to links on different servers.

Linking with relative URLs

Relative URLs can take a number of different forms. When referring to a file that occurs in the same directory as the referring page, a URL can be as simple as the name of the file. For example, if you want to create a link in your home page to the file `foobar.html`, which is in the same directory as your home page, you would use:

```
<a href="foobar.html">The Wonderful World of Foobar!</a>
```

If the file you want to link to is in a subdirectory of the referring pages directory, you need to enter only the directory information and the name of the file. So if `foobar.html` were in the `foobar` subdirectory of your `www` directory, you could refer to it from your home page by using:

```
<a href="foobar/foobar.html">The Wonderful World of Foobar!</a>
```

If the file you want to link to is in a higher directory than the referring page, use `..`, which means to go up a directory. For example, to link from `foobar.html` to `home.html`, which is in the directory above, you would use:

```
<a href="../home.html">Go back to my home page</a>
```

URL

Stands for "Uniform Resource Locator." A URL is the address of a specific webpage or file on the Internet. For example, the URL of the google website is "`http://google.com`." The address of this page is "`http://techterms.com/definition/url`" and includes the following elements:

1. **http://** - the URL prefix, which specifies the protocol used to access the location
2. **google.com** - the server name or IP address of the server
3. **/definition/url** - the path to the directory or file

While all website URLs begin with "http," several other prefixes exist. Below is a list of various URL prefixes:

- `http` - a webpage, website directory, or other file available over HTTP
- `ftp` - a file or directory of files available to download from an FTP server



- news – a discussion located within a specific newsgroup
- telnet – a Unix-based computer system that supports remote client connections
- gopher – a document or menu located on a gopher server
- wais - a document or search results from a WAIS database
- mailto - an email address (often used to redirect browsers to an email client)
- file - a file located on a local storage device (though not technically a URL because it does not refer to an Internet-based location)

You can manually enter a URL by typing it in the address bar of your web browser. For example, you might enter a website URL printed on a business card to visit the company's website. Most URLs, however appear automatically when you click on a link or open a bookmark. If the server name in the URL is not valid, your browser may display a "Server not found" error. If the path in the URL is incorrect, the server may respond with a 404 error.

Absolute and Relative URLs

You may address a URL in one of the following two ways:

- **Absolute** – An absolute URL is the complete address of a resource. For example http://www.tutorialspoint.com/html/html_text_links.htm
- **Relative** – A relative URL indicates where the resource is in relation to the current page. Given URL is added with the <base> element to form a complete URL. For example /html/html_text_links.htm



UNIT-II

HTML

- HTML is an acronym which stands for **Hyper Text Markup Language** which is used for creating web pages and web applications. Let's see what is meant by Hypertext Markup Language, and Web page.
- **Hyper Text:** HyperText simply means "Text within Text." A text has a link within it, is a hypertext. Whenever you click on a link which brings you to a new webpage, you have clicked on a hypertext. HyperText is a way to link two or more web pages (HTML documents) with each other.
- **Markup language:** A markup language is a computer language that is used to apply layout and formatting conventions to a text document. Markup language makes text more interactive and dynamic. It can turn text into images, tables, links, etc.
- **Web Page:** A web page is a document which is commonly written in HTML and translated by a web browser. A web page can be identified by entering an URL. A Web page can be of the static or dynamic type. **With the help of HTML only, we can create static web pages.**
- Hence, HTML is a markup language which is used for creating attractive web pages with the help of styling, and which looks in a nice format on a web browser. An HTML document is made of many HTML tags and each HTML tag contains different content.

```
<html>
<head>
<title>Web page title</title>
</head>
<body>
<h1>Write Your First Heading</h1>
<p>Write Your First Paragraph.</p>
</body>
</html>
```

Description of HTML Example

- **<!DOCTYPE>**: It defines the document type or it instruct the browser about the version of HTML.
- **<html >**: This tag informs the browser that it is an HTML document. Text between html tag describes the web document. It is a container for all other elements of HTML except <!DOCTYPE>
- **<head>**: It should be the first element inside the <html> element, which contains the metadata (information about the document). It must be closed before the body tag opens.
- **<title>**: As its name suggested, it is used to add title of that HTML page which appears at the top of the browser window. It must be placed inside the head tag and should close immediately. (Optional)
- **<body>**: Text between body tag describes the body content of the page that is visible to the end user. This tag contains the main content of the HTML document.
- **<h1>**: Text between <h1> tag describes the first level heading of the webpage.
- **<p>**: Text between <p> tag describes the paragraph of the webpage.

Brief History of HTML

In the late 1980's, a physicist, Tim Berners-Lee who was a contractor at CERN, proposed a system for CERN researchers. In 1989, he wrote a memo proposing an internet based hypertext system.

Tim Berners-Lee is known as the father of HTML. The first available description of HTML was a document called "HTML Tags" proposed by Tim in late 1991.

HTML Versions



Since the time HTML was invented there are lots of HTML versions in market, the brief introduction about the HTML version is given below:

HTML 1.0: The first version of HTML was 1.0, which was the barebones version of HTML language, and it was released in 1991.

HTML 2.0: This was the next version which was released in 1995, and it was standard language version for website design. HTML 2.0 was able to support extra features such as form-based file upload, form elements such as text box, option button, etc.

HTML 3.2: HTML 3.2 version was published by W3C in early 1997. This version was capable of creating tables and providing support for extra options for form elements. It can also support a web page with complex mathematical equations. It became an official standard for any browser till January 1997. Today it is practically supported by most of the browsers.

HTML 4.01: HTML 4.01 version was released on December 1999, and it is a very stable version of HTML language. This version is the current official standard, and it provides added support for stylesheets (CSS) and scripting ability for various multimedia elements.

HTML5 : HTML5 is the newest version of HyperText Markup language. The first draft of this version was announced in January 2008. There are two major organizations one is W3C (World Wide Web Consortium), and another one is WHATWG (Web Hypertext Application Technology Working Group) which are involved in the development of HTML 5 version, and still, it is under development.

Features of HTML

- 1) It is a very **easy and simple language**. It can be easily understood and modified.
- 2) It is very easy to make an **effective presentation** with HTML because it has a lot of formatting tags.
- 3) It is a **markup language**, so it provides a flexible way to design web pages along with the text.
- 4) It facilitates programmers to add a **link** on the web pages (by html anchor tag), so it enhances the interest of browsing of the user.
- 5) It is **platform-independent** because it can be displayed on any platform like Windows, Linux, and Macintosh, etc.
- 6) It facilitates the programmer to add **Graphics, Videos, and Sound** to the web pages which makes it more attractive and interactive.
- 7) HTML is a case-insensitive language, which means we can use tags either in lower-case or upper-case.

HTML Head

The HTML <head> element is used as a container for metadata (data about data). It is used between <html> tag and <body> tag.

The head of an HTML document is a part whose content is not displayed in the browser on page loading. It just contains metadata about the HTML document which specifies data about the HTML document.

An HTML head can contain lots of metadata information or can have very less or no information, it depends on our requirement. But head part has a crucial role in an HTML document while creating a website.

Metadata defines the document title, character set, styles, links, scripts, and other meta information.

Following is a list of tags used in metadata:

```
<title>
<style>
<meta>
<link>
<script>
<base>
```



HTML <title> Element

The HTML <title> element is used to define the title of the document. It is used in all HTML/XHTML documents. The <title> element must be placed between <head> element, and one document can only have one title element.

What does <title> element do?

It defines a title in the browser tab.

It provides a title for the page when it is added to favorites.

It displays a title for the page in search engine results.

HTML <body> tag

HTML <body> tag defines the main content of an HTML document which displays on the browser. It can contain text content, paragraphs, headings, images, tables, links, videos, etc.

The <body> must be the second element after the <head> tag or it should be placed between </head> and </html> tags. This tag is required for every HTML document and should only use once in the whole HTML document.

Syntax

<body> Place your Content here.....</body>

Attribute

Tag specific Attributes

Attribute	Value	Description
alink	color	It defines the color of the active link in a document. (Not supported in HTML5)
background	URL	It determines the background image for the document. (Not supported in HTML5)
bgcolor	color	It determines the background color of the content. (Not supported in HTML5)
link	color	It determines the color of the unvisited link. (Not supported in HTML5)
text	color	It determines the color of the text in the document. (Not supported in HTML5)
vlink	color	It determines the color of the visited link. (Not supported in HTML5)
onload		Function call on page loading
onunload		Function call when user leaves the page
onfocus		Function call when document receives focus by user.
onblur		Function call when document loses focus by user.

HTML Paragraph

HTML paragraph or HTML p tag is used to define a paragraph in a webpage. Let's take a simple example to see how it work. It is a notable point that a browser itself add an empty line before and after a paragraph. An HTML <p> tag indicates starting of new paragraph.

<p>This is first paragraph.</p>

An HTML
 tag is used for line break and it can be used with paragraph elements. Following is the example to show how to use
 with <p> element.

Line Break Tag

Whenever you use the
 element, anything following it starts from the next line. This tag is an example of an **empty** element, where you do not need opening and closing tags, as there is nothing to go in between them.



