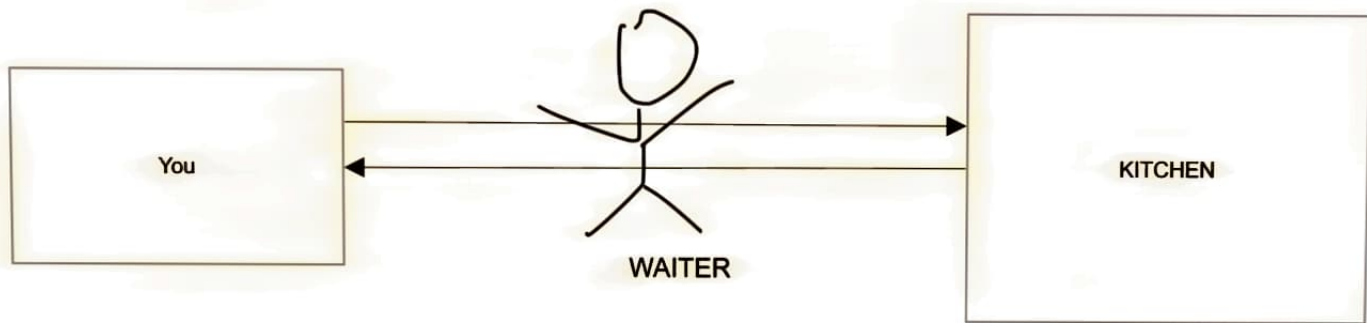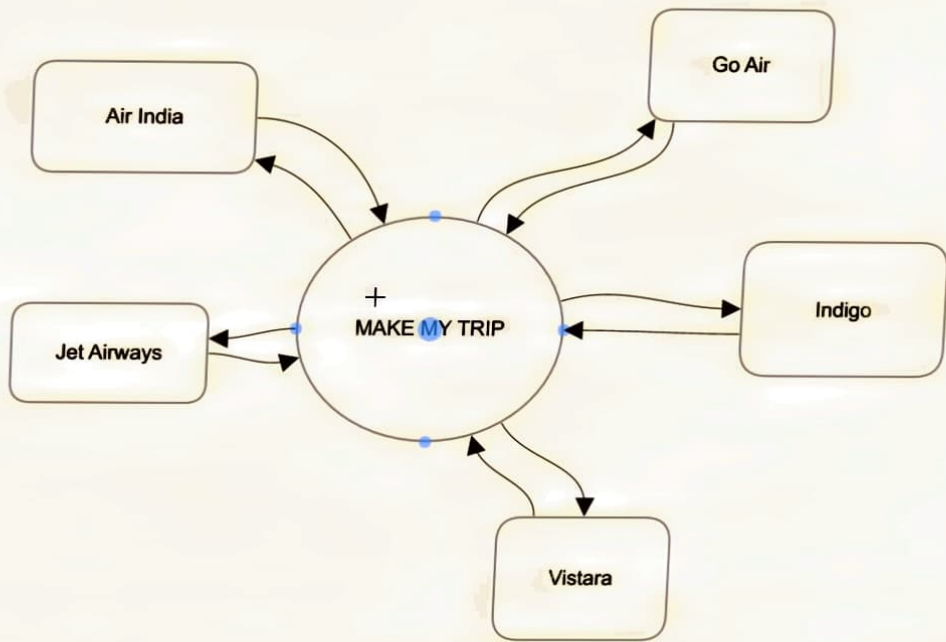Web Service - service available over the web

        - enables communication between applications over the web

        - provides a standard protocol/format for communication

        - platform independent communication

        - using web services two different applications (implementation)
          can talk to each other and exchange data/information

You → WAITER → KITCHEN

Filter Results

No. of Stops

0 stop	1 stop
₹3,393	₹3,572

Departure time from New Delhi

Before 6AM	6AM-12PM	12PM-6PM	After 6PM
₹3,393	₹3,572	₹4,792	₹4,550

Airlines

- Air India — ₹3,393 onwards
- Jet Airways — ₹3,572 onwards
- Go Air — ₹4,550 onwards
- Vistara — ₹4,792 onwards
- Spicejet

	29 OCT ₹3,901	30 OCT ₹2,256	31 OCT ₹3,393	01 NOV ₹5,642	02 NOV ₹5,856	

New Delhi to Mumbai - Mon, 31 Oct
114 flights found

📅 Fare Calendar

DEPARTURE	ARRIVAL	DURATION	PRICE ▲

Air India AI-349	04:00 New Delhi	06:15 Mumbai	2h 15m Non stop	₹3,393 Earn 16 points	Book

