1. What is HTTP?

HTTP stands for hypertext transfer protocol. It’s a protocol or a set of rules computers follow to communicate with each other on the internet.

1. What is a URL?

URL stands for uniform research identifier. The URL is an address we type into the browser in order to reach the appropriate web server and ask it for the content we want to be sent back.

1. What is DNS?

DNS stands for domain name system. It’s a system used to map human readable URLs such as google.com into their respective IP addresses used to identify the server / computer where the content of the URL we want is located on the network / internet.

1. What is a query string?

A query string can be added at the end of a URL in order to query the server for specific contents related to the key-value pairs in the query string.

1. What are two HTTP verbs and how are they different?

GET and POST are the two HTTP verbs most commonly used. GET only request information from the server but doesn’t affect anything on the server side. POST connect with the server and typically send data that will affect the server. For example, we can use POST to send data that will be saved on the database of the server.

1. What is an HTTP request?

An HTTP request is sent to a server following the HTTP protocol via the network when we type an URL into the browser or click a link on a web page. It contains the URL but also a lot of extra information such as date, language, etc.

1. What is an HTTP response?

An HTTP response is what the server sent back to us after an HTTP request has been received and processed. It contains the information such as the HTML needed for the browser to display the content we requested as well as a lot of extra information including the status code, headers, etc.

1. What is an HTTP header? Give a couple examples of request and response headers you have seen.

An HTTP header is the extra information our browser sent along with an HTTP request or response. It can include date, time, language, etc which assist the communication between clients and servers. Some examples are

Request headers: Priority, User-Agent, Cookie,

Response headers: Date, Cache-control, content-type, content-length, server, Accept-Language

1. What are the processes that happen when you type <http://somesite.com/some/page.html> into a browser?

The processes are as follow: the browser read the URL and decide to use the HTTP protocol for communication 🡪 it then sent somesite.com to a local server, which is then sent to an internet provider server, which is then sent to a DNS in order for it to be mapped into the appropriate IP address 🡪 it then make a request to that IP address following the HTTP protocole 🡪 it then communicates with the server using port SOME, which can be skipped usually 🡪 it then requests the contents that are in page.html 🡪 if this communication succeeds and page.html exists, the server will response by sending the appropriate content back to the user, which is typically in the form of an HTML with a status code of 200 🡪 The browser makes a DOM from that HTML and finds any other resources needed such as images, css and javascript 🡪 If extra resources are needed, the browser will make separate requests for those resources and receive responses from the server for each 🡪 the browser display the contents for the user.