

UML Overview

Audience Course UML Overview

The course UML Overview is intended for developers, designers, architects, managers and other interested persons who want to get an overview of the Unified Modeling Language (UML) standard for modeling systems.

Prerequisites Course UML Overview

Knowledge of and experience with system development and object orientation is beneficial to a good understanding but not strictly required.

Realization Training UML Overview

The theory is treated on the basis of presentation slides and is interspersed with exercises. UML models are used as demonstration of the concepts. The course material is in English. The course times are from 9.30 up and to 16.30.

Certification UMI

Participants receive an official certificate UML Overview after successful completion of the course.



Content Course UML Overview

The course UML Overview gives insight into the UML language for modeling systems. It discusses the UML syntax, symbols, diagrams and views.

UML Intro

After an introduction to the UML specification and the meaning of UML as a meta language, the courses addresses Structural Modeling and the diagrams used like class and object diagrams, component and deployment diagrams.

Class Diagrams

Also domain modeling and the modeling of possible relationships between classes are discussed like inheritance, associations, aggregations, compositions and dependencies.

Use Case Diagrams

Next attention is paid to Use Case Modeling, the Use Case Diagram, the role of actors and the accurate description of the interaction steps.

Sequence Diagrams

The next subject is Dynamic Behavior Modeling where interaction diagrams like sequence diagrams and collaboration diagrams are discussed.

State Diagrams

The modeling of system states using state chart diagrams, the difference between passive and active objects and the role of threads is also part of the subject matter. There is also attention for the role of activity diagrams in which concepts such as control and data flow and swim lanes are discussed.

Subsystems en Stereotypes

Finally a number of advanced concepts such as the UML modeling of packages and subsystems and the use of stereotypes, constraints and tagged values are part of the program.



Modules Course UML Overview

Module 1 : UML Introduction	Module 2 : Use Case Modeling	Module 3 : Structural Modeling
What is UML?	Use Cases	Structural Modeling
Modeling Reasons	Actors	Identification of Classes
UML History	System Context Diagram	Structural Diagrams Elements
UML Design Goal	Identifying Use Cases	Structural Relationships
UML Diagrams	Use Case Diagram	Association Modeling
UML Views	Use Case Modeling Steps	Domain Class Model
Use Case View	High Level Use Case	Interfaces
Logical View	Expanded Use Case	Composition
Component View	Structuring Use Case Model	Generalization
Deployment View	Include Relationship	Dependencies
Notes and Adornments	Include Use Case	Packages
Stereotypes	Extends Relationship	Objects and Links
Tagged Values	Extends Use Case	Component Diagrams
Constraints	Use Case Generalization	Deployment Diagrams
System Sequence Diagrams	Actor Generalization	Design Class Diagrams
Module 4 : Interactions	Module 5 : State Machines	Module 6 : Activity Graphs
Interaction Diagrams	State Machines	Activity Diagram
System Sequence Diagrams	State Diagram Elements	Steps in Activity Diagrams
Object Sequence Diagrams	State Machine Usage	Actions and Subactivities
UML Messages	State Entry and Exit Actions	Activity Diagram Elements
Sequence Diagrams Elements	Pseudo States	Decisions
Recursion and Conditions	Order of Actions	Sync State
Sequence Diagram Syntax	Internal Transitions	Fork Transitions
Communication Diagrams	State Do Activities	Join Transitions
Communication Diagram Elements	Guards	Swim Lanes
Communication Diagram Syntax	History States	Activity Diagram Syntax
Interaction Diagrams are Valuable	State Diagram Syntax	Using Activity Diagrams