Course T471 Outline

Java Programming Introduction

IT ACADEMY TRAINING

Course Details | Common Questions

Who should attend (Audience)

This course is intended for Application Administrators, Application Architects, Software Developers, Testing Analysts, and other IT Professionals with programming language such as C, JavaScript, PHP or COBOL who are interested in learning how to develop Java applications.

Duration

4 Days

8 AM-4 PM Central Daily

Course skill level

- ✓ **Foundation**
- Intermediate
- Advanced

This course qualifies for

2.4 CEUs

23 NASBA CPEs

Technology used during course

- AnyWare Classes use Zoom
- SkyTap Virtual Machines
- Computing Sandbox

What is this course about?

Java is an object-oriented programming language. Java is in the same family as C and C++ and solves many of their complexities (pointers, memory allocation, multiple inheritance, etc.). Java is also a portable language, and compiled Java programs run without recompilation on Macintosh, Microsoft Windows, UNIX, and other platforms.

In this course, you gain extensive experience writing, compiling, and executing Java programs and building robust applications using Java's object-oriented features. You learn to create robust applications using Java class libraries, develop platform-independent GUIs, read, and write data using Java streams, and retrieve data from relational databases.

Recommended prerequisites

- T401 - Software Development and Programming Concepts

Previous knowledge & experience needed

- Experience with a programming language such as C, JavaScript, PHP or COBOL is assumed.

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Chapter 1: Introduction to Java Programming

- Introduction to Java
- Compiling and Executing Java Applications

Chapter 2: Object-Oriented Programming

- Fundamentals of OO
- Object Relationships
- Object-Oriented Analysis and Design
- Polymorphism
- OOP with Java

Chapter 3: Structure of the Java Language

- Local Variables and Expressions
- Conditionals and Loops
- Creating Objects
- Creating Arrays

Chapter 4: Classes and Interfaces

- Packages
- Class Syntax
- Fields and Methods
- Overloading and Overriding
- Abstract Classes and Methods
- Constructors
- Type Casting
- Interfaces
- Collections
- API

Chapter 5: Graphical User Interfaces

- Creating and Arranging GUIs
- Event Handling
- Menus
- Message Boxes

Chapter 6: Input and Output

- Jave I/O
- Serialization

Chapter 7: Java Database Connectivity

- The Basic JDBC API

Chapter 8: Advanced Tools and APIs

- SDK Tools
- Java Servlets
- JavaServer Pages (JSP)

Chapter 9: Course Summary

Common Questions – Attendance Policy, Contacts

What is the Attendance Policy for IT Academy Classes?

IT Academy attendees are expected to adjust their work schedule to match the IT Academy class hours of 8:00am – 4:00pm. 100% attendance is expected in each IT Academy class. Missing time in class may result in the following:

- No Show=Employees who do not show up for class or arrive more than one (1) hour after the start of class will be advised to reschedule for the next available course.
- Incomplete=Employees missing a half day or more of class-any day of class-will be advised to reschedule for the next available course. Employees not available to sit for the post-test will be considered incomplete.

AnyWare Technical Support contact?

AnyWare@LearningTree.com, 1-877-653-8733

IT Academy Classroom Point of Contact?

Christopher Marsh, Christopher.marsh@tn.gov, 615-532-5517

How do I access the new My IT Academy Portal?

1. Log into Edison
2. ELM Learning Home Page
3. Quick Links
4. My IT Academy (last link under Quick Link)

For more FAQs visit the IT Academy AEM Site

https://www.teamtn.gov/sts/sts-employee-engagement/itacademytn/it-academy-toolkit/faqs.html