

## SHELL PROGRAMMING

### Course Description

Students learn to read, write, and debug shell scripts, thus increasing productivity by taking full advantage of the UNIX shell.

Course Length: 3 Days

Course Tuition: \$750 (US)

### Prerequisites

Fundamentals of UNIX.

### Course Outline

- Introduction to Java
  - Java History
  - Security and the Net
- Getting Started
  - The Big Picture
  - Writing the Code
  - Compiling and Running Java Programs
  - The Development Cycle
  - Java Applets
  - Applet Deployment
- Java Language Fundamentals
  - Class Definitions
  - Method Definitions
  - Variables, Scope, and Access
  - Creating Objects
  - Constructors
  - Operators
  - Conditions
  - Arrays
  - Loops
- Advanced Language Features
  - OO and Java
  - Using Inheritance
  - Inheriting Functionality
- GUI Components in Java
  - Events and Listeners
  - Adaptors
  - Implementing Panels
  - Labels
  - TextFields
  - Creating and Using Buttons
  - CheckBoxes and RadioButtons
  - ComboBoxes
  - Using Lists
  - Multi-line Text Fields
- Accessing Data Over the Network
  - URLs
  - Getting a Document
  - Using I/O Streams
  - Sending Data to a CGI Script on the Server
  - Opening a Socket
  - Creating an E-mail Message
- Windows, Dialogs, and Menus
  - Creating a Frame Object
  - The Not-So-Basics of Menus
  - Menu Events
  - Opening a Dialog With the User

Multi-Threaded Programming  
Thread Communication  
Packages  
JavaDoc  
Exception Handling  
• Laying Out a Form  
What is a Layout Manager?  
Using the FlowLayout Manager  
Using the GridLayout Manager  
Using the BorderLayout Manager  
Containers  
Which Layout?

• The Buzzword Breakdown  
JDBC  
RMI  
Beans  
Servlets  
Swing  
JavaScript  
ActiveX  
CORBA