

## **OJ-OOAD-UML: Object-Oriented Analysis and Design Using UML**

Course Code: OJ-OOAD-UML

Duration: 5 days

Instructor-led Training (ILT) | Virtual Instructor-led Training (VILT)

### **OVERVIEW**

This Object-Oriented Analysis and Design Using UML training teaches you how to effectively use object-oriented technologies and software modeling as applied to a software development process. Expert Oracle University instructors present one practical, complete, object-oriented analysis and design (OOAD) road map from requirements gathering to system design.

Learn To:

- Use object-oriented technologies.
- Use Unified Modeling Language 2.2.
- Perform object-oriented analysis and design.
- Follow a software development process using an OO software project.
- Create a system design (the Solution model) supporting the functional requirements (FRs).

### **SKILLS COVERED**

Upon completing this course, the learner will be able to meet these overall objectives:

- Describe the object-oriented software development process, including object-oriented methodologies and workflows
- Gather system requirements through interviews with stakeholders
- Analyze system requirements to determine the use cases and domain

model of the problem domain (the Requirements model)

- Create a system architecture (the Architecture model) supporting the nonfunctional requirements (NFRs) and development constraints
- Create a system design (the Solution model) supporting the functional requirements (FRs)

### **WHO SHOULD ATTEND?**

- Application Developers
- System Analysts
- Java Developers
- Java EE Developers

### **PREREQUISITES**

- Understand object-oriented concepts and methodology
- Demonstrate a general understanding of programming, preferably using the Java programming language
- Understand the fundamentals of the systems development process

### **COURSE CONTENTS**

- Examining Object-Oriented Concepts and Terminology
- Introducing Modeling and the Software Development Process
- Creating Use Case Diagrams
- Creating Use Case Scenarios and Forms
- Creating Activity Diagrams
- Determining the Key Abstractions
- Constructing the Problem Domain Model
- Transitioning from Analysis to Design using Interaction Diagrams
- Modeling Object State Using State Machine Diagrams
- Applying Design Patterns to the Design Model

- Introducing Architectural Concepts and Diagrams
- Introducing the Architectural Tiers
- Refining the Class Design Model
- Overview of Software Development Processes
- Overview of Frameworks
- Course Review

**END OF PAGE**