How web page requests (i.e., URLs) carried out

We often think that when entering a URL into the address bar of our web browser, or clicking on a link on a web page, the browser goes directly to that page and displays it. Actually, several steps are involved in retrieving a web page associated with a URL.

When entering a URL and pressing enter, or clicking on a link, your browser knows you want to see a web page. It needs to then find out:

1. Which server to open a connection to so it will look it up in a DNS (domain name server).
2. Once it gets the information, it needs to know which port to connect to.
3. Once it locates the port, it sends a command that does something like say, "Hello, I think I'm talking to xyz server please send me the web page index."
4. After it receives the index, it returns an IP address and a web page which displays as the URL in your browser window.

Most of the time we don't need to know these details, however they're useful when trying to make sense of web site modifications such as setting up redirects.