The `
` tag has a space between the characters **br** and the forward slash. If you omit this space, older browsers will have trouble rendering the line break, while if you miss the forward slash character and just use `
` it is not valid in XHTML.

```
<body>
  <p>Hello<br />
    You delivered your assignment ontime.<br />
    Thanks<br />
    Mahnaz</p>
</body>
```

Horizontal Lines

Horizontal lines are used to visually break-up sections of a document. The `<hr>` tag creates a line from the current position in the document to the right margin and breaks the line accordingly.

For example, you may want to give a line between two paragraphs as in the given example below –

Example

```
<html>
<head>
  <title>Horizontal Line Example</title>
</head>
<body>
  <p>This is paragraph one and should be on top</p>
  <hr />
  <p>This is paragraph two and should be at bottom</p>
</body>
</html>
```

HTML `` tag

HTML `` tag is used to define the font style for the text contained within it. It defines the font size, color, and face or the text in an HTML document.

Syntax

```
<font size=" " color=" " face=" " "> Content....</font>
```

Example

```
<body>
<h2>Example of font tag</h2>
<p>This is normal text without any font styling</p>
<p>
  <font color="blue">Text with normal size and default face</font>
</p>
<p>
  <font size="5" color="green">Text with Increased size and default face</font>
</p>
<p>
  <font color="red" face="cursive">Text with Changed face</font>
</p>
</body>
```

Using CSS

```
<body>
```



`<h2>Change font using CSS</h2>`

`<p>This is normal text without any font styling</p>`

`<p style="color: blue;">Text with normal size and default face</p>`

`<p style="font-size: 25px; color: green;">Text with Increased size and default face </p>`

`<p style="font-family: cursive; color: red;">Text with Changed face</p>`

`</body>`

HTML Headings

Headings are defined with the `<h1>` to `<h6>` tags.

`<h1>` defines the most important heading. `<h6>` defines the least important heading.

`<h1>Heading</h1>`

`<h2>Heading</h2>`

`<h3>Heading</h3>`

`<h4>Heading</h4>`

`<h5>Heading</h5>`

`<h6>Heading </h6>`

Text Alignment

The CSS text-align property defines the horizontal text alignment for an HTML element:

Example

`<h1 style="text-align:center;">CenteredHeading</h1>`

`<p style="text-align:center;">Centered paragraph.</p>`

`<h3 style="text-align:right;background-color:pink;">This text is located at right side</h3>`

`<p style="text-align:left;background-color:pink;">This text is located at center side</p>`

HTML - Backgrounds

By default, your webpage background is white in color. You may not like it, but no worries. HTML provides you following two good ways to decorate your webpage background.

HTML Background with Colors

HTML Background with Images

Html Background with Colors

The **bgcolor** attribute is used to control the background of an HTML element, specifically page body and table backgrounds.

`<body>`

`<!-- Format 1 - Use color name -->`

`<table bgcolor = "yellow" width = "100%">`

`<tr>`

`<td>`

 This background is yellow

`</td>`

`</tr>`

`</table>`

`</body>`

Html Background with Images

The **background** attribute can also be used to control the background of an HTML element, specifically page body and table backgrounds. You can specify an image to set background of your HTML page or table.



```
<body>
  <!-- Set table background -->
  <table background = "/images/html.gif" width = "100%" height = "100">
    <tr><td>
      This background is filled up with HTML image.
    </td></tr>
  </table>
</body>
```

HTML Lists

HTML Lists are used to specify lists of information. All lists may contain one or more list elements.

There are three different types of HTML lists:

1. Ordered List or Numbered List (ol)
2. Unordered List or Bulleted List (ul)
3. Description List or Definition List (dl)

HTML Ordered List or Numbered List

In the ordered HTML lists, all the list items are marked with numbers by default. It is known as numbered list also. The ordered list starts with tag and the list items start with tag.

```
<ol>
  <li>Aries</li>
  <li>Bingo</li>
  <li>Leo</li>
  <li>Oracle</li>
</ol>
```

Output:

1. Aries
2. Bingo
3. Leo
4. Oracle

HTML Unordered List or Bulleted List

In HTML Unordered list, all the list items are marked with bullets. It is also known as bulleted list also. The Unordered list starts with tag and list items start with the tag.

```
<ul>
  <li>Aries</li>
  <li>Bingo</li>
  <li>Leo</li>
  <li>Oracle</li>
</ul>
```

Output:

- o Aries
- o Bingo
- o Leo
- o Oracle

HTML Description List or Definition List

HTML Description list is also a list style which is supported by HTML and XHTML. It is also known as definition list where entries are listed like a dictionary or encyclopedia.

The definition list is very appropriate when you want to present glossary, list of terms or other name-value list.

The HTML definition list contains following three tags:



<dl> tag defines the start of the list.
<dt> tag defines a term.
<dd> tag defines the term definition (description).
<dl>
 <dt>Aries**</dt>**
 <dd>-One of the 12 horoscope sign.**</dd>**
 <dt>Bingo**</dt>**
 <dd>-One of my evening snacks**</dd>**
 <dt>Leo**</dt>**
 <dd>-It is also an one of the 12 horoscope sign.**</dd>**
 <dt>Oracle**</dt>**
 <dd>-It is a multinational technology corporation.**</dd>**
</dl>

Output:

Aries
-One of the 12 horoscope sign.
Bingo
-One of my evening snacks
Leo
-It is also an one of the 12 horoscope sign.
Oracle
-It is a multinational technology corporation.



UNIT-III

HTML editor

An HTML editor is a program for editing HTML, the markup of a web page. Although the HTML markup in a web page can be controlled with any text editor, specialized HTML editors can offer convenience and added functionality. For example, many HTML editors handle not only HTML, but also related technologies such as CSS, XML and JavaScript or ECMAScript. In some cases they also manage communication with remote web servers via FTP and WebDAV, and version control systems such as Subversion or Git. Many word processing, graphic design and page layout programs that are not dedicated to web design, such as Microsoft Word or Quark XPress, also have the ability to function as HTML editors.

HTML editor is a tool that helps you to edit and create HTML(Hypertext Markup Language) code. It is a text-based tool which lets you edit your source code directly.

HTML editor is the essential part of the web development!

It is a best practice to take help of HTML editors as they give you a clear understanding of the code. Most of the professional web developers depend on the HTML editors to maintain and create their websites.

Types of editors

There are two main varieties of HTML editors:

- Text editors
- WYSIWYG (what you see is what you get) editors.

Text editors

Text editors intended for use with HTML usually provide at least syntax highlighting. Some editors additionally feature templates, toolbars and keyboard shortcuts to quickly insert common HTML elements and structures. Wizards, tooltip prompts and auto completion may help with common tasks.

Text editors commonly used for HTML typically include either built-in functions or integration with external tools for such tasks as version control, link-checking and validation, code cleanup and formatting, spell-checking, uploading by FTP or WebDAV, and structuring as a project. Some functions, such as link checking or validation may use online tools, requiring a network connection.

Text editors require user understanding of HTML and any other web technologies the designer wishes to use like CSS, JavaScript and server-side scripting languages.

Example

- Adobe Dreamweaver
- Adobe Muse
- Amaya
- BlueGriffon
- Bootstrap Studio



- CKEditor
- EZGenerator
- FirstPage

WYSIWYG HTML editors

WYSIWYG HTML editors provide an editing interface which resembles how the page will be displayed in a web browser. Because using a WYSIWYG editor may not require any HTML knowledge, they are often easier for an inexperienced computer user to get started with.

The WYSIWYG view is achieved by embedding a layout engine. This may be custom-written or based upon one used in a web browser. The goal is that, at all times during editing, the rendered result should represent what will be seen later in a typical web browser.

WYSIWYM (what you see is what you mean) is an alternative paradigm to WYSIWYG editors. Instead of focusing on the format or presentation of the document, it preserves the intended meaning of each element. For example, page headers, sections, paragraphs, etc. are labeled as such in the editing program, and displayed appropriately in the browser.

Difficulties in achieving WYSIWYG

A given HTML document will have an inconsistent appearance on various platforms and computers for several reasons:

- Different browsers and applications will render the same markup differently.
- Web browsers, like all computer software, have bugs
- A single visual style can represent multiple semantic meanings
- Modern web sites are rarely constructed in a way that makes WYSIWYG useful

Example

- Lyx
- WYMeditor

NetBeans

NetBeans is an integrated development environment (IDE) for Java. NetBeans allows applications to be developed from a set of modular software components called modules. NetBeans runs on Windows, macOS, Linux and Solaris. In addition to Java development, it has extensions for other languages like PHP, C, C++, HTML5, and JavaScript. Applications based on NetBeans, including the NetBeans IDE, can be extended by third party developers.

Versions:

- NetBeans IDE 6.
- NetBeans IDE 6.5.
- NetBeans IDE 6.8



- NetBeans IDE 6.9.
- NetBeans IDE 7.0
- NetBeans IDE 7.0.1.
- NetBeans IDE 7.3
- NetBeans IDE 7.4
- NetBeans IDE 8.0
- NetBeans IDE 8.1
- NetBeans IDE 8.2
- Netbeans 9.0.
- NetBeans 10.0
- NetBeans 11.0 was released on 4 April 2019.
- NetBeans 11.1 was released on 22 July 2019.

NetBeans IDE

NetBeans IDE is an open-source integrated development environment. NetBeans IDE supports development of all Java application types (Java SE (including JavaFX), Java ME, web, EJB and mobile applications) out of the box. Among other features are an Ant-based project system, Maven support, refactorings, version control (supporting CVS, Subversion, Git, Mercurial and Clearcase).

