**HTTP Fundamentals**

1. What are the basic Features of HTTP?

# It is a connection protocol between client & server. It is connectionless and stateless.

1. What are request methods in HTTP?

# GET, POST, DELET, PUT and PATCH, are the request methods in HTTP.

1. What are the differences between GET and POST methods?

GET: It is used to retrieve data from or of the current resource.

It is less secure than POST.

It cannot be used while sending the passwords.

Push: It is used to create a new resource.

It is secure and difficult to hack than GET.

PUSH is used while sending the passwords.

1. What is status code in HTTP?

# It is the response given by the server on the clients request.

100-199 is information response

200-299 successful response

300-399 Redirects

400-499 Client errors

500-599 server errors.

1. What are the header fields in HTTP?

# Header fields provide the information about any request made or response received, It can be a text or image.

There are 4 types of header fields. General header, client Request header, server Response header and Entity header.

1. What is URI?

# Uniform resource identifier, It can be a name or locator.

1. What are Idempotent methods and why do we call them?

# It is the methods than can be called many times but the output will be same all the time.

1. Explain HTTP Request & Response Messages?

# HTTP Request is an http request made by the client to the server.

HTTP Response is the response from the server to the client.

1. What is Session State in HTTP?

# It is the server side storage of information of the user using a browser of website throughout the time.

1. What is HTTPS?

#  HTTPS is the secured version of http.

**Introduction to API**

1. Explain REST and RESTFUL?

# Representational state transfer, REST is the representation of an object by an unique URL.

RESTful is the representation of tht Rest object.

1. Mention what are the HTTP methods supported by REST?

# GET, POST, DELETE, PUT and HEAD, are the HTTP methods supported in rest.

1. Explain the architectural style for creating web API?
2. Explain the RESTFul Web Service?

# It is a lightweight, maintainable and scalable service built on REST architecture. It is exposes the API from the application to call the client.

1. Explain what is a “Resource” in REST?

# Any information that can be named is called a resource or a key abstraction of information in REST is called a resource.

1. Which protocol is used by RESTful web services?

# HTTP.

1. What is messaging in RESTful web services?

# In RESTful, a client sends a message in HTTP request form and server responds in HTTP response, this tecqnique is called messaging.

1. State the core components of an HTTP Request?

# HTTP methods, GET, PUT, PUSH.

Header for containing the information about the data.

HTTP version to specify HTTP version.

1. State the core components of an HTTP response?

# Resources,

Request header,

Request body,

Response body,

Status code.

1. What do you understand about payload in RESTFul web service?

# Payload is the request data present in the HTTP message body.

1. Explain the caching mechanism?

# Caching is the storing of information for easy future access.

1. List the main differences between SOAP and REST?

# SOAP is Simple Object Access Protocol. SAOP is a Protocol and it requires more bandwidth.

REST is an architectural pattern, it used less bandwidth.

1. Enlist advantages and disadvantages of ‘Statelessness’.

# Some advantages of Statelessness are, the server need not to manage any sessions, deploying any number of services is possible. Seamless integration with HTTP protocols is possible it improves the visibility.

Disadvantage of Statelessness is that additional information is required in every request.