

Gathering, Documenting, Managing and Validating User Requirements (2 Days)

This is a basic course in understanding the process of gathering, defining, testing and managing user requirements. You will learn the requirements process from start to ongoing maintenance.

This course is ideal for people who are just learning about the importance of user requirements, or for those who need a defined process for requirements management.

This is a practical interactive seminar which uses team exercises to reinforce the process taught in the class. Your instructor will be a certified instructor in the software engineering field. You will learn the terminology, process, and challenges of requirements management in the real world. As a result of attending this seminar, you should have a good working knowledge of user requirements and what it takes to gather, design, test and manage a complete set of user requirements for a project.

Gathering, Defining and Testing User Requirements will help you become more comfortable and confident in performing the requirements management process in just about any role on the project, including business analyst, user, system designer, project manager, QA analyst or tester.

You will emerge from this two-day session knowing how to define the right problem, talk to the right people, document the right needs, build the right system, and test the system using a defined baseline of requirements as the target. You will also leave with a knowledge of how tools can help you perform requirements management.

Return on Investment

- Learn how to define and solve the right problem and avoid spending tons of money building the wrong system.
- Learn how to find problems in requirements before they ripple through the rest of the project, where they are much more costly to fix.
- Understand the key issues in gathering and defining user requirements.
- Learn how to design tests that adequately cover requirements and business events.
- Get the most out of your existing investment in user requirements and use cases and how to leverage that investment.
- Advance your career by reinforcing your software engineering expertise.

Who Will Benefit

- Project managers
- Business analysts
- End-users
- System designers
- Software engineers and developers
- QA analysts
- Test analysts
- Testers

The program requires only basic IT knowledge or experience. Technical documentation knowledge or experience is not a pre-requisite.

Course Topics

Module 1 – Exploring Requirements (1.5 hrs.)

- What is a requirement?
- The overall objective
- Why we aren't very good at requirements
- Problems with requirements
- Why are requirements important?
- Case Study – Defining a Simple Requirement
- Self-assessment for requirements management

Module 2 – Problem Analysis (2 hrs.)

- Defining the Problem to be Solved
- Understanding the Problem
- Context-free Questions
- The Sources of False Assumptions
- Identify the Involved Parties
- Setting the Scope
- Identifying Constraints
- Modeling Techniques
- Problem Solving Exercise

Module 3 – Techniques for Getting the User Perspective (3 hrs.)

- Getting the Right People
- Interview Techniques
- Defining Features
- Workshops
- Facilitating a Requirements Gathering Workshop
- Brainstorming
- Exercise – Brainstorming a Requirement Definition
- Storyboards
- Use Cases
- JAD Sessions
- Role Playing
- Prototyping
- How to Have an Effective Meeting
- Dealing With Conflicts
- Exercise – Role Playing to Develop a Requirement Definition

Module 4 – Documenting Requirements (2.5 hrs.)

- SRS Standards
- System Definition Models
- Levels of specification
- Dealing with ambiguity
- Tools for Documenting Requirements
- Exercise – Writing a Requirements Specification
- Use Cases
- Exercise – Writing a Use Case

Module 5 – Requirements Management (1 hr.)

- Scope Management
- Managing Expectations
- Refinement of Requirements
- Change Control
- Tools for Change Control and Requirements Management
- How the Requirements Management Process is handled in the Rational Unified Process
- Case Study – Changing a Requirement

Module 6 – Testing Requirements (2 hrs)

- Nine Quality Measures
- Verification Methods
 - Ambiguity Walkthroughs and Reviews
 - Technical Reviews
 - User Satisfaction
 - Benchmarking
- Exercise – Perform an Ambiguity Review
- Developing Test Cases from Requirements
- Traceability in Test Cases
- The “V” Diagram
- Tools for Test Case Design from Requirements
- Exercise – Define Test Cases from a Requirement

Module 7 – Dealing With Problems in the Requirements Process (1 hr.)

- Scope Creep
- Excessive Change
- Uncontrolled Changes (Requirements Leakage)
- How to Start
- How to Start Earlier
- When to Stop

Resources

- Helpful modeling tool information
- Glossary
- Bibliography

Deliverables

- Courseware PDF with slides, worksheets, checklists, complete examples and supporting text
- You will have the basic information needed to gather, define, manage and validate requirements.