Advanced Java

Duration: 5 Days Course Contents

• Chapter 1: Review of Java Fundamentals

- 1. The Java Environment
- 2. Data Types
- 3. The String Class
- 4. The StringBuffer Class
- 5. Arrays
- 6. Passing Data Types to a Method
- 7. Constructors and Initialization
- 8. Inheritance
- 9. Abstract Classes
- 10. Interfaces
- 11. Static Data, Methods, and Blocks
- 12. Wrapper Classes
- 13. I/O

• CHAPTER 2: PACKAGING AND DISTRIBUTING A JAVA APPLICATION

- 1. Packages
- 2. Managing Source and Class Files
- 3. The javadoc Utility
- 4. Documenting Classes and Interfaces
- 5. Documenting Fields
- 6. Documenting Constructors and Methods
- 7. Running the javadoc Utility
- 8. jar Files
- 9. The Manifest File
- 10. Bundling and Using Jar-Packaged Resources

• CHAPTER 3: MISCELLANEOUS ENHANCEMENTS

- 1. Enhanced for Loop
- 2. Autoboxing and Auto-Unboxing
- 3. Static Imports
- 4. varArgs

- 5. Typesafe Enums
- 6. Formatted Strings
- 7. Format Specifier Syntax
- 8. Format Specifier Conversions
- 9. Format Specifier Flags
- 10. Formatted Integers Example
- 11. Formatted Floating Points Example
- 12. Formatted Strings Example
- 13. Formatted Dates Example
- 14. Complex Formatted Example

CHAPTER 4: ASSERTIONS

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- 2. Assertion Syntax
- 3. Compiling with Assertions
- 4. Enabling and Disabling Assertions
- 5. Assertion Usage

• CHAPTER 5: REGULAR EXPRESSIONS

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- 3. Character Classes
- 4. Quantifiers
- 5. Capturing Groups and Backreferences
- 6. Boundary Matchers
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- 3. Searching and Sorting Arrays of Primitives
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- 6. Sorting Using Comparable
- 7. Sorting Using Comparator
- 8. Collections
- 9. Lists and Sets
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- 11. Lists and Iterators Example
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- 13. Maps and Iterators Example
- 14. The Collections Class
- 15. Rules of Thumb

• CHAPTER 7: GENERICS

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- 2. Defining Simple Generics
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- 5. Bounded Wildcards
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- 6. Serialization Issues
- 7. Compressed Files
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• CHAPTER 10: LOGGING API

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- 3. Logger Levels
- 4. Logger Handlers

- 5. Specifying Handlers and Formatters
- 6. Configuring Handlers
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- 1. Networking Fundamentals
- 2. The Client/Server Model
- 3. InetAddress
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- 5. Sockets
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