

# Java Web Services

## Prerequisites

You should know how to develop a complete Web App like the one we do in our [Spring MVC](#) course.

## Intended Audience

Java Web Developers who want to improve/consolidate their skills in web services

## After this course you should be able to

- Develop REST-style and SOAP-based web services and clients with this quick and thorough introduction.
- Prepare for the Java EE 6 Web Services Developer Certified Expert 1Z0-897 exam

## Course Material

Supplied in electronic format

## Course Contents

### Day 1

#### Web Services Quickstart

- Web Service Miscellany
  - What Good Are Web Services?
- Web Services and Service-Oriented Architecture
- A Very Short History of Web Services
  - What Is REST?
- Review of HTTP Requests and Responses
  - HTTP as an API
    - A First RESTful Example
  - Why Use Servlets for RESTful Web Services?

### Day 2

#### RESTful Web Services: The Service Side

- A RESTful Service as an HttpServlet
- A RESTful Web Service as a JAX-RS Resource
- A RESTful Web Service as Restlet Resources
  - A RESTful Service as a @WebServiceProvider

#### RESTful Web Services: The Client Side

- A Perl Client Against a Java RESTful Web Service
  - A Client Against the Amazon E-Commerce Service
    - A Standalone JAX-B Example
- Another Client Against the Amazon E-Commerce Service
  - The CTA Bus-Tracker Services
- RESTful Clients and WADL Documents
  - The JAX-RS Client API
  - JSON for JavaScript Clients

### Day 3

#### SOAP-Based Web Services

- A SOAP-Based Web Service
  - The RandService in Two Files
  - Clients Against the RandService
- The WSDL Service Contract in Detail
- SOAP-Based Clients Against Amazon's E-Commerce Service

#### SOAP Handlers and Faults

- The Handler Level in SOAP-Based Services and Clients
  - Handlers and Faults in the predictionsSOAP Service
- A Handler Chain with Two Handlers
- SOAP-Based Web Services and Binary Data
  - The Transport Level
    - Axis2

### Day 4

#### Web Services Security

- Wire-Level Security
- A Very Lightweight HTTPS Server and Client
  - HTTPS in a Production-Grade Web Server
    - Container-Managed Security
      - WS-Security

### Day 5

#### Web Services and Java Application Servers

- The Web Container
  - Toward a Lightweight JAS
    - GlassFish Basics
- Servlet-Based Web Services Under GlassFish
- An Interactive Website and a SOAP-Based Web Service
  - A @WebService as a @Stateless Session EJB
    - TomEE: Tomcat with Java EE Extensions
  - Where Is the Best Place to Be in Java Web Services?

## Duration and pricing

- In pricing Group A

## **Certificate**

- [Please read about our certificates](#)

## **Bookings**

You can download the course registration form on our home page or by clicking [here](#)

## **Brochure**

You may download a pdf copy of this page by clicking on the pdf icon at the top of the page.

## **Questions**

Please [email us](#) Schedule On the calendar below. If your browser doesn't display the calendar below, please click on [this link](#) or try using [Google Chrome](#), alternatively please enquire via our [Contact Us](#) page.

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