1. Explain REST and RESTFUL?

REST stands for Representational State Transfer. It's an architectural pattern for creating web services. A RESTful service is one that implements that pattern.

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

GET, PUT, POST, DELETE, HEAD

1. Explain the architectural style for creating web API?

-> Simple URI as the address for the services.

->For communication between client and server use HTTP.

-> Stateless communication

->Use XML/JSON as formatting language.

1. Explain the RESTFul Web Service?

->Restful web service is a lightweight and maintainable Service that is built on the REST architecture.

-> Restful Web Service, expose API from your application in a secure, uniform, stateless manner to the calling client.

-> The client can perform predefined operations using the Restful service. The underlying protocol for REST is HTTP

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

Every content in the Rest architecture is considered as a resource.

The resources can be text, html, images , videos etc.

REST servers provides access to the resources and REST client access the data and modify the resource.

1. Which protocol is used by RESTful web services?

HTTP protocol is used by restful web services.

1. What is messaging in RESTful web services?

In the HTTP protocol, when the client sends a message as a request and receives the reply message as a response. This technique is term as messaging.

1. State the core components of an HTTP Request?

* Includes methods like GET, PUT, POST, etc.
* Uniform Resource Identifier for identifying the resources available on the server.
* HTTP Version for specifying the type of version.
* HTTP Request header for containing the information about the data.
* HTTP Request body that contains the representation of the resources in use.

1. State the core components of an HTTP response?

* This contains various codes which determine the status of the server response.
* HTTP Version for specifying the HTTP version.
* HTTP Response header for containing the information about the data.
* HTTP Response body that contains the representation of the resources in use.

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

The payload is the part of that response that is communicating directly to us. In REST APIs this is usually some JSON formatted data.

With help of this payload we can see the data that being transmitted between client and the server.

1. Explain the caching mechanism?

Caching mechanism is nothing but which helps improving the delivery speed by storing a copy of the asset you requested and later accessing the cached copy instead of the original.

 If the file is stored in cache, this results in a cache hit response and the asset is delivered from cache

1. List the main differences between SOAP and REST?

REST:

1-REST is designed on architectural style.

2-this permits many data formats like text, xml, json etc.

3-Data can be cached.

4-Requirs less resources and light weight.

SOAP:

1-SOAP is designed on the protocol.

2-It uses only XML.

3-Data cannot be cached.

4-It requires more resources and bandwidth.

1. Enlist advantages and disadvantages of ‘Statelessness’.