Free Meals/Snacks | Flight details ⌄

Jet Airways 9W-2249	06:20 New Delhi	10:20 Mumbai	4h 00m 1 Stop	₹3,572 Earn 17 points	Book

Free Meals/Snacks | Flight details ⌄

Go Air G8-428	20:40 New Delhi	22:45 Mumbai	2h 05m Non stop	₹4,550 Earn 22 points	Book

Flight details ⌄

Vistara UK-943	07:30 New Delhi	09:45 Mumbai	2h 15m Non stop	₹4,792 Earn 23 points	Book

Free Meals/Snacks | Flight details ⌄

Air India

Go Air

Jet Airways

MAKE MY TRIP

Indigo

Vistara

WEB SERVICES
Services available over the web

A web service provider develops/implements the application (web service) and makes it available over the internet (web)

SERVER
SERVICE PROVIDER

WEB SERVICES

Services available over the web
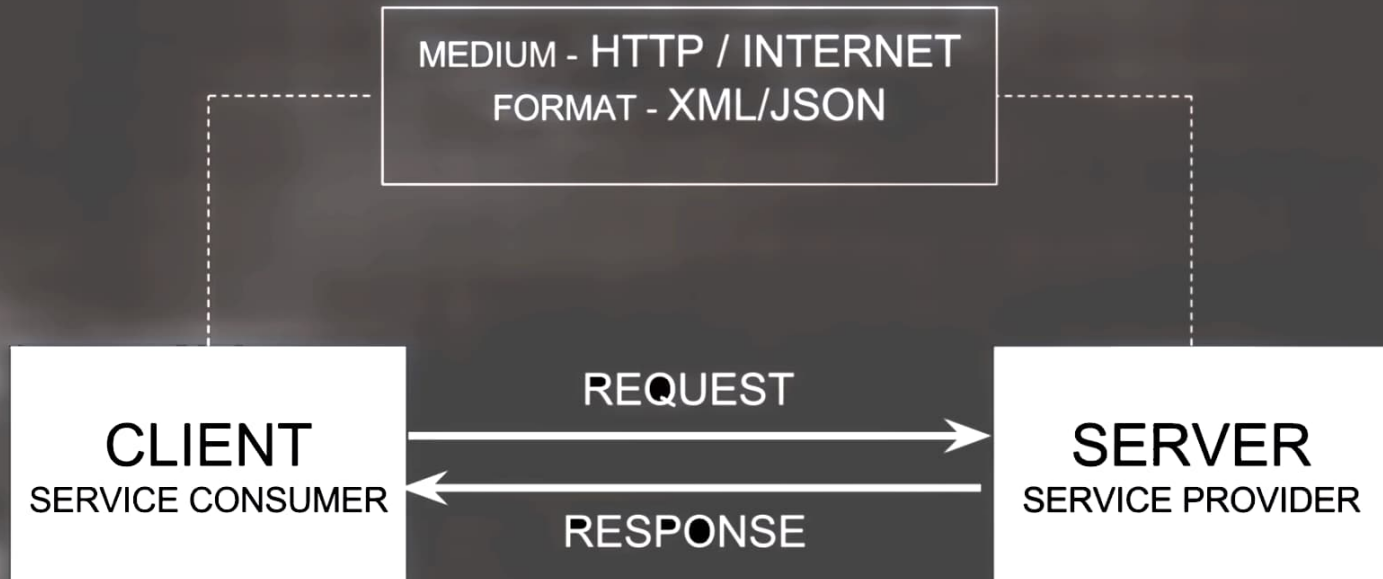
WEB SERVICES

Services available over the web

MEDIUM - HTTP / INTERNET
FORMAT - XML/JSON

CLIENT
SERVICE CONSUMER

REQUEST

RESPONSE

SERVER
SERVICE PROVIDER

WEB SERVICES

Services available

MEDIUM - HTTP

FORMAT - X[

SOAP
Simple Object Access Protocol

Medium : HTTP (POST)
Format : XML

REST
REpresentational State Transfer

Medium : HTTP (POST,GET,PUT, DELETE,...)
Format : XML/JSON/TEXT...

CLIENT
SERVICE CONSUMER

REQUEST →

← RESPONSE

SERVER
SERVICE PROVIDER

WEB SERVICES

WSDL

UDDI

Service Provider publishes an interface for his web services that describes all attributes of the web services.

