

Java RESTful Services Essentials (TT7350)

Category: Software Development & Programming | **Vendor:** Trivera Tech

Duration: 16.00 hours (2 days)

13.0 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

Java REST Essentials® is a two day, lab-intensive services training course that introduces developers to the core concepts, principles, and Java implementations for RESTful services.® Today's development environments are increasingly dominated by sophisticated tooling that makes the implementation of RESTful services less arduous.®

About This Course

Geared for experienced Java developers, Java REST Essentials is a two day, lab-intensive services training course that introduces developers to the core concepts, principles, and Java implementations for RESTful services. Today's development environments are increasingly dominated by sophisticated tooling that makes the implementation of RESTful services less arduous. The proper design of these services is far more complex and demanding. Java RESTful Service Essentials focuses on providing an understanding of the fundamental principles and technologies that are used in building these services. This understanding is critical to being able to diagnose, troubleshoot, tune, and perform other lifecycle activities.

Who Should Attend

This is an intermediate level training course, designed for experienced Java developers and architects who need to identify, design, and implement web services. We will explore and apply the terminology, the specification, the processes and technologies specific to web services.

Prerequisites & Entry Requirements

General Prerequisites:

To ensure a smooth learning experience and maximize the benefits of attending this course, you should have at least a year of practical development experience with Java and servlets and should be familiar with XML and JSON basics.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

This course combines engaging instructor-led presentations and useful demonstrations with valuable hands-on labs and engaging group activities. Throughout the course you'll learn how to:

- Understand and apply the basic concepts of REST
- Understand and intelligently discuss the similarities and differences between RESTful services and SOAP-based services
- Appreciate the security concerns associated with RESTful services
- Design, develop, and deploy real-world RESTful Services
- Effectively define and design endpoints
- Work with query parameters
- Determine the best format to use for exchanging data
- Understand the principles associated with HTTP methods and how to stay congruent to them
- Extend the semantics of the RESTful service beyond the HTTP methods
- Implement RESTful services using JAX-RS to
- Handle various HTTP methods
- Use different approaches for parameters
- Deal with content negotiation
- Work with different data formats including XML and JSON
- Handle exceptions
- Implement RESTful Java clients
- Develop JAX-RS Java clients using the JAX-RS 2.0 Client API
- Manage different Web targets
- Deal with content negotiation on the client
- Work with different data formats including XML and JSON

Detailed Course Outline

Overview of REST

The basics of the REST architectural style

The advantages and disadvantages of that style

Relating REST to HTTP

The advantages and disadvantages of that implementation

The comparisons between SOAP and REST

Tutorial: Building Web Applications in IntelliJ

Designing RESTful Services

The basic process for designing RESTful services

Best practices for defining endpoints

Options and best practices for exchanging data

Requirements associated with the HTTP methods

Best practices for using HTTP methods

Options for extending operations

Introduction to JAX-RS

Understand some of the features of the JAX-RS framework

Be familiar with process for implementing RESTful services

Be able to develop and deploy a simple REST service

How JAXB supports XML interoperability

How to use JAXB with JAX-RS

Lab: Introduction to JAX-RS

@Path: URI Matching

JAX-RS mechanisms for mapping URIs to resource

How to use @Path expressions to map URIs

How to use @Path expressions to extract values from URIs

Lab: URI Matching JAX-RS

JAX-RS Content Negotiation

JAX-RS built-in content handler

How to inject content handlers into service

Basics of working with JSON

Capabilities for HTTP content negotiation

JAX-RS mechanisms for supporting content negotiation

Lab: Content Negotiation

JAX-RS Request and Response

How information about the request can be injected into the resource

The different injection targets of the resource

How to build a 'complex' response

How to respond to a HTTP POST

The JAX-RS exception hierarchy

How exceptions can be mapped to response codes

Lab: The Reservation Service

JAX-RS Client API

Be able to invoke a JAX-RS service using the client API

Understand the purpose of the WebTarget object

Be able to dynamically resolve path template values

Understand some of the return codes

Be able to filter client request and server responses

Lab: JAX-RS Clients

JAX-RS Filters and Interceptors

Understand the purpose of JAX-RS filters

Be able to develop interceptors

Be able to define global filters and interceptors

Dynamically add interceptors and filters

Understand NameBinding

Lab: JAX-RS Filters and Interceptors

Asynchronous JAX-RS

Be able to make asynchronous requests

Develop resources to process request asynchronously

Lab: Asynchronous JAX-RS

Additional Course Details

Nexus Humans Java RESTful Services Essentials (TT7350) training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Java RESTful Services Essentials (TT7350) course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for Java RESTful Services Essentials (TT7350)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
-

Q: How many CPD hours does this course provide?

The 2-day Java RESTful Services Essentials (TT7350) course provides up to 13.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Java RESTful Services Essentials (TT7350) training?

The training takes place over 2 day(s), with each day lasting approximately 16.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Java RESTful Services Essentials (TT7350)?

Yes, we provide corporate training, dedicated training, and closed classes for Java RESTful Services Essentials (TT7350). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Java; JEE ; Application Security

Q: Why choose Nexus Human for Java RESTful Services Essentials (TT7350)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Java RESTful Services Essentials (TT7350) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

 Email: info@nexushuman.com

 Website: www.nexushuman.com

 Phone: +353 1 XXX XXXX (Ireland) | +44 20 XXXX XXXX (UK)