WWW Lifecycle

The process starts out when a user accesses a web page on the World Wide Web with the help of a software application called an internet **browser**(e.g. Chrome, Firefox, Opera).

The **browser** uses the **URL**(Uniform Resource Locator), usually known as a web address, as a reference to a web resource that specifies its location on a computer network. A typical **URL** could have the form "`http://www.example.com/index.html`", which indicates a protocol (`http`), a hostname (`www.example.com`), and a file name (`index.html`).

When the user types in the **URL** of a web page, he is sending a request to a **DNS server**, which will respond by sending him the **Internet Protocol address** of the web page. **IP addresses** are labels assigned to each device connected to the internet that uses the **IP protocol** to communicate. Because **IP addresses** consist of numbers or hexadecimal digits, they are really hard to memorize, and the role of the **DNS server** is really important to the user. **DNS servers** have the task of searching the name of the website throughout their database and sending back to the client(browser) the IP address assigned to it .

Once the browser has the **IP address** of the web page, it will send a request to the web server. It does this with the help of a protocol which is used to transfer data over the World Wide Web, called **Hypertext Transfer Protocol**. **HTTP** works as a request-response protocol between a client and server, so when the client(browser) sends a request to the server, the server will respond to the client by sending the requested content or information about the status of the request. The **GET** method is used to get this done, which is one of the most common **HTTP** methods. This method requests data from a specified resource and places it in a cache memory; it can be bookmarked and remains in the browser history.

After the **web server** receives the request, the **web server** usually being a dedicated computer running specific software, it processes it and returns **HTML** data. **HTML** stands for **Hypertext Markup Language** and represents the core structure of a web page. It is used together with other technologies such as CSS(Cascading Style Sheets) and JavaScript in creating a web page.

The **browser** receives the **HTML** document and then interprets it and displays the web page on the screen.