**What is a Web Browser?**

**Introduction**

A browser is a software designed to find and display content on the World Wide Web. This content might be **a web page, a pdf document, a picture, a video or any other content**. The richest content is a web page. A web page is usually an HTML document which stands for **Hyper Text Markup Language**. Web browsers are also able to run **CSS (Cascading Style Sheet) and Javascript code**. CSS styles the HTML pages to make them look beautiful. And Javascript gives the page the ability to interact with users, show dynamic content and listen to specific **events**.

Events are fired inside the browser window and tend to be attached to a specific item that resides in it (this might be a single element, set of elements, the HTML document loaded in the current tab or the entire browser window). Different types of events occur on the browser. For example:

* Clicking or hovering the cursor over a button, link, picture, etc.
* Pressing a key.
* Resizing, minimizing, maximizing or closing the browser window.
* Loading a web page.
* Submitting a form.
* Playing, pausing a video.

Browsers have common features like address bar, back and forward buttons, bookmarking options, buttons for refreshing the page and stopping the request and home button to direct the user to the home page.

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| *Web browsers* |

Q: What Is Web Browser?  
A: A web browser is a program that you use to view web pages. Some of the most popular web browsers are Microsoft Internet Explorer, Google Chrome, Mozilla Firefox.

**Web Browser Structure**

**Introduction**

Web browsers have seven high level components. These are **User Interface, Browser Engine, Rendering Engine, Networking, Javascript Interpreter, UI Backend and Data Storage**.

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| *Web browser structure* |

 User Interface :The user interface is where the users interact with the browser.

 Browser Engine :The browser engine is the bridge between the user interface and the rendering engine. It relays the necessary information to the rendering engine for performing a render.

 Rendering Engine :The rendering engine is responsible for rendering the requested content and displaying it on the screen. It may be either an HTML, a CSS or a JS content.

 Networking :The networking component uses the URL given by the user and retrieves the page via a protocol called HTTP or a file via FTP protocol.

 Javascript Interpreter :The Javascript interpreter, as the name suggests, interprets and execute the Javascript code of the web page. Then the results are sent to the rendering engine for displaying.

 UI Backend :The UI Backend is responsible for drawing basic widgets like combo boxes and windows. It uses operating system user interface methods.

 Data Storage :The data storage is persistence layer. The browser may need a small storage area to store, process or show data. So there are some mechanisms for storing like localStorage, sessionStorage, IndexedDB, WebSQL and FileSystem.