



Course Content and Pre-Assessment

Name: _____

Company: _____

Course Description:

This intensive, hands-on course emphasizes becoming productive quickly as a graphical Java programmer. Students learn how to create real-world GUI applications using Java's Swing classes.

Prerequisites:

Java EE 5 or equivalent knowledge

The **Java Swing** course will cover the topics listed below. Please check each item and designate if you already Know, Need Refresher, or Don't Know. Please be honest with yourself as this is a tool to place you in a proper class based on your level of knowledge. This is our method of indicating your level of current knowledge in order to best meet your needs.

K= Know
 R= Refresher
 DK= Don't Know

K R DK

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K R DK

Collections

- Java Arrays
- The Collections Framework
- Set Implementation Classes
- List Implementation Classes
- Map Implementation Classes
- Applying Algorithms
- Implementation and Performance Strategies

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- Arranging Components
- A Scrollable Component
- Configuring Components
- Menus
- Using the Jfile Chooser
- Heavyweight vs. Lightweight Components

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Introduction to Threads

- Non-Threaded Applications
- Threaded Applications
- Creating Threads
- Thread States
- Runnable Threads
- Coordinating Threads
- Runnable Interface
- Threads in Applets
- Interrupting Threads
- ThreadGroups

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Event Handling

- The Event Delegation Model
- Implementing a Listener
- Semantic Events
- List Selection Events
- Event Objects
- Mouse Events
- Other Low-Level Events
- A Popup Menu
- Adapters

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Inner Classes

- Inner Classes
- Member Classes
- Local Classes
- Anonymous Classes
- Instance Initializers
- Nested Classes
- Inheritance vs. Containment

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Components

- Controlling Component Appearance
- The Component Hierarchy
- Fonts
- Font Manipulation
- Color
- Getting Fancy
- Text Components
- Scrolled Components
- JTable and MVC

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Getting Started with Swing

- AWT and Swing
- Displaying a Window
- GUI Programming in Java
- Handling Events

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Laying Out a Container

- Containment Hierarchy
- Using Layout Managers
- Top-Level Containers
- General Purpose Containers
- FlowLayout

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Java Swing

Course ID#: 1260-450-ZZ-W

21 Hrs

K= Know
R= Refresher
DK= Don't Know

K R DK

K= Know
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K R DK

• Box and BorderLayout	—	—	—	• Applet Methods	—	—	—
• CardLayout	—	—	—	• Applet vs. Application	—	—	—
• JTabbedPane	—	—	—	• Swing Applets	—	—	—
• GridLayout	—	—	—	• Plug-Ins	—	—	—
• GridBagLayout and GridBagConstraints	—	—	—	• HTML Tags for Swing Applets	—	—	—
• Non-Managed Containers	—	—	—	• Security	—	—	—
Specialized Components				Input/Output Streams			
• Specialized Components	—	—	—	• Overview of Streams	—	—	—
• Compound Components	—	—	—	• Bytes vs. Characters	—	—	—
• Dialogs	—	—	—	• Converting Byte Streams to Character Streams	—	—	—
• Extending Dialog	—	—	—	• Binary Input and Output	—	—	—
• Using JOptionPane	—	—	—	• PrintWriter Class	—	—	—
• Choosers	—	—	—	• Reading and Writing Objects	—	—	—
Applets				• Streams Streams Streams	—	—	—
• Loading Applets	—	—	—	• Buffers, Channels and Charsets	—	—	—
• The <APPLET> Tag	—	—	—	Managing Security Policies			
• GUI Applets	—	—	—	• The Java Security Model	—	—	—
• Graphical Applets	—	—	—	• Policy Entries	—	—	—
• HTML Parameters	—	—	—	• Policy Files	—	—	—
• Retrieving Images	—	—	—	• Using the Policy Tool	—	—	—
• Browser Interaction	—	—	—	• Security Managers	—	—	—
				• Default Applet Security	—	—	—