These steps are as follows:

1. Get one IP address for my computer from DHCP server

* My operating system create a DHCP request message, this message is handled by UDP, IP and Ethernet protocol and broadcast to the devices that are connected to my computer.
* Go through some Ethernet links, the DHCP message arrive at the local DHCP server. The DHCP server create a DHCP ACK message. This message contains the designated IP address, the IP address of DNS server, the IP address of the default gateway router and so on. The server handles this message through UDP, IP, Ethernet and sends this message to my computer.
* Go through some Ethernet links, the DHCP ACK message arrives at my computer. My operating system extract the information from this datagram and set up my computer’s IP address.
* In order to get the MAC address of the gateway router, my operating system create a ARP query message which is placed in Ethernet frame. Then the ARP query is broadcast to every devices that are connected to my computer. When the gateway router receives the ARP query message, it creates an ARP reply message containing its MAC address and send this message to my computer.
* Now, my computer installs its IP address and MAC address, Gateway router’s IP address, MAC address, DNS server’s IP address.

1. Query the DNS server

* I type a URL in my web browser. The operating system create a DNS query for the URL. This message is first put into UDP segment with port 53. Then the UDP segment is put into IP datagram with the destination IP address of DNS server. Then the IP datagram is put into Ethernet frame with the destination MAC address of gateway router.
* Then the DNS query message is sent to the DNS sever via some intra-AS( RIP, OSPF) and inter-AS (BGP) protocols.
* When the DNS query message arrive at the DNS server, the server look up its resources records and create a DNS reply message with the URL-IP address mapping information. Then this message is packaged through UDP, IP and Ethernet. Finally this message is sent to my computer. After my computer receive this reply, my operating system and the application extract the information contained in this message.
* Now my web browser knows the IP address corresponding to the URL.

1. Send request and get response from the Web server.

* My browser creates a http request message with the destination IP address field filled with the Web server’s IP address.
* My operating system first go through a TCP handshake with the Web server. The first TCP segment is packaged through TCP, IP, Ethernet. Then this segment is sent to the gateway router first through some intra-AS protocols. Then the gateway router forward this segment to the destination Web server through some intra-AS and inter-AS protocols. When the Web server receives this TCP handshake segment, it creates a TCP SYNACK message and send this message to my computer.
* When the TCP connection between my computer and the web server is set up, my operating system send the HTTP request message to the web server. After the web server receives this message, it creates a HTTP response message with the content that I request. After my computer receive the message, the operating system and web browser extract the information from the message in order. Finally, the content that I request will be downloaded and shown in my web browser.
* Now the web page is shown in my web browser.