**WEB ENGINEERING**

**ASSIGNMENT # 01**



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# **Web Browser:**

A **web browser** is an application software instance designed and developed to get and display data from HTML files or web pages stored on online servers. **Sir Tim Berners-Lee** developed the first web browser in **1990**, and **mosaic** developed the first graphical web browser in **1993**.

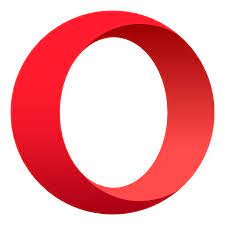
# **Search Engine:**

A **search engine** is a specific type of website that enables users to find data on the Internet. Users enter the necessary keywords into the search field to get the information. After that, the search engine scans its index for relevant web pages and lists them on the screen.

# **Difference Between Search Engine & Web Browser:**

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| --- | --- | --- |
| **Features** | **Search Engine** | **Web Browser** |
| **Definition** | A search engine is a type of website that allows users to discover information by entering queries, and it then displays relevant results on the screen based on those queries. | It is a type of software that is used to access information from webpages or HTML files stored on servers. |
| **Dependency** | A search engine does not depend on a specific web browser to function; it is accessible and usable from various web browsers. | While a web browser can be configured to use a specific search engine as the default, it is not inherently dependent on any particular search engine. Users can easily change their preferred search engine within the browser settings. |
| **Components** | It has three fundamental components, including the Search Indexer, Crawler, and Database. | It employs a GUI to help users in having an interactive online session on the Internet. |
| **Installation** | It is not required to be installed on the system. | Many web browsers may be installed on the computer system. |
| **Database** | It has its own database. | In a web browser, no database is needed. It only has cache memory, which you can use to store cookies and browse history until you delete it from the PC. |
| **Usage** | A search engine's main purpose is to collect and preserve data about various URLs. | It is designed to display the website at the server's current URL. |
| **Examples** | There are numerous search engines available, including Google, Yahoo, Bing, DuckDuckGo, etc. | Some instances of web browsers include Mozilla Firefox, Google Chrome, Netscape Navigator, etc. |

## **Browsers:**

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**Chromium Pale Moon Opera**

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**Tor Brave Chrome**

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**Vivaldi Mozilla Firefox Microsoft Edge**

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**Safari**

## **Search Engines:**

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**Swisscows Qwant Startpage**

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** Ecosia Yandex Microsoft Bing**

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** Yahoo Baidu Google**

**Duck Duck Go**