

MRA DAV PUBLIC SCHOOL, SOLAN

Class XII (Informatics Practices)
Topic: Web Browser

Learning Objectives

- What is a Browser?
- Learning about different browsers, add-ons, extensions
- Learning about Cookies

Introduction

Web Browser is a software that helps in accessing web pages and, thus, is also called web client. It helps the user to navigate through the World Wide Web and display web pages.



A web browser takes you anywhere on the internet. It retrieves information from other parts of the web and displays it on your desktop or mobile device. The information is transferred using the Hypertext Transfer Protocol, which defines how text, images and video are transmitted on the web. This information needs to be shared and displayed in a consistent format so that people using any browser, anywhere in the world can see the information.

Commonly used Browsers,



Developed by Google Inc. Google Chrome's beta version was first released on September 2, 2008 for Microsoft Windows. An open and free source application, with a global share of more than 50%, is one of the most popular web browser. It runs on different operating systems, like Microsoft Windows, Mac OS X, Chrome OS, Linux, Android and iOS.



Mozilla Firefox, or simply Firefox, is a free and open-source web browser developed by the Mozilla Foundation and its subsidiary, the Mozilla Corporation. Firefox was created in 2002 under the codename "Phoenix" by the Mozilla community members. Firefox is a widely localized web browser. The first official release in November 2004 was available in twenty-four different languages and for twenty-eight locales. As of June 2020, currently in eighty-nine locales (79 languages).



Microsoft Edge is the default web browser on Windows 10, Windows 10 Mobile, and Xbox One consoles, replacing Internet Explorer 11 and Internet Explorer Mobile. The browser includes an integrated Adobe Flash Player (with an internal whitelist allowing Flash applets on Facebook websites to load automatically, bypassing all other security controls requiring user activation) and a PDF reader.

Commonly used Browsers,



Safari is a graphical web browser developed by Apple, based on the WebKit engine. First released on desktop in 2003 with Mac OS X Panther, a mobile version has been bundled with iOS devices since the iPhone's introduction in 2007. Safari is the default browser on Apple devices. A Windows version was available from 2007 to 2012.



Opera is a freeware web browser for Microsoft Windows, Android, iOS, macOS, and Linux operating systems, developed by Opera Software. Opera is a Chromium-based browser using the Blink layout engine. It differentiates itself because of a distinct user interface and other features.

Opera was conceived at Telenor as a research project in 1994 and was bought by Opera Software in 1995. It was a commercial software for the first ten years and had its own proprietary Presto layout engine. The Presto versions of Opera received many awards, but Presto development ended after a milestone transition to Chromium in 2013.

Browser add-ons and plug-ins

Web browser plugins and add-ons are programs integrated into your web browser and extending its capabilities. For example, you can use them to view media content on a web page, receive news and mail, download files, block undesired pop-up windows, and so on.

In computing, a plug-in or add-on is a software component that adds a specific feature to an existing computer program. When a program supports plug-ins, it enables customization.

Applications support plug-ins for many reasons. Some of the main reasons include:

- to enable third-party developers to create abilities which extend an application
- to support easily adding new features
- to reduce the size of an application
- to separate source code from an application because of incompatible software licenses.

A browser extension is a small software module for customizing a web browser. Browsers typically allow a variety of extensions, including user interface modifications, ad blocking, and cookie management

Cookies

An HTTP cookie (also called web cookie, Internet cookie, browser cookie, or cookie) is a small piece of data sent from a website and stored on the user's computer by the user's web browser while the user is browsing. Cookies were designed to be a reliable mechanism for websites to remember stateful information (such as items added in the shopping cart in an online store) or to record the user's browsing activity (including clicking particular buttons, logging in, or recording which pages were visited in the past). They can also be used to remember pieces of information that the user previously entered into form fields, such as names, addresses, passwords, and credit-card numbers.

Cookies are arbitrary pieces of data, usually chosen and first sent by the web server, and stored on the client computer by the web browser. The browser then sends them back to the server with every request, introducing states (memory of previous events) into otherwise stateless HTTP transactions. Without cookies, each retrieval of a web page or component of a web page would be an isolated event, largely unrelated to all other page views made by the user on the website.

References

- Google
- Wikipedia