

1. What is HTTP?
2. What is a URL?
3. What is DNS?
4. What is a query string?
5. What are two HTTP verbs and how are they different?
6. What is an HTTP request?
7. What is an HTTP response?
8. What is an HTTP header? Give a couple examples of request and response headers you have seen.
9. What are the processes that happen when you type "<http://somesite.com/some/page.html>" into a browser?

1. **HTTP** is Hypertext Transfer Protocol and its just a set of rules thats says how to communicate between a browser and a web server.
2. **URL** is Universal Resource Locator, a URL is an address for some internet resource and are frequently associated with HTTP Requests.
3. **DNS** is Domain Name System and its purpose is to take the **hostname** and turn it into the corresponding IP address.
4. **Query String** allows you to pass key-value pairs into the URL, in the format **?key1=value1&key2=value2...**
5. **2 HTTP VERBS** are **GET Request** and **POST Request**.
 - **GET** is used when making a request without side effects and to get some data from the server (most pages, search forms).
 - **POST** specifies a request where we do have side effects and to send some data to the server (pages that change data on server).
6. **HTTP Request** is a request from a client to a server which follows the HTTP protocol (eg a request for HTML from news.google.com).
7. **HTTP Response** is a response from a server to a client which follows the HTTP protocol (eg sending back HTML/CSS/JS/etc).
8. **HTTP Header** provide additional information about the request or the response. Here are some examples:
 - Request Headers : Host, User-Agent, Accept, Cookie, Cache-Control.
 - Response Headers : Content-Type, Last-Modified, Set-Cookie, Cache-Control.

9. The Process when we type a URL in a browser

- Your browser “resolves” the name into an IP address using DNS
- Your browser makes a request to that IP address, including headers (info about browser, any previous cookies, and other things)
- The server sends a response (typically, HTML, with a status code (200 if it was successful))
- The browser makes a DOM from that HTML, and finds any other resources needed (images, CSS, JavaScript, etc)
- The browser makes separate HTTP requests for those resources and receives response from the server for each