Modularity: All the functions of the IDE are provided by modules. Each module provides a well-defined function, such as support for the Java language, editing, or support for the CVS versioning system, and SVN. NetBeans contains all the modules needed for Java development in a single download, allowing the user to start working immediately. Modules also allow NetBeans to be extended. New features, such as support for other programming languages, can be added by installing additional modules. For instance, Sun Studio, Sun Java Studio Enterprise, and Sun Java Studio Creator from Sun Microsystems are all based on the NetBeans IDE.

License: The IDE is licensed under the Apache License 2.0. Previously, from July 2006 through 2007, NetBeans IDE was licensed under Sun's Common Development and Distribution License (CDDL), a license based on the Mozilla Public License (MPL). In October 2007, Sun announced that NetBeans would henceforth be offered under a dual license of the CDDL and the GPL version 2 licenses, with the GPL linking exception for GNU Classpath. Oracle has donated NetBeans Platform and IDE to the Apache Foundation where it underwent incubation and graduated as a top level project in April 2019.

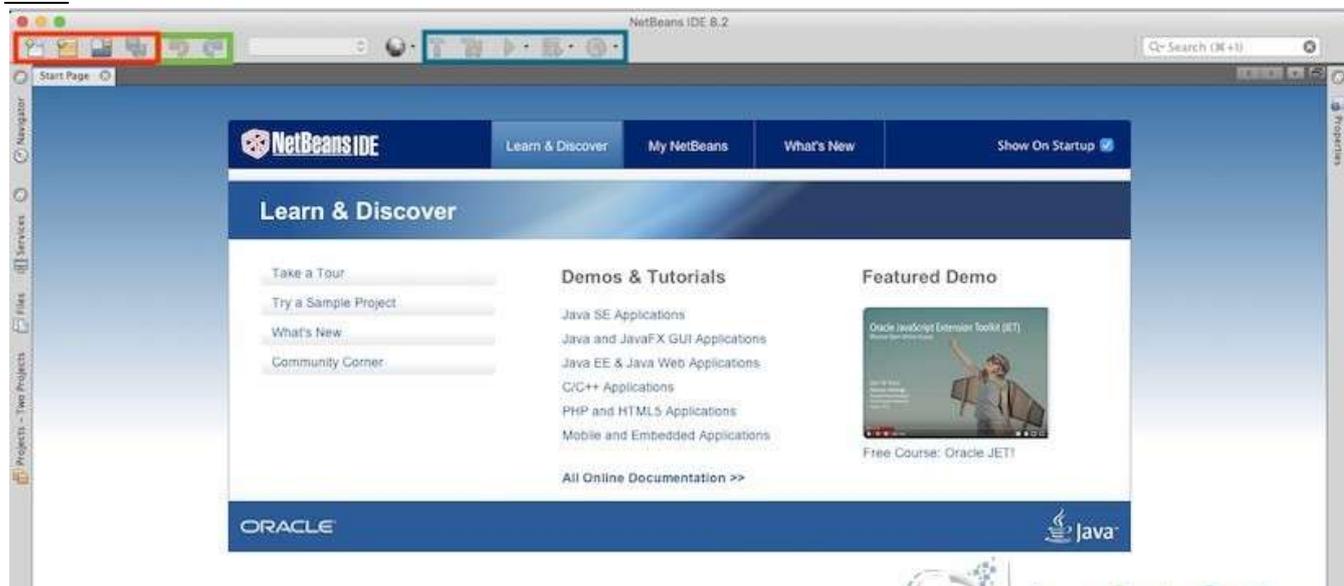


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1. **File operations buttons:** The first group of buttons marked in Red indicate the buttons for file operations. The first button is used to create new files. The second button is dedicated to creation of new project. The third button is used to open up a file or a project as the need be. The fourth button is used to save all the changes files as and when required.
2. **Actions Undo-Redo buttons:** The buttons are utilised to undo or redo the changes while developing the code.
3. **Build, Run and Debug controls:** These controls are used when a project requires to be built or executed. The first button in the group marked blue is used for building the project. A build process involves complete process of compilation, linking and bytecode or executable file creation. The second button is a Clean & Build button. It clears the files generated from previous build and recreates all the compiled versions of files. The next button is used to execute a project with the default configuration while the button beside it allows you to debug when necessary. The last button is a profiling execution button. It allows to execute the project in a profiling mode.

Adobe Dreamweaver



- Adobe Dreamweaver is a proprietary web development tool from Adobe Inc.. It was created by Macromedia in 1997 and developed by them until Macromedia was acquired by Adobe Systems in 2005.
- Adobe Dreamweaver is available for the macOS and Windows operating systems.



- Following Adobe's acquisition of the Macromedia product suite, releases of Dreamweaver subsequent to version 8.0 have been more compliant with W3C standards. Recent versions have improved support for Web technologies such as CSS, JavaScript, and various server-side scripting languages and frameworks including ASP (ASP JavaScript, ASP VBScript, ASP.NET C#, ASP.NET VB), ColdFusion, Scriptlet, and PHP.

Features

Adobe Dreamweaver CC is a web design and development application that uses both a visual design surface known as Live View and a code editor with standard features such as syntax highlighting, code completion, and code collapsing as well as more advanced features such as real-time syntax checking and code introspection for generating code hints to assist the user in writing code. Combined with an array of site management tools, Dreamweaver allows for its users to design, code and manage websites, as well as mobile content. Dreamweaver is an Integrated Development Environment (IDE) tool. You can live preview of changes for the frontend. Dreamweaver is positioned as a versatile web design and development tool that enables visualization of web content while coding.

Dreamweaver, like other HTML editors, edits files locally then uploads them to the remote web server using FTP, SFTP, or WebDAV. Dreamweaver CS4 now supports the Subversion (SVN) version control system.

The second part of Dreamweaver is a fully-featured code editor. It comes equipped with all the standard functions, including:

- **Syntax highlighting** — That means Dreamweaver highlights different elements (such as operators, variables, etc.) in different colors in order to make the code easier to read and correct.
- **Code Completion** — Code completion works in a similar way as autocomplete on your phone. Start typing and the editor will make suggestions for what you are trying to write. That way, you don't have to type everything out completely.
- **Code collapsing** — Code collapsing is another feature for making code easier to read. It allows you to visually shrink parts of your code when you don't need them. That way, you don't have to scroll through the entire file but can only deal with the parts you need to work on.

First Startup

When you first start Dreamweaver, you will see this screen.

