

UML 2 modeling with Enterprise Architect



SII-345 3 Days (21 Hours)

Description

Based around a complete case study, this condensed and practical course will allow you to master the essential UML notations and the main uses of Enterprise Architect within a development approach, from business modeling to design.

Who is this training for ?

For whom

Software architects, designers, developers.

Prerequisites

Aucune

Training objectives

- Know how to use UML in different software engineering activities (business, requirements, design)
- Know how to implement UML with the Enterprise Architect tool (class, sequence, state diagrams, etc.)
- Know develop a quality design using architectural patterns (layers, MVC)
- Know how to express the design with Enterprise Architect using static and dynamic modeling

Training program

Introduction à la modélisation métier

- The project approach and software engineering activities.
- Importance of the design activity.
- UML within the project approach.
- The different diagrams.
- The notion of stereotype and profile.
- Business modeling: business process - activity diagram and domain class diagram.
- Practical work Getting started with the Enterprise Architect case study: structuring the project into packages and using profiles.
- Modeling the business with the business diagram activity.

Spécifier les exigences

- Functional and non-functional requirements.
- FURPS approach.
- Definition of actors.
- Definition of use cases.
- Use case diagram.
- Illustration of use case scenarios with the sequence diagram.
- Practical work Specification of the requirements of the case study: use case and sequence diagrams.

Concevoir le système - Modélisation statique

- Code architecture.
- Layered patterns/layers.
- MVC pattern.
- Structuring in packages.
- Class identification.
- Attributes.
- Operations.
- Class diagram.
- Association relationships between classes .
- Generalization relations.
- Practical work Carry out static modeling with Enterprise Architect: structure the code in packages.
- Create the class diagram .

Concevoir le système - Modélisation dynamique

- Define operations.
- Design-level use case scenarios.
- Describe interactions with the sequence diagram.
- State management.
- State diagram.
- Practical work Perform dynamic modeling with Enterprise Architect: sequence diagram.
- Define states with the state machine diagram.

Concevoir le système - Modélisation du déploiement

- The definition of deployable components and their interfaces.
- Component diagram.
- The deployment of components on the hardware architecture.
- Deployment diagram.
- Practical work Carry out deployment modeling: component and deployment diagram.

Introduction aux fonctions avancées de l'outil

- Code generation and "reverse engineering".
- Documentation generation.
- Completion of large projects and collaborative use.