
Object-Oriented Analysis and Design Using UML Ed

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The Object-Oriented Analysis and Design Using UML training explores the software development processes, object-oriented technologies and the Unified Modeling Language (UML). Learn one practical, complete, object-oriented analysis and design (OOAD) roadmap from requirements gathering to system deployment.

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)

Topics

- 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