What is a Webpage:

A web page is a single hypertext document available on **World Wide Web (WWW)**. It is composed of HTML elements and displayed on the user's browser such as Mozilla, Firefox, Chrome, etc. It is also referred to as "Page."

A webpage is a document written in HTML and can be viewed on any web browser. It is contained within the web server, which can be accessed by entering the URL for that web page, and once it is loaded, it appears on the user's web browser. Each webpage is linked with a unique URL; hence two pages cannot have the same URL. A webpage may contain **text**, **links for other pages**, **graphics**, **videos**, etc. Moreover, it is mainly used to provide information to the user in text, images, etc.

A webpage is a part of a website; it means a website contains different web pages. Such as javaTpoint.com is a website, and the page currently you are accessing is the webpage. It can be understood as an example of a book. So, a website is like a complete book, and a webpage is like a page of that book.

The WWW or Internet contains millions of web pages, and daily, a lot is being added. Tim Berners-Lee developed the first webpage.

Characteristics of a Web Page:

Following are some characteristics of a Web page:

- A simple webpage can be created very quickly.
- It takes very little time to create a webpage compared to a website.
- A web page and a website should be compatible with any device, such as Mobile, Desktop, Laptop, etc.
- The search engine provides a web page through a link, and when a user clicks on that link, it is redirected to the webpage of a website.
- A webpage can have any type of information including videos, and audios.
- It can be made up of only HTML (Hypertext Markup Language), or CSS, or JavaScript for dynamic and attractive behavior.

Page Let's understand some basic terms that are used on webpage:

• <u>Website:</u> A website is a collection of several web pages. These pages are linked together with hyperlinks. A website has a unique domain name, and we can access it by entering that domain name in the URL.

- <u>Search Engine:</u> A search engine is an internet service that helps users find any information available on the internet. Some examples of search engines are **Google**, **Yahoo**, **Bing**, it is usually accessed with the help of Web browser.
- <u>Web Browser:</u> A web browser or simply browser is application software used to access the internet. Some examples of Web browsers are **Google**Chrome, Microsoft Internet Explorer, Safari, etc. It does two things:
 - o It connects to a web server on the internet and requests a page that the user wants to view; once it finds that page, it displays it on its device.
 - o It can interpret the set of HTML tags within a page to display the page in the correct format.
- Webserver: A web server can be understood as a computer that hosts or provide a website on the internet. It contains webserver software and component files of a website such as HTML document, images, CSS stylesheet, and JS files.
- HTML: HTML is an abbreviation of Hyper-Text Markup Language. A markup language is a computer language that specifies how a page should be formatted. With the help of HTML, one can specify fonts, colors, images, headings, and everything that he wants to display on a page displayed by the browser.

Elements of a Webpage:

The main element of the webpage is a text file composed of HTML

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 - <u>CSS:</u> The CSS code is used to make the page more interactive and control its look and feel.
 - <u>Scripts:</u> The JavaScript code is included in a webpage to add interactivity to the page and add more functionalities to it.
 - <u>Media:</u> It is used to include media components such as audio, video, and images.

Types of a Web page:

There are mainly two types of a Web page based on functionality:

Static Webpage

• Dynamic Webpage

Static Webpage

Static webpages are those webpages that cannot be modified or altered by the client. These are also known as stationary or flat web pages. They are displayed on the client's browser in the same format and manner as they are saved in the webserver. Users can only load the page and read the information but cannot perform any change on the page.

A static webpage is generally made up of HTML and CSS only.

Dynamic Webpage

As the name suggests, Dynamic webpages are dynamic, which means it shows different information at different point of time.

The dynamic webpage shows different content each time it is viewed. There are two types of Dynamic web pages, which are:

- <u>Server-Side Dynamic Webpage:</u> These web pages are created using Server-side scripting. These pages are changed when they are visited or viewed. Some examples of server-side pages are login pages, submission forms, shopping carts, etc. Various scripting languages such as PHP, ASP.net, JSP, etc., can be used for server-side scripting.
- <u>Client-side Dynamic Webpage:</u> These web pages are created using Client-side scripting. These pages get changed in response to actions that occur within that page, such as mouse or keyboard action. Scripting languages such as JavaScript, Dart, etc., can be used for Client-Side scripting.

Apart from these two Webpages, there are some examples of common web pages that can be found on most of the websites, and these are as follow:

- Home Page: The home page of any website is one of the most important pages. It is called a home page because this is like a starting point from where users can go anywhere on that website. This page usually contains links to the important zones of the site. It can also be known as the index page.
- Feed Page: The feed page is usually found in those websites that update content. It is used to provide information to users for the latest information that has been updated.

- Menu Page: The menu page is created to accomplish the navigation goal. The page contains a collection of different links that give access to different categories and zones.
- About-us Page: This page contains brief information and details of the company, product, or website. It allows the visitors to know the details of the website that they are using.
- Registration Page: The registration page allows users to create an account by signing up, and hence they can create a personalized account. It helps the company to know the visitor and provide personalized offers and deals to them.
- Contacts Page: This is a simple page made for the visitors to contact the website owner. For any issue or any feedback, users can use this page.
- Landing Page: This is one of the special types of a Web page used as a core part of a website or as an individual page. The main aim of creating this page is to convert the visitors into the lead. It represents clear and focused content on a specific goal.

How to Create a Simple Webpage?

Creating a simple webpage is very easy; anyone with basic knowledge of computers and HTML can create it. But before creating a webpage, you should be aware of the below points:

- A simple webpage can be created using HTML code only. Such pages are simple but not interactive and have very few functionalities.
- To make your webpage interactive and add functionality, you need to learn and use scripting languages, such as PHP, Python, etc.
- A web page can also be created using Notepad, but it is recommended to use IDEs for advanced uses such as Atom, Sublime Text editor, PyCharm,

Follow the below steps to create your webpage:

- 1. Open the Notepad application on your computer.
- 2. Write Below code on it.





<head>
<title>Your title goes here</title>
</head>
<body bgcolor="white" text="red">
<h1>first Web page</h1>
This is my first web page!
</body>
</html>

In the above code, the following tags are used:

- <!DOCTYPE html>: It is used for document type declaration, which means which version of HTML you are using. It indicates the browser that which language it is supposed to interpret.
- <html>: it indicates the start and of the HTML code.
- <head>: It can have different types of information such as title, meta tag, etc.; this information will not appear on the webpage.
- **<body>**: This tag contains other tags on the webpage, and users can see them. In above code, we have included <h1> heading tag and paragraph tags.
- 3. Save the file with any name and .html extension. For example, save it with html name.
- 4. Go to the saved file (web.html), double click or right-click and run it.
- 5. It will open on your default browser and will display the below output:

