

Modelling, Requirements, Business Analysis Courses

Two Day Workshop on

REQUIREMENTS ANALYSIS (A UML USE CASE APPROACH)

Course Objective

This two-day course describes an approach to requirements analysis that can be applied by analysts with different levels of experience. Underpinning the approach is the concept of Use Cases. These describe requirements from the perspective of the users of a software application.

The course first shows participants how to create a conceptual model. The conceptual models provides a context for identifying requirements and the development of use case models. Finally packaging of a requirements specification and various project issues are discussed.

The course is based on UML (unified modeling techniques) and includes a number of generic and project specific workflows, which show how to apply the techniques to a variety of different projects.

Course Features

- Describes the need for software application requirements.
- Introduces and/or reviews as required by the participants, the techniques of Activity Analysis; Needs Analysis; Conceptual Modelling, Business Rule Modelling and Use Case Modelling.
- Presents a generic set of workflows that can easily be tailored to meet the needs of specific projects.

Participant Benefits

- Clear understanding of the role of requirements in a software development or acquisition project.
- Ability to effectively apply the techniques discussed during the course to a variety of projects.
- Practical experience of applying the techniques and workflows to a case study.

Who Should Attend

Business and Systems Analysts
Developers who need to do specify requirements
Team Leaders
Project Managers
Software Engineers &
Software Managers

Introduction

Business Modelling

Conceptual Modelling

- Classification, Abstraction and Reification
- UML Class Diagrams
- Identifying Object Types
- Subject Areas

Requirements Definitions

- Business Rules
- Application Vision and Scope
 - Features
 - Vision
 - Scope
- Software Requirements
 - Interface Requirements
 - Functional Requirements
 - Non-Functional Requirements
 - Quality Attributes
 - Environmental Constraints
 - Life-Cycle Constraints
 - Design Constraints
 - Storage Requirements
 - Identifying Software Requirements

Use Case Concepts

- System Boundaries and Visibility
- Use Cases as Tool Requirements
- Anatomy of a Use Case
- A Use Case Framework

Describing Use Cases

- Use Case Template
- Use Case Scenarios
- Extending and Including Use Cases
- Specialising Use Cases
- Levels of Use Case Detail
- Use Case Diagrams

Use Case Modelling

- Identifying Actors and Use Cases
- Incorporating Information requirements
- Incorporating Business Rules

Incorporating Software Requirements
Requirements Validation
Packaging the Requirements Specification

Review and Conclusion