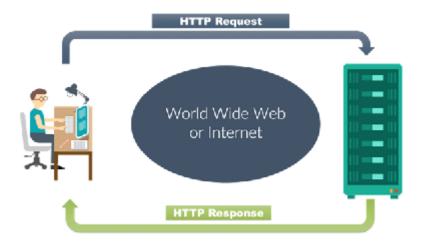# Additional Resources: Getting Started With Basics

What happens when you enter google.com in the web browser?

Steps:

- **Initial Typing:** When you start typing google.com in the browser, the browser will start looking for your browser cache first if the content is fresh and present in the cache display the same.
- **URL Parsing:** If not, the browser checks if the IP address of the URL is present in the browser cache if not then request the OS to do a DNS lookup using UDP to get the corresponding IP address of the URL from the DNS server to establish a new TCP connection.
- A new TCP connection is set between the browser and server.
- An HTTP request is sent to the server using the TCP connection.
- The web servers running on the Servers handle the incoming HTTP request and send HTTP responses.
- The browser processes the HTTP response sent by the server and may close the TCP connection or reuse the same for future requests.
- If the response data is cacheable then browsers caches the same.
- Browser decodes the response and renders the content.

What is HTTP?

- HTTP is a protocol that allows the fetching of resources, such as HTML documents.
- It is the foundation of any data exchange on the Web, and it is a client-server protocol. Your server will receive requests from the browser that follows HTTP.
- It then responds with an HTTP response that all browsers are able to parse.

To know more about HTTP, click [here](#)

What is a web browser, and how does it work?

- The web browser is an application that provides access to the web server, sends a network request to the URL, obtains resources, and interactively represents them.

  E.g., Google Chrome, Firefox, Safari, Internet Explorer and Opera.

To know how does the browser work click [here](#)

What is DNS?

- The Domain Name System (DNS) is the phonebook of the Internet.
  E.g. when you want to call your friend, search for the friend's name in the phone directory and call them, but in an actual call on their mobile number.

  Similarly, Domain Name System (DNS) does this same process but for domain names and IP addresses.

- Humans access information online through domain names, like google.com. Web browsers interact through Internet Protocol (IP) addresses. DNS translates domain names to IP addresses so browsers can load Internet resources.

To know more about DNS, click [here](#)

Question for you:-

Are URLs and Domain names the same? If not then what is the difference between them?