

# The Unified Modeling Language (UML®) Using Enterprise Architect

Three Day Course Syllabus

DAY 1

## Introduction to Enterprise Architect

### User Interface

- Desktop layout
- Portals window
- Visual styles
- Commonly used Views
- Workspace Layouts, Menu Sets, and Perspectives

### Managing Projects

- Creating and opening Projects
- Creating Root Nodes, Views and Packages
- Adding Models using the Wizard
- Organizing Models with Views and Packages

### Managing Diagrams

- Toolbox
- Creation techniques
- Menu options, properties and toolbar
- Navigation between diagrams
- Floating diagrams
- Copy/paste across diagrams

### Creating Diagram Elements

- Creation techniques
- Properties
- Drag and drop

### Managing Diagram Elements

- Appearance, layering, and feature visibility
- Alignment, resizing, automatic layout
- Info view

### Deleting Model Elements

- Diagram level deletions
- Repository level deletions

### Managing Connectors

- Creation (toolbox and Quick Linker)
- Redirection
- Advanced options
- Line bends and styles
- Virtualizing Connector ends

### Managing Package Content

- Package Navigator
- Package Browser/List View

## Tool Configuration

- Defining People
- Defining general types
- Personal configuration options

COURSE LEADER

## Frank Truyen

is a principal consultant and trainer, with 20+ years of experience in the IT industry as a developer, architect, consultant and manager.

Strong expertise in different modeling notations such as UML®, SoaML™, DDS™, UPDM™, ArchiMate® and BPMN™, allied with his extensive experience in using the Enterprise Architect modeling tool, allows Frank to successfully provide training and consulting services to a broad variety of customers across many industries.

## Modeling Business Architecture

### Managing Requirements

- Creating Requirements via a diagram
- Creating Requirements using the Specification Manager
- Other features
- Importing & exporting Requirements
- Organizing Requirements

### Structural models

- UML (Conceptual) Class diagram

### Behavioral models

- UML Use Case diagram
  - Definition
  - Best practices
  - Creating Use Case diagrams
  - Discovering Actors
  - Guidelines for creating Use Cases
  - Modeling Use Case Scenarios
  - Defining constraints
  - Using behavioral diagrams to illustrate Scenarios
  - Tracing Requirements to Use Cases
- UML Activity diagram

DAY 2

## Modeling Application Architecture

### Structural models

- UML Class diagram (Attributes)
  - Object-Oriented principles
  - Classes and Objects
  - Element visibility
  - Relationships
  - Defining Attributes
  - Adding rules and constraints
  - Stereotypes and Tagged Values
  - Grouping elements into Packages
- UML Composite Structure diagram
- UML Component diagram
- UML Deployment diagram

### Behavioral models

- UML Class diagram (Operations)
  - Discovering and assigning responsibilities
  - Patterns for assigning responsibilities
  - Defining Operations
  - Defining Interfaces
- UML Sequence diagram
  - Combined Fragments
- UML State Machine diagram
- UML Interaction Overview diagram

DAY 3

## Traceability and Navigation

Overview

The Relationships window

The Relationship Matrix

The Gap Analysis Matrix

The Traceability window

Other traceability features

## Core Tool Features

### Documentation Generation

Template driven RTF generator

Diagram and Package options

Linking into Microsoft Word

Model documents

Master documents

Generating to an Artifact

HTML generator

### Document Artifacts

Creating

Linked Documents

External document links

### Model Searches

Initiating

Configuring

Viewing results

Custom searches

Other features

### Managing Baselines and comparing models

Creating baselines

Administering baselines

Package comparisons

Diagram comparisons

## Extra Tool Features

### Diagram features

- Boundaries, Swimlanes, Matrix, and Kanban
- Content filters
- Notes
- Active legends

### Element features

- Browser
- Compartments
- Replication

### Tool features

- Working Sets
- Charts, Dashboards, and Heatmaps
- Managing hyperlinks
- Keyboard shortcuts
- Getting help

## End-to-End Modeling Exercise (if time permits)

- The Online Bookstore model, or
- A User defined modeling exercise