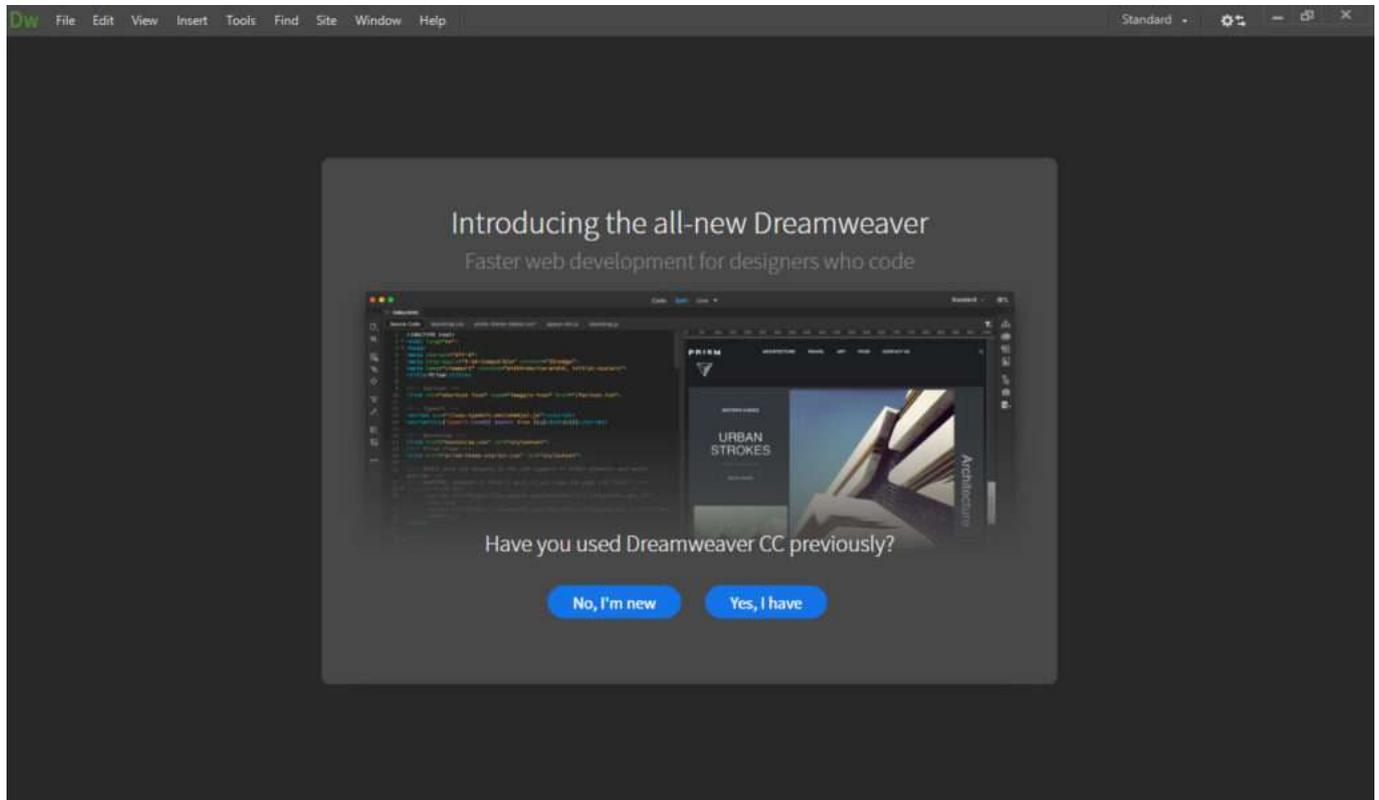


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Subject- Web Designing



Pros and Cons of Adobe Dreamweaver

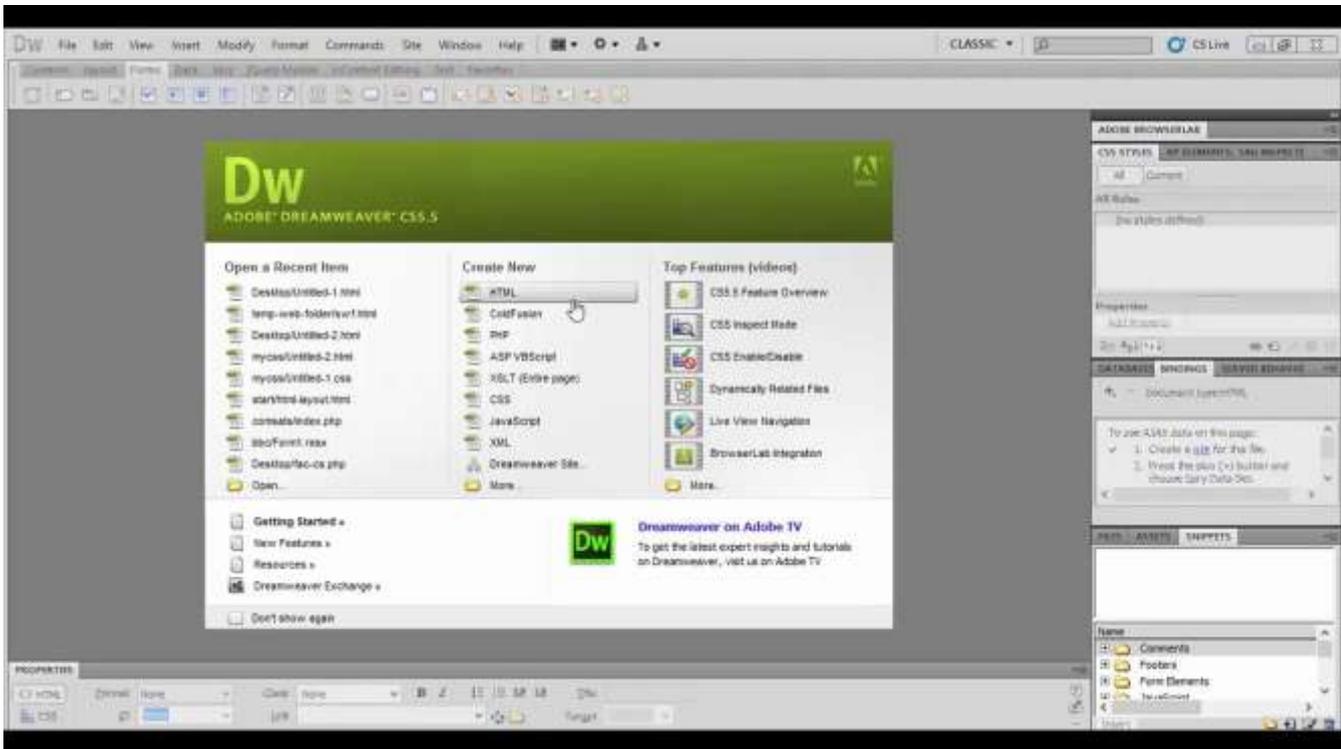
Dreamweaver Pros

Dreamweaver is an intuitive and flexible tool that does a lot of things right. Here are some of the biggest advantages this software can offer you:

- Device Testing
- Easy Code Error Testing
- Included Font Selection
- Bundled Stock Photos
- Interface Personalization

Dreamweaver Cons

- Steeper Learning Curve
- Your Site Is Only as Good as Your Skills
- Recurring Subscription Fee (On Top of Hosting)



The **Dreamweaver** user interface consists of main menu, insert menu, document menu and work area, along with all the properties inspector, panels and windows you view on opening the application.

Creating extra spaces before or after text

One of the most confusing things to new users who're creating a web page is that they cannot press the spacebar multiple times make additional spaces. To create extra spaces before, after, or in-between your text, use the ** **; (non-breaking space) extended HTML character.

For example, with "extra space" we have the following code in our HTML.

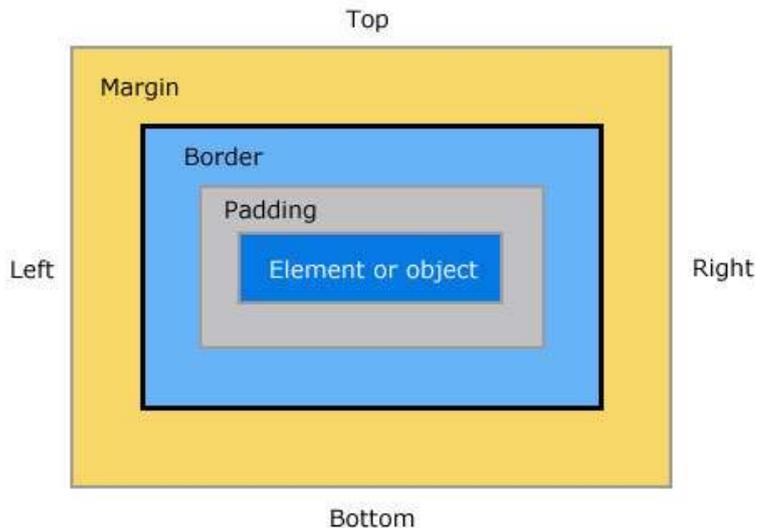
extra space

Creating extra space around an element or object

Any HTML element can have additional spacing added to the top, right, bottom, or left. However, make sure you understand the difference between margin and padding before deciding the type of space you want to add around the element or object. As you can see in the picture below, padding is what immediately surrounds the element, within the border, and the margin outside the border.



Margin, Border, and Padding



Add space below a line or paragraph of text

If you need to add extra space below a line or paragraph of text, and only need to do it once, you can use the `
` tag. Below is an example of how this technique can be applied.

```
<p>This sentence contains example text.<br>
```

```
<br>
```

```
As you can see, two breaks add the space above.</p>
```



UNIT-IV

HTML frames

HTML frames are used to divide your browser window into multiple sections where each section can load a separate HTML document. A collection of frames in the browser window is known as a frameset. The window is divided into frames in a similar way the tables are organized: into rows and columns.

Disadvantages of Frames

There are few drawbacks with using frames, so it's never recommended to use frames in your webpages –

- Some smaller devices cannot cope with frames often because their screen is not big enough to be divided up.
- Sometimes your page will be displayed differently on different computers due to different screen resolution.
- The browser's *back* button might not work as the user hopes.
- There are still few browsers that do not support frame technology.

Creating Frames

To use frames on a page we use <frameset> tag instead of <body> tag. The <frameset> tag defines, how to divide the window into frames. The rows attribute of <frameset> tag defines horizontal frames and cols attribute defines vertical frames. Each frame is indicated by <frame> tag and it defines which HTML document shall open into the frame.

```
<html>
<head>
  <title>HTML Frames</title>
</head>
<frameset rows = "10%,80%,10%">
  <frame name = "top" src = "/html/top_frame.htm" />
  <frame name = "main" src = "/html/main_frame.htm" />
  <frame name = "bottom" src = "/html/bottom_frame.htm" />
  <noframes>
  <body>Your browser does not support frames.</body>
</noframes>
</frameset>
</html>
```

```
<frameset cols = "25%,50%,25%">
  <frame name = "left" src = "/html/top_frame.htm" />
  <frame name = "center" src = "/html/main_frame.htm" />
```



```
<frame name = "right" src = "/html/bottom_frame.htm" />  
  
<noframes>  
  <body>Your browser does not support frames.</body>  
</noframes>  
</frameset>
```

The <frameset> Tag Attributes

Sr.No	Attribute & Description
1	cols
2	rows
3	border
4	frameborder
5	framespacing

The <frame> Tag Attributes

Sr.No	Attribute & Description
1	src
2	name
3	frameborder
4	marginwidth
5	marginheight
6	noresize
7	scrolling
8	longdesc

HTML table

An HTML table is defined with the <table> tag.



