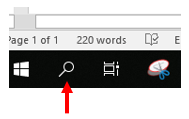
**Day 2 – Web Server (Software)**

**Warm-Up Activity**

Creating a simple Web Page

1. Use the search button (magnifying glass icon) in the bottom windows tray.
2. Find and open the “notepad” text editor application.
3. Use “Save As…” to go to your student folder (G drive) save the file as “mywebpage.txt”
4. Edit the file with the following contents and save it.

<h1>Hello Everybody</h1>

<p>This is a basic <b>HTML</b> web page</p>

Opening your web page

1. Open your web browser (e.g. Chrome)
2. Type “file://G:/” for the URL. What do you see?
3. Click on your “mywebpage.txt” to open it. What do you see?
4. Use File Explorer to rename your file to “mywebpage.html”
5. Refresh the “file://G:/” URL
6. Click on your “mywebpage.html” to open it. What do you see?

**Presentation Notes: Web Server Software**

1. What is a HTML and what does it stand for?

HTML stands for **Hyper Text Markup Language**. And HTML is the language used to create web pages.

1. What does a basic web page contain?

A basic web page contains some graphics, text, and hyperlinks to other web pages and files.

1. How does a dynamic web page differ from a basic web page?

A dynamic web page differs from a basic web page because the dynamic web page includes data and it includes animation and it includes some very dynamic colors with some very good Hyperlinks to certain parts of the web page.

1. What is a Web Server?

At the most basic level, whenever a browser needs a file which is hosted on a web server, the browser requests the file via HTTP. When the request reaches the correct web server (hardware), the HTTP server (software) accepts request, finds the requested document (if it doesn't then a [404](https://developer.mozilla.org/en-US/docs/Web/HTTP/Status/404) response is returned), and sends it back to the browser, also through HTTP.

1. What are some functions of a Web Server?

**1. Stores and secures website data:**

In web hosting services, a web server stores all website data and secures it from unauthorized users when it is properly configured.

**2. Provides web database access:**

A web server’s responsibility is to provide access to websites that are hosted. Web hosting service providers own some web servers that are used in variable ways to provide different web hosting services, such as backend database servers.

**3. Serve the end user requests:**

Web servers accept requests from different users connected over the internet and serve them accordingly.

1. What are some common types of Web Servers?

A program that uses HTTP for serving files that create web pages for users in response to their requests that are sent by the HTTP clients of their computer is called as a web server.

If any server delivers an XML document to another device, it can be a web server. In simple words, a web server is an Internet server that responds to HTTP requests for delivering content and services.

Let’s take an example, if you are working on your computer, browsing your web and a message pop ups from your friend that “I had just read a great article at the following URL: https://www.milesweb.in/blog”.

So, you will insert this URL into your browser and press enter. That’s it!

1. What is a HTTP and what does it stand for?

Stands for "Hypertext Transfer Protocol."

1. What is the difference between HTTPS and HTTP?
2. HTTP URL in your browser’s address bar is http:// and the HTTPS URL is https://.
3. HTTP is unsecured while HTTPS is secured.
4. HTTP sends data over port 80 while HTTPS uses port 443.
5. HTTP operates at application layer, while HTTPS operates at transport layer.
6. No SSL certificates are required for HTTP, with HTTPS it is required that you have an SSL certificate and it is signed by a CA.
7. HTTP doesn’t require domain validation, whereas HTTPS requires at least domain validation and certain certificates even require legal document validation.
8. No encryption in HTTP, with HTTPS the data is encrypted before sending.

1. What are some other common URL protocols?

A [URL, or Uniform Resource Locator](https://en.wikipedia.org/wiki/URL), is effectively a unique web address. It represents the “location” of a specific resource on the internet. The term URL refers to a subset of [Uniform Resource Indicators (URIs)](https://en.wikipedia.org/wiki/Uniform_Resource_Identifier) that, in addition to identifying the web resource—also provides the means of locating it.