

# Interactive RPG IV Programming Workshop

(RG75)

5 Days (40% Lecture, 60% Workshop)

This course provides a comprehensive treatment of writing interactive programs in the AS/400 RPG IV language. Students will learn how to create, debug and maintain interactive applications, starting with very simple displays, and continuing through such advanced topics as Display Windows and Subfiles. This class is intended for the RPG IV Programmer who needs a better understanding of interactive programming in RPG IV.

**Prerequisites: A working knowledge of RPG IV programming on the AS/400, or the class Introduction to RPG IV programming.**

## Course Outline

### Introduction

The AS/400 Interactive Model  
The Display File and SDA

### SDA (Screen Design Aid)

Using SDA  
Creating Interactive Menus  
Creating Interactive Help Text  
Using text display attributes  
Using color on the display  
Total control with SDA commands  
Add and manipulate data fields  
Using a file reference to easily build a screen  
The DDS Language for Display Files

### Using RPG IV as the Screen Driver

Designing screens for RPG IV  
Processing display files in RPG IV

### Types of Displays

Using Output only Displays  
Using Input/Output Displays

### Working with Screen Indicators

Numbered indicators  
Using a separate indicator area  
Using named indicators  
Manipulating indicators in RPG IV  
Conditioning Display attributes  
Conditioning Fields  
Overlapping Fields  
Using an indicator data structure

### RPG IV Specifics

File Specs for display files  
Using the File Information Data Structure  
READ Op-code  
WRITE Op-code  
EXFMT Op-code

### Screen Control

Using multiple screen record formats  
Editing Numeric Fields for output  
Using Input Keyword  
Add and Process Function Keys  
Cursor Positioning

### Message Handling in screens

Using ERRMSG (Error Message) Keyword  
Using ERRSFL (Error Subfile) Keyword  
Using Message Subfiles for optimum control  
Understanding Program message queues  
Using the IBM Messaging APIs  
Creating a message file and adding messages

### Develop, Code, Test and Debug Programs

Display fields and literals for output only  
Display Fields for both input and output  
Handling Complex displays  
Using SDA test utility  
Using the RPG IV Debugger

### Handling Errors and Anomalies

Screen I/O Errors  
Avoiding Record Lock contentions  
Using Commitment Control for integrity

### Windows

Using Windows in your displays  
Window borders  
Opening Multiple windows at once  
Place a subfile in a window  
Creating an F4=Prompt result window  
Creating Help Text in a Window

### Introduction to Subfiles (*Scrollable Lists*)

Using SDA to create Subfiles  
Processing Subfiles in RPG IV  
Output only Subfiles  
Input/Output Subfiles

For more information, call (636) 519-7917

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