This is XML based interface and is called -
Web **S**ervices **D**escription **L**anguage -
WSDL

CLIENT
SERVICE CONSUMER

REQUEST

RESPONSE

SERVER
SERVICE PROVIDER

WEB SERVICES
Services available over the web

WSDL

UDDI

WSDL
Web Services Description Language

Is an XML based interface that is used to describe the functionalities of the Web Services

CLIENT
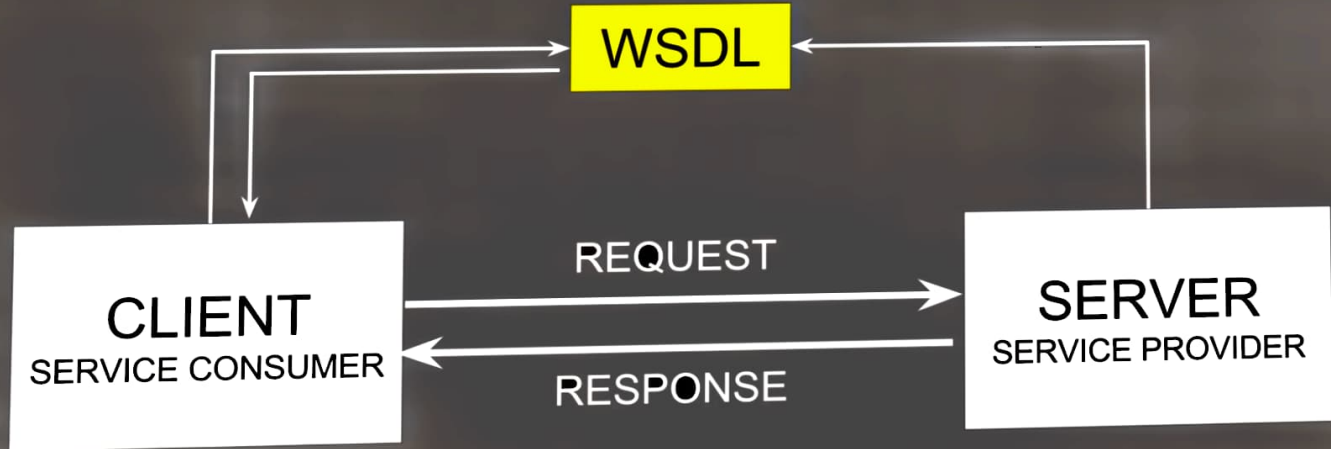SERVICE CONSUMER

REQUEST →

← RESPONSE

SERVER
SERVICE PROVIDER

WSDL

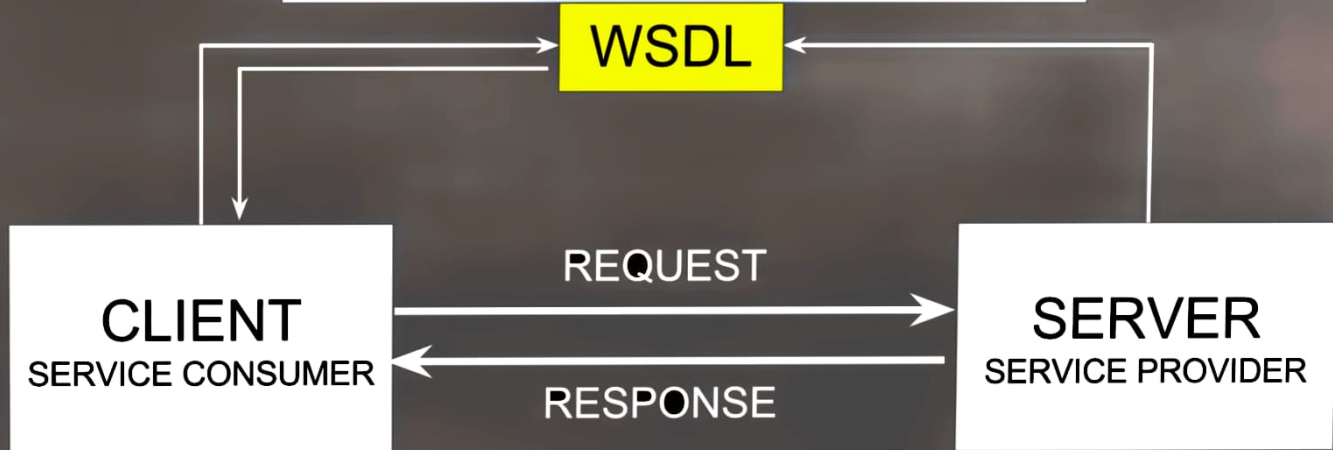**UDDI**

A web service provider publishes his web service (through wsdl) on an online directory from where consumers can query and search the web services. This online registry/directory is called **UDDI**

