## www.iconATG.com



+1 866 ICON US1 +1 636 530 7776 info@iconATG.com

# Defining & Managing Requirements with Use Cases

Requirements are the foundation for any software development project. Well-defined requirements are the key to building software that users want, because it meets their needs. Use Cases are an industry proven approach to capture end user requirements. This course explores the process of eliciting, analyzing, documenting, communicating, and managing business requirements and the requirements of a software system. Students will learn how to gather requirements using several techniques, create the use case model, write use case specifications, and manage changing requirements.

If you are a Project Management Professional (PMP)® certified by the Project Management Institute (PMI), you can earn Professional Development Units (PDUs) by attending this course.

## **Objectives:**

- Context of the Unified Process
- Understand different types of requirements and where use cases fit in the lifecycle
- Learn techniques for eliciting, capturing, and communicating requirements
- Understand and practice the process to develop use case models and use case specifications
- Understand how to manage changing requirements, including impact analysis based on traceability

## Audience:

This course is designed for business analysts, systems analysts, requirements analysts, managers, subject matter experts, users, team leads, architects and software developers who require knowledge of requirements management techniques and use cases.

## Prerequisites:

#### None

## Duration:

2 or 3 days (depending on public or private presentation and amount of lab exercises desired)

## Related courses:

Students who take this course will benefit from the following courses:

- Kequirements Elicitation & Facilitation: teaches information elicitation and meeting facilitation techniques that are invaluable throughout business modeling activities.
- Facilitated Use Case Workshop: hands-on, expert-led sessions further enabling students with techniques and skills within a specific project.
- Advanced Use Case Lab: teaches how to correct poorly written use cases and improve quality.

Defining & Managing Requirements with Use Cases  $\odot$  1994-2009 IconATG

## www.iconATG.com

+1 866 ICON US1 +1 636 530 7776 info@iconATG.com



## Outline:

- 1. Putting requirements into perspective
  - Define concepts used throughout the course
  - Explain requirements impact on project success
  - Place requirements within the context of an iterative lifecycle
- 2. Defining the right problem
  - Describe how to analyze the business problem and how this relates to software development
  - Review tips for effectively defining the problem
  - Practice writing a problem statement
- 3. Eliciting requirements techniques
  - Discuss different techniques for eliciting requirements
  - Discuss benefits of each technique and when to use them
  - Practice some of the techniques
- 4. Understanding actors
  - What are actors?
  - How to identify and describe actors
  - Practice finding and defining actors
- 5. Developing the use case model
  - What are use cases?
  - Describe how to develop a use case model
  - Practice finding and briefly describing use cases as part of building a use case model
- 6. Refining the use case model
  - Discuss how to review a use case model within the project team and with stakeholders
  - Describe how the use case model evolves during a project, including structuring the model to manage complexity

- Discuss setting objectives and priorities for iterative development
- 7. Writing a use case
  - Describe the basic process for writing a use case specification
  - Describe the components of a use case specification
  - Discuss the relationship between use case and user interfaces
  - Review tips for writing quality use case specification
  - Practice writing a use case specification
- 8. Defining non-use case requirements and ensuring quality
  - Discuss which requirements do not belong in use case specifications
  - Describe non-functional requirements, goals, and constraints
  - Review an artifact that holds this information
  - Describe quality characteristics applicable to functional and nonfunctional requirements
- 9. Managing scope and changing requirements
  - Define the importance of establishing baselines
  - Discuss how to manage changing requirements, including using a change control board
  - Explore why requirements change
  - Discuss how requirements attributes facilitate impact assessment, traceability, and change management
- 10. Course summary
  - Review course objectives
  - Summarize the course's most important points