Each table row is defined with the <tr> tag. A table header is defined with the <th> tag. By default, table headings are bold and centered. A table data/cell is defined with the <td> tag.

```
<table style="width:100%">
<tr>
<th>Firstname</th>
<th>Lastname</th>
<th>Age</th>
</tr>
<tr>
<td>Jill</td>
<td>Smith</td>
<td>50</td>
</tr>
<tr>
<td>Eve</td>
<td>Jackson</td>
<td>94</td>
</tr>
</table>
```

Table Heading

Table heading can be defined using <th> tag. This tag will be put to replace <td> tag, which is used to represent actual data cell. Normally you will put your top row as table heading as shown below, otherwise you can use <th> element in any row. Headings, which are defined in <th> tag are centered and bold by default.

Cellpadding and Cellspacing Attributes

There are two attributes called *cellpadding* and *cellspacing* which you will use to adjust the white space in your table cells. The *cellspacing* attribute defines space between table cells, while *cellpadding* represents the distance between cell borders and the content within a cell.

Tables Backgrounds

You can set table background using one of the following two ways –

- **bgcolor** attribute – You can set background color for whole table or just for one cell.
- **background** attribute – You can set background image for whole table or just for one cell.

You can also set border color also using **bordercolor** attribute.

Table Height and Width



You can set a table width and height using **width** and **height** attributes. You can specify table width or height in terms of pixels or in terms of percentage of available screen area.

able Header, Body, and Footer

Tables can be divided into three portions – a header, a body, and a foot. The head and foot are rather similar to headers and footers in a word-processed document that remain the same for every page, while the body is the main content holder of the table.

The three elements for separating the head, body, and foot of a table are –

- **<thead>** – to create a separate table header.
- **<tbody>** – to indicate the main body of the table.
- **<tfoot>** – to create a separate table footer.

A table may contain several **<tbody>** elements to indicate *different pages* or groups of data. But it is notable that **<thead>** and **<tfoot>** tags should appear before **<tbody>**

HTML Form

An **HTML form** is a section of a document which contains controls such as text fields, password fields, checkboxes, radio buttons, submit button, menus etc.

An HTML form facilitates the user to enter data that is to be sent to the server for processing such as name, email address, password, phone number, etc.

HTML forms are required if you want to collect some data from of the site visitor.

HTML Form Syntax

```
<form action="server url" method="get|post">  
  //input controls e.g. textfield, textarea, radiobutton, button  
</form>
```

HTML <form> element

The HTML **<form>** element provide a document section to take input from user. It provides various interactive controls for submitting information to web server such as text field, text area, password field, etc.

Syntax:

```
<form>  
  //Form elements  
</form>
```

HTML <input> element

The HTML **<input>** element is fundamental form element. It is used to create form fields, to take input from user. We can apply different input filed to gather different information form user. Following is the example to show the simple text input.



Example:

```
<body>
<form>
  Enter your name <br>
  <input type="text" name="username">
</form>
</body>
```

HTML TextField Control

The type="text" attribute of input tag creates textfield control also known as single line textfield control. The name attribute is optional, but it is required for the server side component such as JSP, ASP, PHP etc.

```
<form>
  First Name: <input type="text" name="firstname"/> <br/>
  Last Name: <input type="text" name="lastname"/> <br/>
</form>
```

HTML <textarea> tag in form

The <textarea> tag in HTML is used to insert multiple-line text in a form. The size of <textarea> can be specify either using "rows" or "cols" attribute or by CSS.

Example:

```
<html>
<head>
  <title>Form in HTML</title>
</head>
<body>
<form>
  Enter your address:<br>
  <textarea rows="2" cols="20"></textarea>
</form>
</body>
</html>
```

Label Tag in Form

It is considered better to have label in form. As it makes the code parser/browser/user friendly.

If you click on the label tag, it will focus on the text control. To do so, you need to have for attribute in label tag that must be same as id attribute of input tag.

```
<form>
  <label for="firstname">First Name: </label> <br/>
  <input type="text" id="firstname" name="firstname"/> <br/>
  <label for="lastname">Last Name: </label>
  <input type="text" id="lastname" name="lastname"/> <br/>
</form>
```



HTML Password Field Control

The password is not visible to the user in password field control.

```
<form>
  <label for="password">Password: </label>
  <input type="password" id="password" name="password"/> <br/>
</form>
```

HTML 5 Email Field Control

The email field is new in HTML 5. It validates the text for correct email address. You must use @ and . in this field.

```
<form>
  <label for="email">Email: </label>
  <input type="email" id="email" name="email"/> <br/>
</form>
```

Radio Button Control

The radio button is used to select one option from multiple options. It is used for selection of gender, quiz questions etc.

If you use one name for all the radio buttons, only one radio button can be selected at a time.

Using radio buttons for multiple options, you can only choose a single option at a time.

```
<form>
  <label for="gender">Gender: </label>
  <input type="radio" id="gender" name="gender" value="male"/>Male
  <input type="radio" id="gender" name="gender" value="female"/>Female <br/>
</form>
```

Checkbox Control

The checkbox control is used to check multiple options from given checkboxes.

```
<form>
Hobby:<br>
  <input type="checkbox" id="cricket" name="cricket" value="cricket"/>
  <label for="cricket">Cricket</label> <br>
  <input type="checkbox" id="football" name="football" value="football"/>
  <label for="football">Football</label> <br>
  <input type="checkbox" id="hockey" name="hockey" value="hockey"/>
  <label for="hockey">Hockey</label>
</form>
```

Submit button control

HTML **<input type="submit">** are used to add a submit button on web page. When user clicks on submit button, then form get submit to the server.

Syntax:

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

HTML <fieldset> element:



The <fieldset> element in HTML is used to group the related information of a form. This element is used with <legend> element which provide caption for the grouped elements.

Example:

```
<form>
  <fieldset>
    <legend>User Information:</legend>
    <label for="name">Enter name</label><br>
    <input type="text" id="name" name="name"><br>
    <label for="pass">Enter Password</label><br>
    <input type="Password" id="pass" name="pass"><br>
    <input type="submit" value="submit">
  </fieldset>
</form>
```

HTML Image

HTML img tag is used to display image on the web page. HTML img tag is an empty tag that contains attributes only, closing tags are not used in HTML image element.

Let's see an example of HTML image.

```
<h2>HTML Image Example</h2>

```

Attributes of HTML img tag

The src and alt are important attributes of HTML img tag. All attributes of HTML image tag are given below.

1) src

It is a necessary attribute that describes the source or path of the image. It instructs the browser where to look for the image on the server.

The location of image may be on the same directory or another server.

2) alt

The alt attribute defines an alternate text for the image, if it can't be displayed. The value of the alt attribute describe the image in words. The alt attribute is considered good for SEO prospective.

3) width

It is an optional attribute which is used to specify the width to display the image. It is not recommended now. You should apply CSS in place of width attribute.

4) height

It h3 the height of the image. The HTML height attribute also supports iframe, image and object elements. It is not recommended now. You should apply CSS in place of height attribute.

```

```

Use tag as a link

We can also link an image with other page or we can use an image as a link. To do this, put tag inside the <a> tag.

Example:

```
<a href="https://www.javatpoint.com/what-is-robotics">
</a>
```

Set Image Location



Usually we keep all the images in a separate directory. So let's keep HTML file test.htm in our home directory and create a subdirectory **images** inside the home directory where we will keep our image test.png.

Set Image Width/Height

You can set image width and height based on your requirement using width and height attributes. You can specify width and height of the image in terms of either pixels or percentage of its actual size.

Set Image Border

By default, image will have a border around it, you can specify border thickness in terms of pixels using border attribute. A thickness of 0 means, no border around the picture.

Set Image Alignment

By default, image will align at the left side of the page, but you can use align attribute to set it in the center or right.

```
<html>
<head>
  <title>Set Image Alignment</title>
</head>
<body>
  <p>Setting image Alignment</p>
  <img src = "/html/images/test.png" alt = "Test Image" border = "3" align = "right"/>
</body>
</html>
```

HTML - Meta Tags

HTML lets you specify metadata - additional important information about a document in a variety of ways. The META elements can be used to include name/value pairs describing properties of the HTML document, such as author, expiry date, a list of keywords, document author etc.

The **<meta>** tag is used to provide such additional information. This tag is an empty element and so does not have a closing tag but it carries information within its attributes.

You can include one or more meta tags in your document based on what information you want to keep in your document but in general, meta tags do not impact physical appearance of the document so from appearance point of view, it does not matter if you include them or not.

Hyperlinks

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.

HTML Links - Syntax

Hyperlinks are defined with the HTML **<a>** tag:

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

Local Links

The example above used an absolute URL (a full web address).

A local link (link to the same web site) is specified with a relative URL (without https://www....).

Example

```
<a href="html_images.asp">HTML Images</a>
```



HTML Links - The target Attribute

The target attribute specifies where to open the linked document.

The target attribute can have one of the following values:

- `_blank` - Opens the linked document in a new window or tab
- `_self` - Opens the linked document in the same window/tab as it was clicked (this is default)
- `_parent` - Opens the linked document in the parent frame
- `_top` - Opens the linked document in the full body of the window
- `framename` - Opens the linked document in a named frame

HTML Links - Image as Link

It is common to use images as links:

Example

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

Link Titles

The title attribute specifies extra information about an element. The information is most often shown as a tooltip text when the mouse moves over the element.

Example

```
<a href="https://www.w3schools.com/html/" title="Go to W3Schools HTML section">Visit our HTML  
Tutorial</a>
```

External Paths

External pages can be referenced with a full URL or with a path relative to the current web page.

