

Learning Use Cases & UML

Brief Description

2 Sessions

The workshop teaches the *Unified Modeling Language* (UML) and an understanding of the *Unified Process* and how to incorporate them into a repeatable development process at your organization. The seminar teaches and provides exercises in modeling techniques used for project planning, scoping, requirements gathering and design for object-oriented development projects.

Detailed Description

The Learning Use Cases & UML Techniques Seminar provides training in the methodology needed for capturing and modeling the artifacts for Object-Oriented and Legacy System development. The class provides a life cycle and techniques used for IT process improvement using use cases and the Unified Modeling Language (UML). The seminar focus is on how to:

- Write use cases and build requirements and design models using the Unified Modeling Language
- Implement a repeatable process for project initiation, requirements definition, analysis and design

The objectives of the seminar are to:

- Provide an understanding of the Software Life Cycle, methodology steps and artifacts needed for Object-Oriented Development Projects
- Provide practical group exercises for building UML artifacts using the UML notations
- Define the Rapid Application Development Process, describe spiral vs. waterfall method, success factors and how to plan projects using an iterative and incremental approach

Seminar Content

Session 1 (1:00 – 5:00pm Eastern Time)

Class Introduction

UML Concepts

- Terms to get acquainted with
- History, scope, and philosophy of the UML
- Major types of diagrams supported by UML

Overview of Project Life Cycle and UML Project Artifacts

Discovery Phase- Problem Statement/Scope of the Project

- Principles and terminology for Discovery-Problem Statement/Scoping Phase
- Constructing the Use Case Diagram (Project Scope) using UML
- **Case Study Exercise- Building the Use Case Diagram**

Discovery Phase- Requirements Analysis

- Principles and terminology for Discovery- Requirements Analysis Phase of the Project Life Cycle
- Constructing the Activity/Swimlanes Workflow Diagram using UML
 - UML notations

- Uses of Activity Diagrams in the project life cycle
- Writing the Business Use Case Model for Requirements Analysis
 - Guidelines for writing the use cases
 - Templates and samples
- **Case Study Exercises - Building Activity/Swimlanes Workflow Diagrams and Writing Use Cases for Requirements Definition**
- Constructing the Domain Object Model and CRCs
- **Case Study Exercise- Building the Domain Object Model using UML**

Session 2 (1:00 – 5:00 pm Eastern Time)

Analysis & Design Methodology Steps and Artifacts

- Principles and Terminology for the Analysis & Design Phase of the Project Life Cycle
- Writing System Use Cases for development
 - Guidelines and templates for writing System Use Cases
 - Building prototypes
- **Case Study Exercise- Writing System Use Cases and building prototypes for the Analysis/Design Phase**
- Constructing the State Diagram and Sequence Diagram using UML
- **Case Study Exercise- Building the State Diagram and Sequence Diagram using UML**

UML Process Simulation

The UML simulation demonstrates how the entire life cycle of a project fits together and how the artifacts taught in class build on each other. Each student leads the group in a stage of the life cycle using the scoping, requirements analysis, analysis and design artifacts. Visio's Profession Version UML tools are used in the simulation.

Who Should Attend?

Those who will find this of value are: Team Leads, Developers, Business Analysts, Business Systems Analysts, System Analysts, Solutions Analysts, Information Architects, Designers, and Project Managers.