WSDL

CLIENT
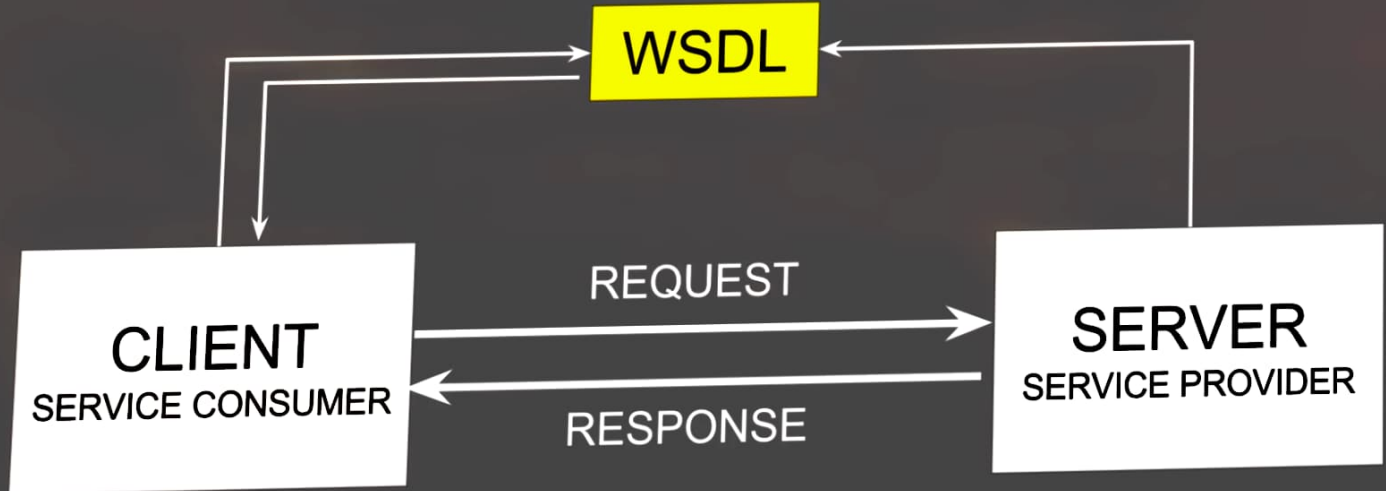SERVICE CONSUMER

REQUEST

RESPONSE

SERVER
SERVICE PROVIDER

WEB SERVICES

WSDL

UDDI

UDDI
Universal Description, Discovery and Integration

Is an XML based standard for publishing and finding web services.

WSDL

CLIENT
SERVICE CONSUMER

REQUEST

RESPONSE

SERVER
SERVICE PROVIDER

What are SOAP Web Services ?

A web service that complies to the **SOAP Web Services Specifications** is a SOAP Web Service.

SOAP Web Services Specifications

- SOAP
- WSDL
- UDDI

What are SOAP Web Services ?

SOAP

Simple **O**bject **A**ccess **P**rotocol
(with SOAP v1.2 - the expansion is discontinued)

Protocol / Rules / Definitions how 2 Applications will talk to each other over the web

What are SOAP Web Services ?

SOAP

All information/message exchange
happens over a common format:
XML

CLIENT
SERVICE CONSUMER

SERVER
SERVICE PROVIDER

What are SOAP Web Services ?

A web service that complies to the **SOAP Web Services Specifications** is a SOAP Web Service.

SOAP Web Ser

- SOAP
- WSDL
- UDDI

All information/message exchange happens over a common format: **XML**

XML messages have a defined structure: **SOAP MESSAGE**

SOAP MESSAGE consist of:
Envelope
Header
Body

Envelope

HEADER

BODY

Soap Message

What are SOAP Web Services ?

SOAP

```xml
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope   xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:c="http://www.acmeOrders.com/OrderService"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <soap:Body>
        <c:OrderMessage>
            <localElement>
                <FirstName>John</FirstName>
                <LastName>Smith</LastName>
                <Street>High Street</Street>
                <City>London</City>
                <ZipCode>W1A1AA</ZipCode>
                <PartNumber>ABC1234</PartNumber>
                <Quantity>1</Quantity>
            </localElement>
        </c:OrderMessage>
    </soap:Body>
</soap:Envelope>
```

CL   ER
SERVICE   OVIDER