This example uses a full URL to link to a web page:

Example

```
<a href="https://www.w3schools.com/html/default.asp">HTML tutorial</a>
```

Rollover image

A **rollover image** is an **image** that changes to some other **image** when you or your customer rolls the mouse over it. These are commonly used to create an interactive feel such as buttons or tabs. But you can create **rollover images** out of just about anything.

```
<body>  
  
</body>
```

Email Links

It is not difficult to put an HTML email link on your webpage but it can cause unnecessary spamming problem for your email account. There are people, who can run programs to harvest these types of emails and later use them for spamming in various ways.

You can have another option to facilitate people to send you emails. One option could be to use HTML forms to collect user data and then use PHP or CGI script to send an email.



A simple example, check our Contact Us Form. We take user feedback using this form and then we are using one CGI program which is collecting this information and sending us email to the one given email ID.

HTML Email Tag

HTML `<a>` tag provides you option to specify an email address to send an email. While using `<a>` tag as an email tag, you will use `mailto:` email address along with `href` attribute. Following is the syntax of using `mailto` instead of using `http`.

```
<a href = "mailto: abc@example.com">Send Email</a>
```

Image Maps

The `<map>` tag defines 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 idea behind an image map is that you should be able to perform different actions depending on where in the image you click.

To create an image map you need an image, and a map containing some rules that describe the clickable areas.

The Image

The image is inserted using the `` tag. The only difference from other images is that you must add a `usemap` attribute:

```

```

The Areas

Then add the clickable areas.

A clickable area is defined using an `<area>` element.

Shape

You must define the shape of the area, and you can choose one of these values:

- `rect` - defines a rectangular region
- `circle` - defines a circular region
- `poly` - defines a polygonal region
- `default` - defines the entire region

```
<area shape="rect" coords="34, 44, 270, 350" href="computer.htm">
```

Three-click Rule

The **three-click rule** or **three click rule** is an unofficial web design rule concerning the design of website navigation. It suggests that a user of a website should be able to find any information with no



more than three mouse clicks. It is based on the belief that users of a site will become frustrated and often leave if they cannot find the information within the three clicks.

Although there is little analytical evidence that this is the case, it is a commonly held belief amongst designers that the rule is part of a good system of navigation. Critics of the rule suggest that the number of clicks is not as important as the success of the clicks or information sent

In an outdated book, *Taking Your Talent to the Web* (2001), Jeffrey Zeldman wrote that the Three-Click Rule is "based on the way people use the Web" and "the rule can help you create sites with intuitive, logical hierarchical structures".

More important to good navigation are the following:

- Ensure that menu items have names with strong information scent and avoid vague, unfamiliar, or branded terms.
- Include clear wayfinding (e.g., breadcrumbs, local subnavigation) that shows users where they currently are in the IA.
- Avoid multilevel hierarchical dropdown menus (on desktop) in favor of mega menus. Hierarchical (or cascading) dropdown menus are error-prone, require precise mouse movements, and show only one slice of the site IA at a time. Mega menus usually display several levels of the information hierarchy and allow users to compare multiple pathways at a glance to understand which "neighborhood" they should be investigating. They also support easy error correction for users that make a mistake along the way. There is nothing more frustrating than a high interaction-cost process that you need to do twice because you clicked the wrong thing or accidentally closed the menu.
- Identify the most important information-seeking tasks, and surface links to them from the homepage and from other important pages.
- For pathways that do involve multiple steps, provide clear landing pages or navigation hubs at key points along the way. These landing pages offer groups of links, often with images or other elements that help with unfamiliar terminology, provide stopping places along the way (that are retraceable with the Back button), and enable easy lateral movement to sibling pages in the same category. Remember, in most IAs, the higher levels of the hierarchy are general categories and the deeper ones are as more specific (and therefore, may require additional information or disambiguation along the way).

SiteMap

- A Sitemap allows you to create a file hosted among the other files in your account that informs the search engines of all pages your website contains. In other words, it provides the search engine with detailed information about the content of your website.
- Although Sitemaps are mainly used to improve the index process of your website by search engines, they can be used to provide accessibility to certain pages as well. For example, pages that are not accessible via your menus, can be indexed by the search engine if you want.
- The Sitemap does not affect the normal way crawler bots index your page – it just extends the visibility and accessibility of your content.

Here's an example

- I. Articles
 - a. Commentary
 - b. Reviews
 - c. Videos
- II. Contributors
 - a. Contributor 1
 - b. Contributor 2
 - c. Contributor 3



renaissance

college of commerce & management

B.Com III Year

Subject- Web Designing

- III. Contests
- IV. Community
 - a. Forum
 - b. Arcade
 - i. Arcade Game 1
 - ii. Arcade Game 2
 - iii. Arcade Game 3

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UNIT-V

Cascading Style Sheets

- **CSS** stands for **Cascading Style Sheets**
- CSS describes **how HTML elements are to be displayed on screen, paper, or in other media**
- CSS **saves a lot of work**. It can control the layout of multiple web pages all at once
- External stylesheets are stored in **CSS files**

Uses of CSS

CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.

HTML was NEVER intended to contain tags for formatting a web page!

HTML was created to **describe the content** of a web page, like:

```
<h1>This is a heading</h1>
```

```
<p>This is a paragraph.</p>
```

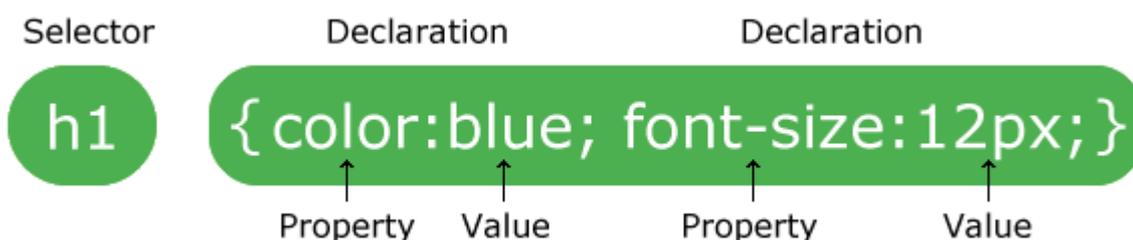
When tags like ``, and color attributes were added to the HTML 3.2 specification, it started a nightmare for web developers. Development of large websites, where fonts and color information were added to every single page, became a long and expensive process.

To solve this problem, the World Wide Web Consortium (W3C) created CSS.

CSS removed the style formatting from the HTML page!

CSS Syntax

A CSS rule-set consists of a selector and a declaration block:



The selector points to the HTML element you want to style.



The declaration block contains one or more declarations separated by semicolons.

Each declaration includes a CSS property name and a value, separated by a colon.

A CSS declaration always ends with a semicolon, and declaration blocks are surrounded by curly braces.

Example

In this example all <p> elements will be center-aligned, with a red text color:

```
p {  
  color: red;  
  text-align: center;  
}
```

Three Ways to Insert CSS

There are three ways of inserting a style sheet:

- External CSS
- Internal CSS
- Inline CSS

External CSS

With an external style sheet, you can change the look of an entire website by changing just one file!

Each HTML page must include a reference to the external style sheet file inside the <link> element, inside the head section.

Example

External styles are defined within the <link> element, inside the <head> section of an HTML page:

```
<!DOCTYPE html>  
<html>  
<head>  
<link rel="stylesheet" type="text/css" href="mystyle.css">  
</head>  
<body>
```



```
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>
```

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

Internal CSS

An internal style sheet may be used if one single HTML page has a unique style.

The internal style is defined inside the <style> element, inside the head section.

Example

Internal styles are defined within the <style> element, inside the <head> section of an HTML page:

```
<!DOCTYPE html>  
<html>  
<head>  
<style>  
body {  
  background-color: linen;  
}
```

```
h1 {  
  color: maroon;  
  margin-left: 40px;  
}  
</style>  
</head>  
<body>
```

```
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>
```

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

Inline CSS



An inline style may be used to apply a unique style for a single element.

To use inline styles, add the style attribute to the relevant element. The style attribute can contain any CSS property.

Example

Inline styles are defined within the "style" attribute of the relevant element:

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

<h1 style="color:blue;text-align:center;">This is a heading</h1>
<p style="color:red;">This is a paragraph.</p>

</body>
</html>
```

Audio on the Web

Before HTML5, audio files could only be played in a browser with a plug-in (like flash).

The HTML5 <audio> element specifies a standard way to embed audio in a web page.

The HTML <audio> Element

To play an audio file in HTML, use the <audio> element:

Example

```
<audio controls>
  <source src="horse.ogg" type="audio/ogg">
  <source src="horse.mp3" type="audio/mpeg">
Your browser does not support the audio element.
</audio>
```

HTML Audio - How It Works

The controls attribute adds audio controls, like play, pause, and volume.

The <source> element allows you to specify alternative audio files which the browser may choose from. The browser will use the first recognized format.



The text between the <audio> and </audio> tags will only be displayed in browsers that do not support the <audio> element.

In HTML5, there are 3 supported audio formats: MP3, WAV, and OGG.

The browser support for the different formats is:

Browser	MP3	WAV	OGG
Edge/IE	YES	NO	NO
Chrome	YES	YES	YES
Firefox	YES	YES	YES
Safari	YES	YES	NO
Opera	YES	YES	YES

Attributes

Attribute	Value	Description
autoplay	autoplay	Specifies that the audio will start playing as soon as it is ready
controls	controls	Specifies that audio controls should be displayed (such as a play/pause button etc)
loop	loop	Specifies that the audio will start over again, every time it is finished
muted	muted	Specifies that the audio output should be muted
preload	auto metadata none	Specifies if and how the author thinks the audio should be loaded when the page loads
src	URL	Specifies the URL of the audio file

How to create a link to play a sound file in HTML

Linking to a sound file using a href allows a browser to open and play an audio file if the viewer of your web page has properly configured their Internet browser. You can also use the <embed> tag or the newer <audio> tag to insert a sound file directly into a web page.

