

SAP OO-ABAP

Introduction to Object-Oriented Programming

- ❖ The Need for a Better Abstraction
- ❖ Classes and Objects
- ❖ Establishing Boundaries
- ❖ Reuse
- ❖ Object Management
- ❖ UML Tutorial: Class Diagram Basics
- ❖ Summary

Working with Objects

- ❖ Syntax Overview
- ❖ Creating and Using Objects
- ❖ Building Your First Object-Oriented Program
- ❖ Getting Started with the Class Builder
- ❖ Case Study: Working with Regular Expressions
- ❖ UML Tutorial: Object Diagrams
- ❖ Summary

Encapsulation and Implementation Hiding

- ❖ Lessons Learned from the Procedural Approach
- ❖ Data Abstraction with Classes
- ❖ Defining Component Visibilities
- ❖ Hiding the Implementation
- ❖ Designing by Contract
- ❖ UML Tutorial: Sequence Diagrams
- ❖ Summary

Object Initialization and Cleanup

- ❖ Creating Objects
- ❖ Controlling Object Initialization with Constructors
- ❖ Garbage Collection
- ❖ Tuning Performance
- ❖ Summary

Inheritance

- ❖ Generalization and Specialization
- ❖ Inheriting Components
- ❖ The Abstract and Final Keywords
- ❖ Inheritance
- ❖ Using the Refactoring Assistant
- ❖ UML Tutorial: Advanced Class Diagrams Part I
- ❖ Summary

Polymorphism

- ❖ Object Reference Assignments Revisited
- ❖ Dynamic Method Call Binding
- ❖ Interfaces
- ❖ UML Tutorial: Advanced Class Diagrams Part II
- ❖ Summary

Error Handling with Exceptions

- ❖ Lessons Learned from Prior Approaches
- ❖ The Class-Based Exception Handling Concept
- ❖ Dealing with Exceptions
- ❖ Raising and Forwarding Exceptions
- ❖ Creating Exception classes
- ❖ UML Tutorial: Activity Diagrams Summary

Working with the SAP List Viewer

- ❖ Overview of the SAP Control Framework
- ❖ Overview of the ALV Object Model
- ❖ Getting Started with the Flight Query Report
- ❖ Event Handling with the ALV Object Model
- ❖ UML Tutorial: Communication Diagrams

ABAP Object Services

- ❖ Object-Relational Mapping Concepts
- ❖ Persistence Service Overview
- ❖ Building Persistent Classes
- ❖ Working with Persistent Objects
- ❖ UML Tutorial: Advanced Sequence Diagrams
- ❖ Summary

Debugging Objects

- ❖ Debugging Objects Using the Classic ABAP Debugger
- ❖ Debugging Objects Using the New ABAP Debugger