



JWSD - Version: 1.3

15 September 2021

Developing Web Services with Java



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 3 days Course

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
- orchestration

Web services

- web services overview
- programming model
- web services vs distributed computing

SOAP

- SOAP overview
- SOAP architecture
- SOAP fault
- SOAP binding style
- WSDL

- WSDL overview
- WSDL structure
- messaging exchange patterns
- JAX-WS
 - service endpoint interface
 - SEI implementation
 - 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
 - JAX-RS Development
 - WADL

Publish your web services

- UDDI
- JAX-R
- Demo