

**JWSD** 

# Developing Web Services with Java







## **Developing Web Services with Java**

JWSD - Version: 1.3



## **Description:**

Web Services is a new concept in the industry that gains popularity and interest by many companies and organizations. The course covers the technologies and aspects related to Web Services standards. The course also gives Java developers that required knowledge for starting design and implement Web Services using the Java language and packages. The course covers web services with SOAP and all the technologies related to it, as well as REST web services and the jax-rs framework that support it.

#### Intended audience:

Designers/developers and anyone who wishes to know how to develop Web Services using Java

## **Prerequisites:**

Basic knowledge of the Java programming language

## **Objectives:**

Understand the technologies and standard related to Web Services Architecture.

Develop Web Services consumer clients and servers using several Java technologies.

## **Topics:**



## XML basics

- xml overview
- writing xml
- namespaces
- DTD

## XML schema

- schema overview
- writing schema
- schema tools

#### JAX-B

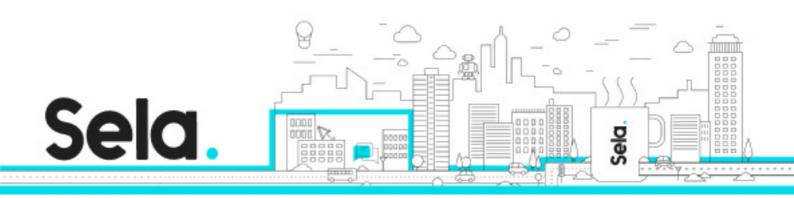
- JAXB architecture
- JAXB binding
- JAXB demo
- JAXB alternatives

## SOA

- the SOA challenge
- what is SOA
- orchastreation

## Web services

- web services overview
- programming model



• web services vs distributed computing

#### **SOAP**

- SOAP overview
- SOAP architecture
- SOAP fault
- SOAP binding style
- WSDL
  - <sup>⁰</sup> WSDL overview
  - <sup>⁰</sup> WSDL structure
  - <sup>⁰</sup> messeging exchange patterns
- JAX-WS
  - º service endpoint interface
  - <sup>⁰</sup> SEI implementation
  - º jax-ws demo

#### Axis2

- Axis2 tasks
- Axis2 structure
- Axis2 process
- Axis2 configuration

## SAAJ

- SAAJ overview
- connections
- name objects
- SAAJ in practice



## **REST**

- What is REST
- REST oriented architecture
- Building REST web services
- REST vs SOAP
- REST best practices
- Developing with JAX-RS
  - <sup>⁰</sup> JAX-RS Development
    - º WADL

## Publish your web services

- UDDI
- JAX-R
- Demo