

# Interactive RPG/400 Programming Workshop

(RG25)

5 Days (40% Lecture, 60% Workshop)

This course provides a comprehensive treatment of writing interactive programs in the RPG/400 language used on the IBM System i (AS/400).. 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/400 Programmer who needs a better understanding of interactive programming in RPG/400.

**Prerequisites: A working knowledge of RPG/400 programming on the IBM System i, or the class Introduction to RPG/400 programming.**

## Course Outline

### Introduction

The System i (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/400 as the Screen Driver

Designing screens for RPG/400  
Processing display files in RPG/400

### Types of Displays

Using Output only Displays  
Using Input/Output Displays

### Working with Screen Indicators

Numbered indicators  
Manipulating indicators in RPG/400  
Conditioning Display attributes  
Conditioning Fields  
Overlapping Fields

### RPG/400 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/400 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

### Subfiles (Scrollable Lists)

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

For more information, call (314) 932-2430 or (800) 936-3140  
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