HTTP Interview Questions

A list of frequently asked **HTTP Interview Questions** and Answers are given below.

1) What is HTTP?

HTTP stands for Hypertext Transfer Protocol. It is a set of rule which is used for transferring the files like, audio, video, graphic image, text and other multimedia files on the WWW (World Wide Web). HTTP is a protocol that is used to transfer the hypertext from the client end to the server end, but HTTP does not have any security. Whenever a user opens their Web Browser, that means the user indirectly uses HTTP.

2) What are HTTP Request Messages?

HTTP Requests are messages which are sent by the client or user to initiate an action on the server.

It consists of various things:

a. Request Line: The Request-Line starts with a method token, which is followed by the Request-URI, the protocol version, and ending with CRLF. Using the SP characters, the elements are separated.

Syntax

1. Request-Line = Method SP Request-URI SP HTTP-Version CRLF

b. The Resource Identified by a Request:

c. Request Header Fields: The request-header fields are used to allow the client to pass additional information to the server like the request and the client itself. The request header fields act as request modifiers, with semantics equivalent to the parameters on a programming language method invocation.

3) What are HTTP Request Methods?

GET

This method retrieves information from the given server using a given URI. GET request can retrieve the data. It cannot apply other effects on the data.

HEAD

The HEAD method is the same as the GET method. It is used to transfer the status line and header section only.

POST

The POST request sends the data to the server. For example, file upload, customer information, etc. using the HTML forms.

PUT

The PUT method is used to replace all the current representations of the target resource with the uploaded content.

DELETE

The DELETE method is used to remove all the current representations of the target resource, which is given by URI.

CONNECT

The CONNECT method is used to establish a tunnel to the server, which is identified by a given URI.

4) What is the Status Code?

The Server issues an HTTP Status Code in response to a request of the client made to the server. Status code is a 3-digit integer. The first digit of status code is used to specify one of five standard classes of responses. The last two digits of status code do not have any categorization role.

5) What are Persistent Connections?

In HTTP/1.0, the connection is closed after a single request or response pair. In HTTP/1.1, a mechanism was introduced, which is known as keep-alive-mechanism. In this mechanism, a connection could be reused for more than one request.

6) What is Session State in HTTP?

Session state is also known as Stateless state. HTTP is a stateless protocol. In the session state, the client and server just know about each other only during the current request. If the connection is closed, and two computers want to connect again, they need to provide information to each other as a new connection, and the connection is handled as the very first one.

7) What is HTTP Message?

HTTP Message is used to show how data is exchanged between the client and the server. It is based on a client-server architecture. An **HTTP** client is a program that establishes a connection to a server to send one or more HTTP request messages. An **HTTP** server is a program that accepts connections to serve HTTP requests by sending an HTTP response messages.

8) What is HTTP cURL?

HTTP cURL is a command-line tool. It is available on all major operating systems

9) What is HTTP Response?

HTTP Response sent by a server to the client. The response is used to provide the client with the resource it requested. It is also used to inform the client that the action requested has been carried out. It can also inform the client that an error occurred in processing its request.

An HTTP response contains the following things:

- 1. Status Line
- 2. Response Header Fields or a series of HTTP headers
- 3. 3Message Body

10) What is HTTP Security?

HTTP is used to communicate over the internet, so users, information providers, and application developers should be aware of the limitations of security in HTTP/1.1. There are two methods to establish a secure HTTP connection: https URI scheme and the HTTP/1.1 Upgrade header.

11. What are 200 OK response codes in HTTP?

This response code is used to show that the request was successful.

12) What are 201 Created response codes in HTTP?

This response code shows that the request has been fulfilled, which results in the creation of a new resource.

13) What is the mean of 300 Multiple Choices response codes in HTTP?

This response code is used to indicate the multiple options for the resource from which the client may choose.

14) What are 400 Bad Request response codes in HTTP?

This code is used to indicate that the server did not understand the request due to invalid syntax.

15) What is the mean of 401 Unauthorized response codes in HTTP?

This error is used to show that we need to perform authentication before accessing the resource.

16) What are 405 Method Not Allowed response codes in HTTP?

This response code shows that the request method is not supported by the requested resource.

17) What are the 408 Request Timeout response codes in HTTP?

This code is used to show that the request took longer than the server was prepared to wait.

18) What are 500 Internal Server Error response codes in HTTP?

This code is used to show that the server has encountered a situation, and it does not know how to handle it.

19) Tell me to which OSI Layer does IP belong?

In the OSI layer, IP belongs to the Network layer, which is the third layer in the OSI layer.

20) What are the different roles of HTTP?

The HTTP was designed mainly to fetch the html document and send it to the client. It was designed in an exquisite way, and it has continually evolved, and features were being added to it, it becomes the most convenient way to quickly and reliably move data on the web.

21) What is HTTPS?

HTTPS stands for Hypertext Transfer Protocol Secure. HTTPS has a secure transfer. HTTPS is used to encrypt or decrypt user HTTP page or HTTP page requests that are returned by the webserver.

22) What is Content Negotiation in HTTP?

Most of the responses of HTTP include an entity which contains the information for interpretation by a user. Naturally, it is used to supply the user with the best available entity corresponding to the request. Unfortunately for cache and server, not all users have the same preferences for what is best. That's why HTTP has provisions for several mechanisms for "content negotiation", when there are multiple representations available, the process of selecting the best representation for a given response.

23) What are the different types of HTTP content negotiation?

The various types of content negotiations are as follows:

- a. **Server-driven Negotiation:** When a server-driven negotiation occurs, then the selection of the best representation for a response is made by an algorithm which is located at the server.
 - b. **Agent-driven Negotiation:** When an agent-driven negotiation occurs, the user agent performs the selection of the best representation for a response after receiving an initial response from the origin server.
 - c. **Transparent Negotiation:** It is a combination of both server-driven negotiation and agent-driven negotiation.

24) What is the mean of 100 Continue response code in HTTP?

This code is used to show that the client should continue with its request. The interim response informs the client that the request's initial part has been received.