

# Spring-boot

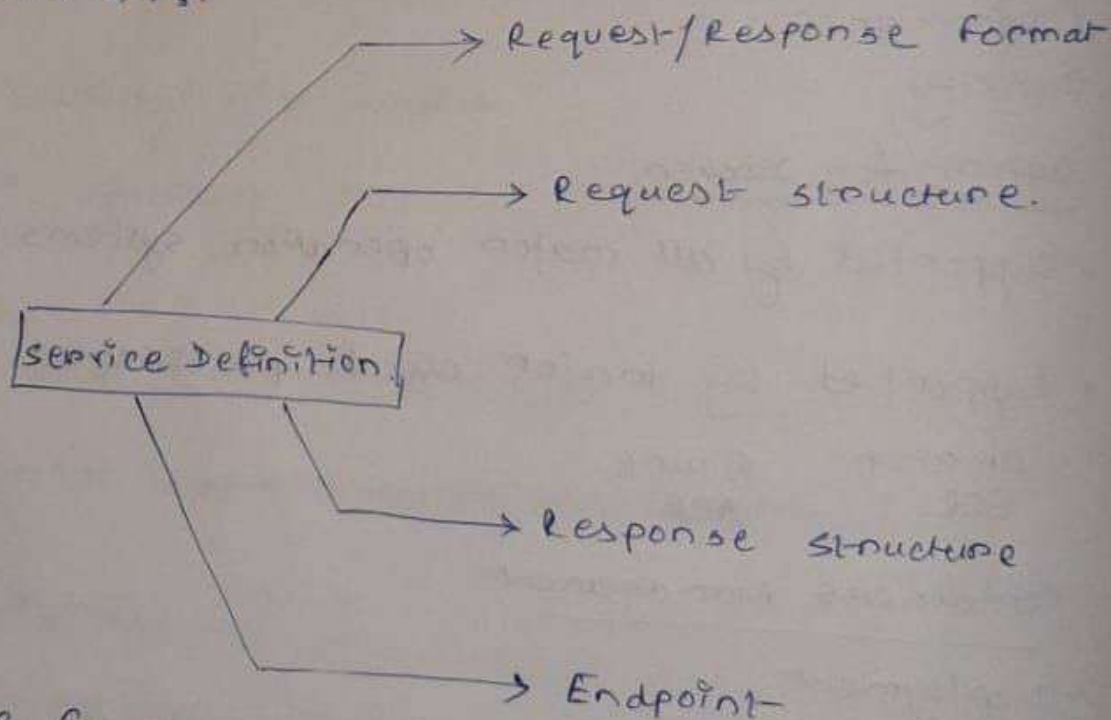
## Web Service

→ Service delivered over the web.

→ Software system designed to support interoperable machine-to-machine interaction over a network.

## Key Terminology

- Request & Response
- Message Exchange format
  - XML & JSON.
- Service Provider or Server
- Service Consumer or Client
- Service Definition.
- Transport
  - HTTP & MQ.



## Web-service Groups

- SOAP-based
- REST-styled.

## SOAP

### • Format

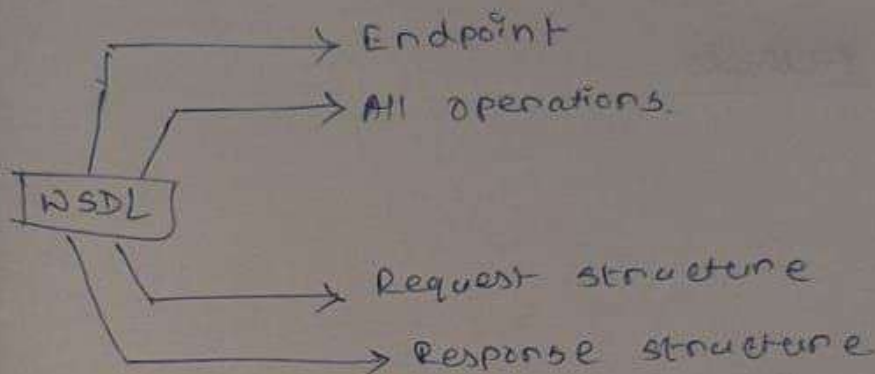
- SOAP XML Request
- SOAP XML Response

### • Transport

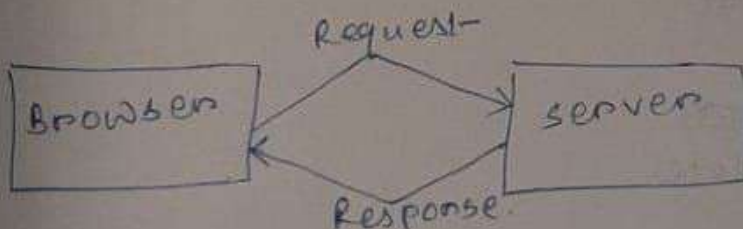
- SOAP over MQ
- SOAP over HTTP

### • Service Definition

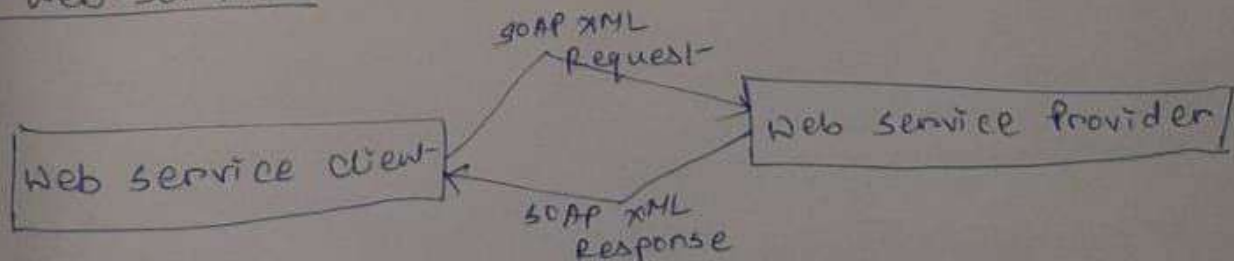
- WSDL



HTTP → Hyper Text Transfer Protocol.



## SOAP Web-service



REST is a style of software architecture for distributed hypertext systems.

## RESTful Web Services

Retrieve all users — GET/users

Create a user — POST/users

Retrieve one user — GET/users/{id} → /users/1

Delete a user — DELETE/users/{id} → /users/1

## Request Methods

- GET
- POST
- PUT
- DELETE

## Response Status

- 200 — SUCCESS
- 404 — RESOURCE NOT FOUND
- 400 — BAD REQUEST
- 201 — CREATED
- 401 — UNAUTHORIZED
- 500 — SERVER ERROR