



# **JAVA for RPG Programmers**

## **course agenda**



# Class administration

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- Student information
  - Badges/Security
  - Phones and Messages
  - Facilities
  - Class Hours
  - Local Restaurants
  - Maps - Area and Building
- Questions
- Introductions



# Introductions

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- Your name, city
- Company/Organization Name
- Major uses of computer
- Prior System i or other system experience
- Prior programming experience



# Course coverage

<b>Pres'n</b>	<b>Title</b>	<b>Description</b>
Chapter 1	World of Java	What is Java, what is it used for
Chapter 2	Java Onion	Tour of the Java language
Chapter 3	Java Syntax	Syntax and statements of Java
Chapter 4	Structures and statements	Looping and Transfer-of-Control statements
Chapter 5	Data Types	Variables: declaration and scope
Chapter 6	Arrays, Vectors, Hashtables	Working with collections of data
Chapter 7	Strings	Text string manipulation
Chapter 8	Date and Time Manipulation	Working with dates and times
Chapter 9	An Object Orientation	Inheritance and Interfaces
Chapter 10	Exceptions	Java's exception model
Chapter 11	Threads	Spawning and managing threads
Chapter 12	User Interface	AWT and Swing GUI
Chapter 13	Database Access	JDBC (SQL) DB2/400 access
Chapter 14	Miscellaneous	Tour of miscellaneous Java tech'ies
Appendix A	Using Java on iSeries	IFS, QShell and Java on AS/400
Appendix B	Mixing RPG and Java	Calling RPG from Java, vice versa

# Agenda

- **Day 1**
  - Introduction, Overview, Syntax
- **Day 2**
  - Structured Statements, Data Types, Arrays
- **Day 3**
  - Strings, Dates, OO Intro
- **Day 4**
  - Exceptions, Threads, GUI, JDBC DataBase Access
- **Day 5**
  - Miscellaneous, Java on AS/400, Mixing RPG and Java

# Day 1 agenda

Type	Description
Ch1: World of Java	What is Java, how to get it?
Ch2: Java Onion	Java "big picture"
Lunch	
LAB: Ch2 exercises	Learn about classes and packages
Ch3: Java syntax	Syntax of Java

## Day 2 agenda

Type	Description
Ch4: Structure Statements	Structured Statements: conditions and loops
Ch5: Data types, variables	Primitive data types, variables, modifiers
LAB: Ch4 exercises	Learn about loops in Java
LUNCH	
Ch6: Arrays, Vectors	Arrays, Vectors, Hashtables
LAB: Ch6 exercises	How to code arrays and Vectors. This is a long lab: important to try and finish

## Day 3 agenda

Type	Description
Ch6 LAB review	What did we do? What did we learn?
Ch7: Strings	String, StringBuffer, StringTokenizer classes
Ch8: Dates and Times	Date, GregorianCalendar, SimpleDateFormat, TimeZone classes
LAB: Ch8 exercises	Learn about date and time manipulation
LUNCH	Working lunch?
LAB: Ch8 exercises cont'd	Continue on chapter 8 exercises
Ch9: OO introduction	Learn OO and Java syntax for OO.
LAB: Ch9 exercises	Start Ch 9 lab exercises if time.



## Day 4 agenda

Topic	Description
Ch9: exercises	Some time to finish chapter 9 lab
Ch10: Exceptions	Learn about try/catch/finally, throw, throws
Ch11: Threads	Learn how to run methods asynchronously
Ch12: GUI	Learn about AWT and Swing (after lunch?)
LUNCH	If possible, work on unfinished exercises
Ch13: Database access	Learn about JDBC
LAB: Ch13 exercises	Write JDBC code, look at direct-record access code to access DB2/400

# Day 5 agenda

Topic	Description
Ch13: exercises	Finish exercises
Ch14: Miscellaneous	Static initializers, inner classes, RMI, serialization, JDK packages, stream files, beans
App A: Java on AS/400	Learn how to use Java commands on iSeries
App B: Mix RPG and Java	Call RPG from Java, Call Java from RPG
LUNCH	If possible, work on unfinished exercises
LAB: AppA exercises	Move Java code to iSeries, execute it and debug it. Finish leftover exercises



# **JAVA for RPG Programmers**

## **Let's get started**

