

SPR400 : Requirements with Use Cases

Code : SPR400 **Duration :** 2 days

Audience :

This course is intended for system analysts and developers who want to learn how the functional requirements of systems can be specified with Use Cases.

Prerequisites :

There are no specific prerequisites for this course. General knowledge of system development is desirable for a proper understanding.

Realization :

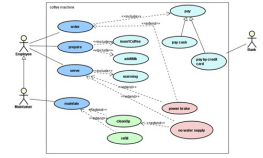
The theory is presented in the form of presentation slides. Brief case studies are used to practice the techniques. Demo projects clarify the discussed concepts. The course material is in English.

Category :



Requirements Analysis

Software Process



Requirements with Use Cases



Contents :

In this course the focus is on Use Case modeling which is a widely used analytical technique for specifying the functional requirements of a software system and the creation of a framework for test case development. After an introduction to requirements in general, where the different types of requirements are discussed, the specification of Use Cases is addressed. Not only the description of the Use Cases in a textual document will be covered, but also the visualization of the Use Cases in a Use Case diagram. Attention is paid to how Use Case diagrams can be of help in the communication with the stakeholders and to gain insight into the size, complexity and the needed interaction with the system under consideration. Subsequently, it is discussed how a Use Case can be accurately described in a number of steps on the basis of a Use Case template. Primarily the focus is on the success scenario but it is also discussed how to specify different key secondary scenarios. Next also more advanced techniques in Use Case Modeling are addressed such as the use of Activity Diagrams with guards, branching of Use Cases with if and the use of iterations. Finally, there is room for discussion of the structuring of Use Cases through reuse via includes, extends and generalizations. The course is completed with attention to Use Cases in the context of prototypes, the interfaces of the system and the test plan.

Module 1 : Requirements

- Understanding Requirements
- Vision Documents
- Requirement Analysis Activities
- Requirement Types
- Functional Requirements
- Non-Functional Requirements
- Requirements Determination
- Requirements Classification
- Requirements Specification
- Conflicting Requirements
- Requirements Risks
- The glossary

Module 2 : Use Case Intro

- Use Case approach
- Identifying stakeholders
- Use Case terminology
- Use Cases
- Actors
- Identifying Actors
- Primary Actor
- Secondary Actors
- Information
- Define System scope
- System Context Diagram
- System Use Case Diagram
- Brief Use Case Description

Module 3 : Use Case Modeling

- Use Case Modeling
- Identifying Use Cases
- Use Case Diagram
- Use Case Modeling Steps
- Drawing Use Cases
- Describing Use Cases
- High Level Use Cases
- Expanded Use Case
- Use Case Template
- Prioritizing Uses Cases
- Packaging Use Cases

Module 4 : Scenario's

- Main success scenario
- Describing the steps
- Best Practices use case descriptions
- Other Scenarios
- Different types of scenarios
- Alternate scenarios and flows
- Alternate flows and exceptions
- Alternate scenario description

Module 5 : Advanced Use Case Modeling

- Activity Diagramming
- Adding decisions
- Guards and notes
- Branching with If
- Alternative Paths
- Scenarios
- Structuring Use Case Model
- Generalizations
- include and extends

Module 6 : Interfaces and Tests

- Usability requirements
- Prototyping
- Prototype documentation
- Interface requirements
- Interface specifications
- Screen functionality
- Interfaces in iteration plan
- Testing Use Case
- Test plan