```
<a href="https://www.computerhope.com/jargon/m/example.mp3">Play sound file</a>
```

Result

[Play sound file](#)



<audio> tag

The <audio> tag can be used to create a media player as part of the web page. It allows the visitor to play, stop, pause, or download an audio file. The <audio> element is compatible with all modern web browsers.

Example code

```
<audio controls>
```

```
  <source src="https://www.computerhope.com/jargon/m/example.mp3" />
```

```
</audio>
```

Embedding Sound Files

<embed> tag

An older method of including audio files is to use the <embed> tag. While this method certainly works, it is less efficient than those which were mentioned above. As such, we recommend using one of the solutions demonstrated above.

```
<embed src="https://www.computerhope.com/clouds.mid"
  align="baseline" border="0" width="145"
  height="60" autostart="false" loop="true">
```

Video

The <video> tag specifies video, such as a movie clip or other video streams.

Before HTML5, a video could only be played in a browser with a plug-in (like flash).

The HTML5 <video> element specifies a standard way to embed a video in a web page.

The HTML <video> Element

To show a video in HTML, use the <video> element:

Example

```
<video width="320" height="240" controls>
  <source src="movie.mp4" type="video/mp4">
  <source src="movie.ogv" type="video/ogg">
```



Your browser does not support the video tag.

</video>

How it Works

The controls attribute adds video controls, like play, pause, and volume.

It is a good idea to always include width and height attributes. If height and width are not set, the page might flicker while the video loads.

The <source> element allows you to specify alternative video files which the browser may choose from. The browser will use the first recognized format.

The text between the <video> and </video> tags will only be displayed in browsers that do not support the <video> element.

HTML <video> Autoplay

To start a video automatically use the autoplay attribute:

Example

```
<video width="320" height="240" autoplay>  
  <source src="movie.mp4" type="video/mp4">  
  <source src="movie.ogg" type="video/ogg">
```

Your browser does not support the video tag.

</video>

Audio Formats

MP3 is the newest format for compressed recorded music. The term MP3 has become synonymous with digital music.

If your website is about recorded music, MP3 is the choice.

Format	File	Description
MIDI	.mid .midi	MIDI (Musical Instrument Digital Interface). Main format for all electronic music devices like synthesizers and PC sound cards. MIDI files do not contain sound, but digital notes that can be played by electronics. Plays well on all computers and music hardware, but not in web browsers.
RealAudio o	.rm .ram	RealAudio. Developed by Real Media to allow streaming of audio with low bandwidths. Does not play in web browsers.



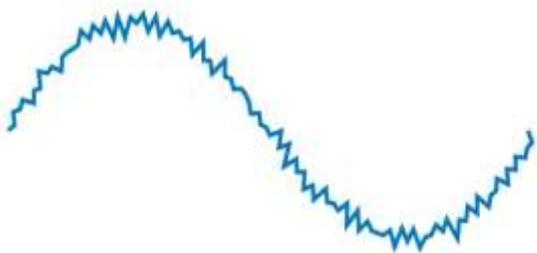
WMA	.wma	WMA (Windows Media Audio). Developed by Microsoft. Commonly used in music players. Plays well on Windows computers, but not in web browsers.
AAC	.aac	AAC (Advanced Audio Coding). Developed by Apple as the default format for iTunes. Plays well on Apple computers, but not in web browsers.
WAV	.wav	WAV. Developed by IBM and Microsoft. Plays well on Windows, Macintosh, and Linux operating systems. Supported by HTML5.
Ogg	.ogg	Ogg. Developed by the Xiph.Org Foundation. Supported by HTML5.
MP3	.mp3	MP3 files are actually the sound part of MPEG files. MP3 is the most popular format for music players. Combines good compression (small files) with high quality. Supported by all browsers.
MP4	.mp4	MP4 is a video format, but can also be used for audio. MP4 video is the upcoming video format on the internet. This leads to automatic support for MP4 audio by all browsers.

Types of Video

- Analog Video
- Digital Video

Analog Signal

SIGNAL + NOISE



NOISE



Digital Signal

SIGNAL + NOISE



NOISE





Analog Vs Digital

	Analog	Digital
Signal	Analog signal is a continuous signal which represents physical measurements.	Digital signals are discrete time signals generated by digital modulation.
Waves	Denoted by sine waves	Denoted by square waves
Representation	Uses continuous range of values to represent <u>information</u>	Uses discrete or discontinuous values to represent information
Example	Human voice in air, analog electronic devices.	Computers, CDs, DVDs, and other digital electronic devices.
Technology	Analog technology records waveforms as they are.	Samples analog waveforms into a limited set of numbers and records them.
Data transmissions	Subjected to deterioration by noise during transmission and write/read cycle.	Can be noise-immune without deterioration during transmission and write/read cycle.
Response to Noise	More likely to get affected reducing accuracy	Less affected since noise response are analog in nature

Attribute	Value	Description
autoplay	autoplay	Specifies that the video will start playing as soon as it is ready
controls	controls	Specifies that video controls should be displayed (such as a play/pause button etc).
height	<i>pixels</i>	Sets the height of the video player
loop	loop	Specifies that the video will start over again, every time it is finished
muted	muted	Specifies that the audio output of the video should be muted
poster	<i>URL</i>	Specifies an image to be shown while the video is downloading, or until the user hits the play button



preload	auto metadata none	Specifies if and how the author thinks the video should be loaded when the page loads
src	<i>URL</i>	Specifies the URL of the video file
width	<i>pixels</i>	Sets the width of the video player

Webcam



Accessing your webcam via your browser used to involve a...pardon the profanity, a plugin. That's right. In order to connect to a webcam and gain access to its video stream, you had to rely on something primarily created in Flash or Silverlight. While that approach certainly worked for browsers that supported plug-ins, it didn't help for the increasing number of browsers that aim to be plugin-free. This inability to natively access the webcam without relying on 3rd party components was certainly a gap in the HTML

development story. At least, that was the case until pretty recently.

A webcam is a video camera that feeds or streams an image or video in real time to or through a computer to a computer network, such as the Internet. Webcams are typically small cameras that sit on a desk, attach to a user's monitor, or are built into the hardware. Webcams can be used during a video chat session involving two or more people, with conversations that include live audio and video. For example, Apple's iSight camera, which is built into Apple laptops, iMacs and a number of iPhones, can be used for video chat sessions, using the iChat instant messaging program (now called Messages). Webcam software enables users to record a video or stream the video on the Internet. As video streaming over the Internet requires a lot of bandwidth, such streams usually use compressed formats. The maximum resolution of a webcam is also lower than most handheld video cameras, as higher resolutions would be reduced during transmission. The lower resolution enables webcams to be relatively inexpensive compared to most video cameras, but the effect is adequate for video chat sessions.

Webcams typically include a lens, an image sensor, support electronics, and may also include one or even two microphones for sound.

- Image sensor
- Optics



- Compression
- Interface
- Software

Characteristics

- Webcams are known for their low manufacturing cost and their high flexibility, making them the lowest-cost form of videotelephony. As webcams evolved simultaneously with display technologies, USB interface speeds and broadband internet speeds, the resolution went up from gradually 320×240, to 640×480, and some even offering 1280×720 (aka 720p) or 1920×1080 (aka 1080p) resolution.
- Despite the low cost, the resolution offered as of 2019 is impressive, with now the low-end webcams offering resolutions of 720p, mid-range webcams offering 1080p resolution, and high-end webcams offering 4K resolution at 60 fps.
- Webcams have become a source of security and privacy issues, as some built-in webcams can be remotely activated by spyware. To address this concern, many webcams come with a physical lens cover.

Uses

- Health care
- Video monitoring
- Commerce
- Videocalling and videoconferencing
- Video security
- Video clips and stills
- Input control devices
- Astro photography
- Laser beam profiling

Animation

Animation is the process of designing, drawing, making layouts and preparation of photographic sequences which are integrated in the multimedia and gaming products. Animation involves the exploitation and management of still images to generate the illusion of movement. A person who creates animations is called animator. He / she use various computer technologies to capture the still images and then to animate these in desired sequence.

Multimedia is the term used to represent combination of visual and audio materials gathered from various resources and then added into one single combination. A multimedia product can be sets of texts, graphic arts, sounds, animations and videos. Precisely, term multimedia is used



to refer visual and audio materials into a single common presentation which can be played in a computer including CD ROM or digital video, internet or web technology, streaming audio or video and data projection system etc.

Modern entertainment industry i.e. film and television has gained new heights because of advances in animation, graphics and multimedia. Television advertisements, cartoons serials, presentation and model designs - all use animation and multimedia techniques.

Types of Animation

- Traditional animation (cel animation or hand-drawn animation)
- Stop motion animation (Claymation, Cut-outs)
- Motion Graphics (Typography, Animated logo)
- Computer animation
- 2D animation
- 3D animation

What is Flash?

- Flash is a multimedia graphics program specially for use on the Web
- Flash enables you to create interactive "movies" on the Web
- Flash uses vector graphics, which means that the graphics can be scaled to any size without losing clarity/quality
- Flash does not require programming skills and is easy to learn

Flash vs. Animated Images and Java Applets

Animated images and Java applets are often used to create dynamic effects on Web pages.

The advantages of Flash are:

- Flash loads much faster than animated images
- Flash allows interactivity, animated images do not
- Flash does not require programming skills, java applets do

Flash text rendering/displaying is much slower than **HTML** and noticeably less clear. Macromedia knows this and that's why they include the ability to display



basic **HTML** in **Flash** and that's why on their own site, they make heavy use of **HTML. Flash** development usually takes much longer than the **HTML** equivalent.

Flash Embedded in HTML

After creating a Flash movie you choose File > Save As from the top menu to save your movie. Save the file as "Somefilename fla".

To embed the Flash movie you just made into an HTML page, you should go back to your Flash program and do the following steps:

Step **1**

Choose File > Open. Open a Flash movie you have created.

Step **2**

Choose File > Export Movie.

Step **3**

Name the file "somefilename.swf". Choose the location where the file is to be stored (in your Web folder). Click OK.

Step **4**

Open the HTML page where you want to insert your Flash movie. Insert this code:

