**Day 26:**

**Web Service:**

Giving the service for web application when more than one application running using different technologies.

Amazon -🡪 Spring boot

Payment --🡪

Paytm -🡪 java technologies

GPay 🡪 python

PhonePay 🡪 node js

Credit / debit other technologies

Net banking other technologies

Java (req)

Application 1 XML/JSON Application 2

python(res)

XML :eXtensible Markup of language

JSON : Java Script Object notation.

SOAP Web Service : Simple Object Access Protocol. SOAP is base upon SOA (Service Oriented Architecture) SOA is standard architecture.

In SOAP web service we can consume and produce the data only in the form XML with SOAP Message structure.

Env

Header

Body

Operation

Rest Full Web Service

REST : Representation State Transfer. In Rest full web service we can consume and produce data in any format base upon client requirement like html, text, json, xml or any media type etc.

Rest full web service is architecture style. Exposing our resources like servlet, jsp or spring controller as rest full web service.

Servlet controller 🡪 then view must be html or jsp

Spring MVC 🡪 then view must be html or jsp

Spring boot controller 🡪thymeleaf

If we make controller as **rest controller** then view can be any technologies

JavaScript

Angular

React JS

Any other rest client

@Controller is replace by

@RestController. When ever use @RestController no html, jsp or thymeleaf etc.

Using Rest Full web service we create rest end point with help of http methods

Like

Get : get the resources or get all employee or customer details.

1. Get all resources details : select query
   1. Get string data in form of plain text, html, xml etc.
   2. Return user defined object or list of object in json format.
2. Get resource details using some property using technique as
   1. Query param select query with where clause

**URL?key=value** passing one information or data

**URL?key=value&key=value** passing more than one information or data.

* 1. Path param

**URL/value** passing one information

**URL/value1/value2/value3** passing more than one information

Post : create the resources : store the data like insert query

Put : update the resources: update query

Patch : update the resources: update query

Patch mainly use to update partial object and put is use to update complete object.

Delete : delete the resources like delete query

Creating rest api end points with project **web starter**

