*Points*

* *important aspects of this implementation include:*
  + *Resources*
  + *Request Headers*
  + *Request Body*
  + *Response Body*
  + *Status codes*
* *RESTful web services use a famous web protocol i.e. HTTP protocol.*
* *Every RESTful web services should have following features and characteristics that are enlisted below:*
  + *Based on the Client Server representation.*
  + *Use of HTTP protocol for performing functions like fetching data from the web service, retrieving resources, execution of any query, etc.*
  + *The communication between the server and client is performed through the medium known as ‘messaging’.*
  + *Addressing of resources available on the server through URIs.*
  + *Based on the concept of statelessness where every client request and the response are independent of the other with complete assurance of providing required information.*
  + *Uses the concept of caching.*
  + *Works on Uniform interface.*
* *Advantages:*
  + *Every method required for communication is identified as an independent method i.e. there are no dependencies to other methods.*
  + *Any previous communication with the client and server is not maintained and thus the whole process is very much simplified.*
  + *If any information or metadata used earlier in required in another method, then the client sends again that information with HTTP request.*
  + *HTTP protocol and REST web service, both shares the feature of statelessness.*
* ***Best practices to implement RESTful web services***
  + *Every input on the server should be validated.*
  + *Input should be well formed.*
  + *Never pass any sensitive data through URL.*
  + *For any session, the user should be authenticated.*
  + *Only HTTP error messages should be used for indicating any fault.*
  + *Use message format that is easily understood and is required by the client.*
  + *Unified Resource Identifier should be descriptive and easily understood.*

***Difference between PUT method and POST method?***

* *The major difference between the PUT and POST method is that the result generated with PUT method is always same no matter how many times the operation is performed. On the other hand, the result generated by POST operation is always different every time.*

*JAX-RS is defined as the Java API for RESTful web service. Among multiple libraries and framework, this is considered as the most suitable Java programming language-based API which supports RESTful web service.*

*Some of the implementations of JAX-RS are:*

* *Jersey*
* *RESTEasy*
* *Apache CFX*
* *Play*