**what happens when you type a URL in the address bar in the browser?**

Once you enter a URL into a web browser, the browser checks the cache for a DNS record to find the corresponding IP address of maps.google.com or whatever.

If the requested URL is not in the cache, ISP’s DNS server initiates a DNS query to find the IP address of the server that hosts maps.google.com.

The browser initiates a TCP connection with the server.

Then the browser sends a HTTP request to the server.

The server sends back a HTTP response.

The browser displays the HTML content (for HTML responses, which is the most common).

Once the page is loaded, the browser sends further async requests as needed.