

# Internet and Web Browser

The World Wide Web (WWW), commonly known as the Web, is an information system where documents and other web resources are identified by Uniform Resource Locators (URLs, such as <https://www.example.com/>), which may be interlinked by hypertext, and are accessible over the Internet. **First introduced Web browser is (Nexus) in 1990**

The resources of the WWW are transferred via the Hypertext Transfer Protocol (HTTP) and may be accessed by users by a software application called a web browser and are published by a software application called a web server. **Tim Berners-Lee is a British computer scientist invented WWW**

# Web browser

- A web browser (commonly referred to as a browser) is a software application for accessing information on the World Wide Web. When a user requests a web page from a particular website, the web browser retrieves the necessary content from a web server and then displays the page on the screen.
- A web browser is not the same thing as a search engine, though the two are often confused. For a user, a search engine is just a website, such as Google Search, Bing, or DuckDuckGo, that stores searchable data about other websites. However, to connect to a website's server and display its web pages, a user must have a web browser installed
- Web browsers are used on a range of devices, including desktops, laptops, tablets, and smartphones. In 2019, an estimated 4.3 billion people used a browser. The most used browser is Google Chrome, with a 64% global market share on all devices, followed by Safari with 18%.

# Popular Web Browsers are

## **Google Chrome**

Google Chrome has become the most used web browsers in the world. Google Chrome was released in the year 2008 as a freeware that was written in C++. The browser is known for its performance, ease of use, syncing with Google database, security, great support for WebKit, HTML5, CSS3, and other latest web standards.

## **Firefox – Open Source**

Firefox is the second most popular web browser in the world. Firefox is a freeware from Mozilla organization that was released in the year 2002 by the name “Phoenix”.

- **Safari**

- Safari web browser is a freeware browser from the Apple Inc. Safari is the default web browser in Mac computers and in OS X and iOS Operating Systems. Safari was released in the year 2003. A version of the browser is available for Windows Operating System as well. Today, Safari is popular because of Apple products.

- **Internet Explorer**

- As Windows Operating System is the most popular desktop Operating System in the world, Internet Explorer or simply IE is the default browser in Windows making this browser the fourth most popular and used browser in the world. This browser is not free as it requires a Windows license to use. The Internet Explorer today has added new features to support the latest web technologies.
- Opera, Mobile Safari etc are other popular Web Browsers

## Introduction to Search Engines

Search Engine refers to a huge database of internet resources such as web pages, newsgroups, programs, images etc. It helps to locate information on World Wide Web.

User can search for any information by passing query in form of keywords or phrase. It then searches for relevant information in its database and return to the user.

**Search Engine Working** : Web crawler, database and the search interface are the major component of a search engine that actually makes search engine to work.

The search engine looks for the keyword in the index for predefined database instead of going directly to the web to search for the keyword.

It then uses software to search for the information in the database. This software component is known as web crawler.

Once web crawler finds the pages, the search engine then shows the relevant web pages as a result. These retrieved web pages generally include title of page, size of text portion, first several sentences etc.

# Following are the several search engines

Search Engine	Description
Google	It was originally called <b>BackRub</b> . It is the most popular search engine globally.
Bing	It was launched in 2009 by <b>Microsoft</b> . It is the latest web-based search engine that also delivers Yahoo's results.
Ask	It was launched in 1996 and was originally known as <b>Ask Jeeves</b> . It includes support for match, dictionary, and conversation question.
AltaVista	It was launched by <b>Digital Equipment Corporation</b> in 1995. Since 2003, it is powered by Yahoo technology.
AOL.Search	It is powered by Google.
LYCOS	It is top 5 internet portal and 13th largest online property according to Media Matrix.
Alexa	It is subsidiary of Amazon and used for providing website traffic information.

# Favorites

- While most Web browsers store saved webpage locations as bookmarks, Internet Explorer saves them as favorites.
- For example, when you save a webpage location in Firefox, it gets stored as a bookmark.
- When you save one in Internet Explorer, it gets stored as a favorite. For this reason, the terms "bookmarks" and "favorites" are often used synonymously.

# Concept of Electronic Mail

- Email is a service which allows us to send the message in electronic mode over the internet. It offers an efficient, inexpensive and real time mean of distributing information among people.
- E-Mail Address
- Each user of email is assigned a unique name for his email account. This name is known as E-mail address. Different users can send and receive messages according to the e-mail address.
- E-mail is generally of the form `username@domainname`. For example, `webmaster@tutorialspoint.com` is an e-mail address where `webmaster` is username and `tutorialspoint.com` is domain name.



- **The username and the domain name are separated by @ (at) symbol.**
- **E-mail addresses are not case sensitive.**
- **Spaces are not allowed in e-mail address.**

## **E-mail Header**

**The first five lines of an E-mail message is called E-mail header. The header part comprises of following fields:**

- **From**
- **Date**
- **To**
- **Subject**
- **CC**
- **BCC**

## **From**

The From field indicates the sender's address i.e. who sent the e-mail.

## **Date**

The Date field indicates the date when the e-mail was sent.

## **To**

The To field indicates the recipient's address i.e. to whom the e-mail is sent.

## **Subject**

The Subject field indicates the purpose of e-mail. It should be precise and to the point.

## **CC**

CC stands for Carbon copy. It includes those recipient addresses whom we want to keep informed but not exactly the intended recipient.

## **BCC**

BCC stands for Black Carbon Copy. It is used when we do not want one or more of the recipients to know that someone else was copied on the message.

## **Greeting**

Greeting is the opening of the actual message. Eg. Hi Sir or Hi Guys etc.

## **Text**

It represents the actual content of the message.

## **Signature**

This is the final part of an e-mail message. It includes Name of Sender, Address, and Contact Number

# Mailbox: Inbox and Outbox

- **Inbox** – Inbox is an area where you can see all the received mails.
- **Outbox** – Outbox is an area where the outgoing messages or messages which are in process of sending or which are failed to send are stored.
- **Sent mail** – Sent mail is an area to view all the sent or successfully delivered mails.
- **Draft** : A draft is simply an email message you haven't yet sent. It's not the same thing as an email waiting to be sent. Nope, it's an email message you close by choosing File→Save or closing the window rather than clicking the Send button. This act places the message into the Drafts folder.

# Spam

- Spam is electronic junk mail or junk newsgroup postings. Some people define spam even more generally as any unsolicited email. However, if a long-lost brother finds your email address and sends you a message, this could hardly be called spam, even though it is unsolicited. Real spam is generally email advertising for some product sent to a mailing list or newsgroup.
- Why **Spam** is a Problem
- In addition to wasting people's time with unwanted email, spam also eats up a lot of network bandwidth. Consequently, there are many organizations, as well as individuals, who have taken it upon themselves to fight spam with a variety of techniques. But because the Internet is public, there is really little that can be done to prevent spam, just as it is impossible to prevent junk mail. However, some online services have instituted policies to prevent spammers from spamming their subscribers.