```
<object width="550" height="400">
<param name="movie" value="somefilename.swf">
<embed src="somefilename.swf" width="550" height="400">
</embed>
</object>
```

Various ways of marketing the website

The 2 main groups of digital marketing are online and offline. While offline marketing involves things like radio, television and phone advertising, online marketing has 7 major categories:

- Search engine optimization (SEO)
- Search engine marketing (SEM)
- Pay-per-click advertising (PPC)
- Content marketing



- Social Media Marketing (SMM)
- Affiliate marketing
- Email marketing

SEARCH ENGINE OPTIMIZATION

According to Search Engine Land, SEO stands for “search engine optimization.” It is the “process of getting traffic from the free, organic, editorial or natural search results on search engines.”

By understanding how search engines rank websites, one can optimize a website to maximize its chances of ranking well for relevant searches. However, search engine algorithms continue to change, making it essential for online businesses to stay up-to-date with best practices to claim high rankings for relevant keywords.

SEARCH ENGINE MARKETING (SEM) & PAY-PER-CLICK ADVERTISING (PPC)

SEM (Search Engine Marketing) is the process of gaining website traffic by purchasing ads on search engines. Google AdWords is by many measures the most popular paid search platform used by search marketers, followed by Bing Ads. Beyond that, there are a number of “2nd tier PPC platforms” as well as PPC advertising options on the major social networks.

Typically, SEM and PPC advertising is carried out through search engines, who charge advertisers a predetermined amount every time their ad is clicked. While the search engines profit handsomely from this model, site owners benefit from being able to precisely target their potential customers.

CONTENT MARKETING

According to the Content Marketing Institute, content marketing is “a strategic marketing approach focused on creating and distributing valuable, relevant, and consistent content to attract and retain a clearly-defined audience — and, ultimately, to drive profitable customer action.”

Basically, content marketing is the ongoing process that focuses on communicating with your customers without always selling. Instead, businesses should use content marketing strategies to educate the consumer while delivering consistent, valuable information to buyers who, in turn, reward us with their business and loyalty.

Regardless of what type of marketing you do, content marketing should be part of your strategy, not something separate. Quality content is part of all forms of marketing, including social media marketing, SEO, PR, PPC, inbound marketing and content strategy.



SOCIAL MEDIA MARKETING (SMM)

As an end user, many people already know a lot about social media, but their knowledge about social media marketing is typically more limited.

Social media marketing is a great way for businesses to fulfill their objectives in terms of building brand equity, improving customer service, reaching new customers and collecting customer feedback. If companies can create social media content that provides value to others, they can connect with customers in a profitable way.

AFFILIATE MARKETING

Affiliate marketing is the process of earning a commission by promoting other people's (or company's) products. You find a product you like, promote it to others (usually through your blog), and earn a piece of the profit for each sale that you make.

EMAIL MARKETING

Email marketing has long been a pillar for any business attempting to generate sales via the internet. It provides direct contact with clients and allows you to drive prospective customers to your website.

In a few simple steps, you can provide updates, exciting news, reminders, etc. to your customers in a matter of minutes. At the same time, you can use these newsletters as printable, direct mail pieces or even flyers. When using the right tools, sending out customizable emails that look professional and represent your business the way you want it can be so simple.

People want brands they can trust, companies that know them, communications that are personalized and relevant, and offers tailored to their needs and preferences. Digital marketing is the method in which you can provide it.

The steps involved in registering a website

Step 1. Choose a domain name/URL

Step 2. Register your domain name/URL

Step 3. Choose a hosting service

Step 4. Connect your domain name to your web host

Step 5. Install WordPress



Step 6. Choose a theme for your website

Step 7. Configure your website

Step 8. Add content

Registering Domain Name

A domain name is the part of your Internet address that comes after "**www**". For example, in **www.tutorialspoint.com** the domain name is **tutorialspoint.com**.

A domain name becomes your Business Address so care should be taken to select a domain name. Your domain name should be easy to remember and easy to type.

Domain Extensions

The final letter at end of internet address is known as top level domain names. They are called top level because they are read from right to left, and the part after the dot is the highest in a hierarchy.

The following table shows the **Generic** Top-Level Domain names:

Domain	Meaning
.com	Commercial Business
.edu	Education
.gov	U.S. government agency
.int	International Entity
.mil	U.S. military
.net	Networking organization
.org	Non profit organization

Registering Domain Name

Registering a Domain Name is very simple. You can take following step to get your desired domain name registered:

- Think of a name that justifies your business need. To find out the available names you can enter a name at commercial domain name registrar such as GoDaddy.



- If the domain name entered by you is available, then select that particular domain name.
- Now it will ask you for other additional services such as Email inbox, hosting etc. that host also provides. You may choose what's best for you.
- Now they will ask you for your personal information which is stored in WHOIS database.
- It will then ask for payment information. Pay for the purchase you have made. Make sure you enter the correct payment information.
- Once you are done with all above steps, you are ready to use their tools to upload your stuff to your site.

Domain Name Registrar

There are a number of domain name registrars available in the market. The following table contains some of the popular domain name registrars:

S.N.	Domain Name Registrar
	Address Creation, LLC
	Addressonthe web, LLC
	101domains, INC
	Atomicdomainnames, LLC
	BigRock Solutions Ltd
	Black Ice Domain, Inc
	Block Host LLC
	Domain Monkeys, LLC
	Domain Mantra, Inc.
	DomainName, Inc.
	Dot Holding Inc.
	DotMedia Ltd



Extend Names, Inc.
Extremely Wild
Fast Domain Inc.
Google Inc

Web hosting

Web hosting is a service of providing online space for storage of web pages. These web pages are made available via **World Wide Web**. The companies which offer website hosting are known as **Web hosts**.

The servers on which web site is hosted remain switched on 24 x7. These servers are run by web hosting companies. Each server has its own IP address. Since IP addresses are difficult to remember therefore, webmaster points their domain name to the IP address of the server their website is stored on.

It is not possible to host your website on your local computer, to do so you would have to leave your computer on 24 hours a day. This is not practical and cheaper as well. This is where web hosting companies comes in.

Types of Hosting

The following table describes different types of hosting that can be availed as per the need:

S.N.	Hosting Description
1.	Shared Hosting In shared hosting, the hosting company puts thousand of website on the same physical server. Each customer has their own allocation of physical web space and a set of bandwidth limit. As all websites share same physical memory, MYSQL server and Apache server, one website on the server experiencing high traffic load will affect performance of all websites on the server.
2.	Virtual Private Server (VPS) It is also known as Virtual Dedicated Server. It is a server which is partitioned into smaller servers. In this customer is given their own partition, which is installed with its own operating system. Unlike shared hosting, VPS doesn't share memory or processor time rather it allocates certain amount of memory and CPU to use which means that any problem on a VPS partition on the same drive will not affect other VPS customers.
3.	Dedicated Server In this kind of hosting, single dedicated server is setup for just one customer. It is



commonly used by the businesses that need the power, control and security that a dedicated server offers.

4. Reseller Hosting

A reseller acts as a middle man and sells hosting space of someone else's server.

5. Grid Hosting

Instead of utilizing one server, Grid Hosting spreads resources over a large number of servers. It is quite stable and flexible. The servers can be added or taken away from the grid without crashing the system.

Web Hosting Companies

Following are the several companies offering web hosting service:

S.N.	Hosting Company
1.	Blue Host
2.	Go Daddy
3.	Host Gator
4.	just Host
5.	Laughing Squid
6.	Hivelocity
7.	liquid Web
8.	Media TempleServInt
9.	Wired Tree
10.	Wild West Domains
11.	Wix
12.	WIPL
13.	Big Rock



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