

Fast Track to Scala Programming for OO / Java Developers (TTSCL2104)

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

Duration: 32.00 hours (4 days)

26.0 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Classroom

Course Overview

Discover the power of Scala programming in our comprehensive, hands-on technical training course designed specifically for experienced object-oriented (OO) developers. Scala is a versatile programming language that combines the best of both OO and functional programming paradigms, making it ideal for a wide range of projects, from web applications to big data processing and machine learning. By mastering Scala, you'll be able to develop more efficient, scalable, and maintainable applications. Fast Track to Scala Programming for OO / Java Developers is a four day hands-on course covers the core principles of Scala, functional programming, web application development, database connectivity, concurrency programming, testing, and interoperability between Scala and Java. Additionally, you'll explore cutting-edge generative AI and GPT technologies, learning how to integrate them into your Scala applications for intelligent suggestions or automation. Throughout the course you ll explore the latest tools and best practices in the Scala ecosystem, gaining valuable knowledge and experience that can be directly applied to your day-to-day work. With 50% of the course content dedicated to hands-on labs, you'll gain practical experience applying the concepts you've learned across various projects, such as building functional web applications, connecting to databases, designing modular components, and implementing concurrency. Upon completing the course, you'll have a solid understanding of the language and its features, empowering you to confidently apply your new skills in data science and machine learning projects. You'll exit well-prepared to create efficient, scalable, and maintainable Scala applications, regardless of the complexity of your projects.

About This Course

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Who Should Attend

This course is geared for experienced skilled Java developers, software developers, data scientists, machine learning experts or others who wish to transtion their coding skills to Scala, learning how to code in Scala and apply it in a practical way. This is not a basic class.

Learning Outcomes

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

Working in a hands-on learning environment led by our expert instructor you'll:

Get comfortable with Scala's core principles and unique features, helping you navigate the language confidently and boosting your programming skills.

Discover the power of functional programming and learn techniques that will make your code more efficient, maintainable, and enjoyable to write.

Become proficient in creating dynamic web applications using the Play Framework, and easily connect to databases with the user-friendly Slick library.

Master concurrency programming with Akka, empowering you to build scalable and fault-tolerant applications that excel in performance.

Enhance your testing skills using ScalaTest and ScalaCheck, ensuring the reliability and quality of your Scala applications, while having fun in the process.

Explore the fascinating world of generative AI and GPT technologies, and learn how to integrate them into your projects, adding a touch of innovation and intelligence to your Scala solutions.

If your team requires different topics, additional skills or a custom approach, our team will collaborate with you to adjust the course to focus on your specific learning objectives and goals.

Detailed Course Outline

Introduction to Scala

- Scala features and benefits
- Comparing Scala with Java and other OO languages
- Installing Scala and setting up the development environment

Object-Oriented Programming in Scala

- Classes and objects
- Traits, mixins, and inheritance
- Companion objects and factories
- Encapsulation and polymorphism

Functional Programming Basics

- Pure functions and referential transparency
- Higher-order functions and currying
- Immutability and persistent data structures
- Pattern matching and recursion

Having Fun with Functional Data Structures

- Lists, sets, and maps in Scala
- Folding and reducing operations
- Stream processing and lazy evaluation For-comprehensions

Building Web Applications in Functional Style

- Introduction to Play Framework
- Functional web routing and request handling
- JSON handling with Play-JSON
- Middleware and functional composition

Connecting to a Database

- Introduction to Slick library
- Database configuration and setup
- Querying and updating with Slick
- Transactions and error handling

Building Scalable and Extensible Components

- Modular architecture and design patterns
- Dependency injection with MacWire
- Type classes and type-level programming
- Implicit parameters and conversions

Concurrency Programming & Akka

- Introduction to Akka framework and Actor model
- Actor systems and message passing
- Futures and Promises
- Supervision and fault tolerance
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Building Confidence with Testing

- Introduction to ScalaTest and ScalaCheck
- Unit testing and property-based testing
- Test-driven development in Scala
- Mocking and integration testing
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Interoperability between Scala and Java

- Calling Java code from Scala
- Using Java libraries in Scala projects
- Converting Java collections to Scala collections
- Writing Scala code that can be called from Java

Using Generative AI and GPT

- Technologies in Scala Programming
- Overview of GPT and generative AI
- Integrating GPT with Scala applications
- Use cases and practical examples

Additional Course Details

Nexus Humans Fast Track to Scala Programming for OO / Java Developers (TTSCL2104) 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 Fast Track to Scala Programming for OO / Java Developers (TTSCL2104) 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 Fast Track to Scala Programming for OO / Java Developers (TTSCL2104)?

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
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Q: How many CPD hours does this course provide?

The 4-day Fast Track to Scala Programming for OO / Java Developers (TTSCL2104) course provides up to 26.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Fast Track to Scala Programming for OO / Java Developers (TTSCL2104) training?

The training takes place over 4 day(s), with each day lasting approximately 32.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Fast Track to Scala Programming for OO / Java Developers (TTSCL2104)?

Yes, we provide corporate training, dedicated training, and closed classes for Fast Track to Scala Programming for OO / Java Developers (TTSCL2104). 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: Why choose Nexus Human for Fast Track to Scala Programming for OO / Java Developers (TTSCL2104)?

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 Fast Track to Scala Programming for OO / Java Developers (TTSCL2104) 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

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