IBM System i (AS/400) Concepts with Control Language

Course Outline

Course Summary

Description
This course provides an introduction to the IBM System i (AS/400) for programmers, system administrators, and other technical personnel. Students learn programming tools and operational concepts which are supported by supervised Hands-on Lab exercises.

This class also provides an introduction to IBM i Programming using the i/OS Control Language. Among the class materials that each student receives are two textbooks and a student guide for their reference after the class.

This class provides the prerequisites needed to attend the RPG IV and COBOL Programming Workshops.

Topics

- What is an IBM System i?
- The System i User Interface
- Work Management Concepts
- The Object Based Architecture
- Using Program Development Mgr (PDM)
- Using the Source Entry Utility (SEU)
- System i Database Concepts
- Introduction to IBM Query for i
- Introduction to SQL / STRSQL
- Screen Design Aid (SDA)
- Control Language Programming
- Introduction to Control Language
- Basic CL Programming
- Input/Output in a CL Program

Audience
This course is designed for programmers, system administrators, and other technical personnel.

Prerequisites
Before taking this course, you should have a basic knowledge of computer concepts.

Duration
Five days
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Course Outline

I. What is an IBM System i?
   A. Introduction to the IBM I (AS/400)
   B. System i Architecture

II. The System i User Interface
   A. The Menu System
   B. Control Language
      1. The Command Line Interface
      2. Commands and Parameters
      3. The Prompt Facility
   C. The Help Facility
   D. Tailoring Assistance Levels
   E. Attn and SysReq Keys
   F. Messages and Message Queues
      1. Sending Messages
      2. Viewing and Responding

III. Work Management Concepts
   A. Interactive and Batch Jobs
   B. Managing Job and Print Queue
   C. Operations for Controlling Jobs
   D. Submitting and Scheduling Jobs

IV. The Object Based Architecture
   A. Library Concepts
   B. Object Types and Attributes
   C. Library Lists
   D. Libraries Objects and Members
   E. The Integrated File System (IFS)

V. Using Program Development Mgr (PDM)
   A. Working with Libraries, Objects and Members
      1. Using PDM
   B. Customizing PDM for your use

VI. Using the Source Entry Utility (SEU)
   A. The Edit Display
   B. SEU Line Commands
   C. Find/Change Options
   D. Browse/Copy Options

VII. System i Database Concepts
   A. Database Capabilities
   B. Storage Management
   C. Data Description Specifications
   D. Creating Physical Files
   E. Using Field Reference Files
   F. Creating Logical Files

VIII. Introduction to IBM Query for i

IX. Introduction to SQL / STRSQL

X. Screen Design Aid (SDA)
   A. Creating your own Menus
   B. Customizing the Sign-On Display

XI. Control Language Programming

XII. Introduction to Control Language
   A. What is CL?
   B. Command Names
   C. Command Parameters

XIII. Basic CL Programming
   A. Creating CL Programs
   B. Structure of a CL Source Member
   C. Declaring Variables
   D. Manipulating Variables
   E. CL Control Structures
   F. Expressions
   G. Controlling Workflow
   H. Basic Error Handling
   I. 

XIV. Input/Output in a CL Program
   A. Passing Parameters
   B. Using external attributes
   C. Using Files and Data Areas
   D. Writing your own administrative utilities

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