***Web Service***

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

Spring boot

Amazon 🡪

Payment -----🡪 PayPal Java related.

Paytm Python with Django

Gpay Node Js with Express JS

Phone pay Asp.net

Credit card

Debit card

Java req

App1 XML /JSON App2

.net res

XML :eXtensible Markup language

JSON : JavaScript object notation

XML and JSON format data we use to share the data between one technologies to another technologies.

Web Service

Web service mainly divided into two types

1. SOAP web Service

Simple Object Access Protocol. SOAP web base upon SOA (Service oriented Architecture). In SOAP web service we can consume and produce the data only in the form of XML.

SOAP Structure :

JAX\_WS

1. Rest full web service

In Rest full web service we can expose our resources as web service. Servlet, JSP, Spring controller. Rest full service is style. In Rest full web service we can consume as well as produce the data in any format base upon requirement like html, plain text, xml, json or any media type.

Servlet and JSP we can use JAX\_RS with Jersey implementation of develop rest api.

Spring framework provide the implementation for rest full web service.

If my controller is normal controller with @Controller then view must be html, jsp, thymeleaf etc. In this option view and controller are tightly coupled.

If my controller is rest controller with @Restcontroller annotation then my view can be any technologies like angular framework, react js, JavaScript, Python, Node js, asp.net or another java application etc. in this option view and controller are independently or loosely coupled.

Simple rest api project

Starter -🡪 Web Starter

According to Rest API we can use http protocol methods

1. Get : Get the resource
2. Get the records with return type in string with format as plain text, html and xml etc.
3. If we return object of any type then we need to use media type as a xml or json (by default json consider).
4. Using get method we can pass the value to search the information
   1. Query param

URL?key=value if we pass single value

URL?key=value&key=value&key=value if we want to pass multiple value.

By default form with get method internally use query param technique.

* 1. Path param

URL/value1 if we pass single

URL/value1/value2/value3 we can pass multiple value.

1. Post : create or insert the resource in db
2. Put : update the complete existing resource in db
3. Patch : update the partial existing resource in db
4. Delete : delete the resource from db.