**Soap Web Services: JAX-WS Specification**

Based on concept of interoperablity

Application indepenndent

Use XML for data transformation

**Teminalogy:**

WSDL: Web Service Defination Language

UDDI: Universal Descrition Discovery Integration

SOAP: Simple Object Acess Protocol

SEI: Service Endpoint Interface

**Using Web services:**

For using u just need WSDL URI.

Then u need to create stub from it

With jdk we have wsimport tool which parse wsdl and geerate stub class which allows us to use to web service.[this operation can be configure to happen while loading client web application{that currently using web service} ]

U need to copy the class/java files to class path and use them in application.

By default wsimport generate only class file but its comes with the option that we can –keep the source files.

SEI: Service Endpoint Interface is created at client side after parsing wsdl document which calls Webservice Endpoint[which is at server side].

**Creating Web services:**

Need J2EE for creating web service ie need a application server.

For this we need javax.jws package [Comes with JEE api]

Metro provides implemetation for these api.

And also Apache axis provide implmentation for these api.

Spring ws are Soap based as its also implements this api.

Install and Configure a application server in eclipse. U may need to install server adapter for including application server in eclipse.

Create a web project.

Create a class and method inside this.

Just u need to annotate class with @Webservice

Then deploy the web project on server : its create a webservice and wsdl internally.

Now we can test webservice either by SOAP UI or by the previous process as we don while using soap webservice or even by webserver test ui.