RPG IV Programming Advanced Workshop for IBM i

Course Number: AS10G

Duration: 4 days

Course Description

This course teaches additional skills and techniques to programmers who can already write comprehensive RPG IV programs.

This class offers a comprehensive discussion of some of the advanced features and functions of RPG IV. This class is designed to enable an experienced RPG IV programmer to develop and maintain RPG IV programs of an advanced level using the latest features and techniques available in the IBM i RPG IV compiler.

Skills Gained

- Use address pointers and user spaces in RPG IV programs
- Write and maintain display programs using subfiles
- Develop ILE modular objects and package them in service programs
- Use the IBM i debugger with RPG IV programs
- Explain the behavior of error handling and percolation in ILE
- Code an ILE error handling program
- Call application program interfaces (APIs) from RPG IV program
- Use C functions in RPG IV programs
- Parse XML in RPG IV programs

This course is the second in a series of two classes designed for programmers who want to learn to code using the IBM i ILE RPG IV language. Previous programming experience using RPG IV is mandatory before enrolling in this course. The student should have attended RPG IV Programming Fundamentals Workshop for IBM i (AS06G).

Previous techniques and the maintenance of programs written using legacytechniques are not covered in the classroom.

Prerequisites

You must have attended these courses (or have equivalent experience):

- Introduction to IBM i for New Users (OE98G)
- IBM i Technical Introduction (OL4AG)
- RPG IV Programming Fundamentals Workshop for IBM i (AS06G)

You should be able to:

- Use a Windows-based PC
- Run PC applications using menus, icons, tool bars, and so forth

Course Details

Outline

Day 1

- Unit 1 - Welcome and administration
- Unit 2 - Using subfile displays Exercise 1 - Inquiry subfile with search
- Exercise 2 - Modularize vendor subfile search Exercise 3 - Page + 1 and PageDown Exercise 4 - Add PageUp
- Exercise 5 - Add SFLPAG = SFLSIZ Exercise 6 - Add maintenance

Day 2

- Unit 2 - Using subfile displays (continued)
- Exercise 6 - Add maintenance (continued) Unit 3 - Using the debugger
- Exercise 7 - Debugging an RPB IV program
- Unit 4 - ILE error handling and condition handlers Exercise 8 - Enhancing the condition handler

Day 3

- Unit 5 - Basic API programming

- Exercise 9 - Using system APIs I Exercise 10 - Using system APIs II Unit 6 - Using RPG Compiler directives
- Exercise 11 - Using conditional compiler directives
- Unit 7 - Using pointers, user spaces, and dynamic memory Exercise 12 - Using list APIs

Day 4

- Unit 8 - Using C functions
- Exercise 13 - Using C IFS functions Exercise 14 - Using C library functions Unit 9 - Using XML in RPG IV
- Exercise 15 - Enhancing the xml-into program