APG

Armstrong Process Group, Inc.
Professional Education Division

Requirements Management Fundamentals

Objectives

- Maintain quality via good requirements management
- Analyze root causes behind the problem
- Develop a vision of the product solution
- Understand and apply a requirements traceability strategy
- Apply techniques for establishing and managing scope
- Understand how to manage customer and user expectations
- Learn how to manage change in the iterative lifecycle

Description

Requirements Management Fundamentals teaches the experienced business and system analyst how to effectively manage requirements in the iterative software development lifecycle. Beginning with a discussion on the importance of requirements management, the course then describes how the iterative lifecycle impacts managing the continually changing requirements of a software development project. Then how to search for the "problem behind the problem" using root cause analysis is discussed. The course then describes how to capture the stakeholders, situation statement, solution statement, product features, and constraints in the vision document. Discussion continues with how to define a traceability strategy and how to apply it for managing scope and change. The course also discusses how to establish and maintain scope using the use case model and requirements attributes throughout the four phases of the iterative lifecycle. The course finishes with an overview of change request management as it relates to requirements. Students continually apply these concepts and techniques throughout the course in hands-on group exercises.

Course Outline (Modules and Topics)

- Requirements Management Overview
  - Importance of requirements management
  - Different types and sources for requirements
  - Iterative development of requirements
- Analyze Root Causes
  - Business objectives and success criteria
  - Root cause/problem analysis
  - Fishbone diagrams and Pareto analysis
  - Situation statement
- Establish Vision
  - Vision document
  - System boundary and constraints
  - Solution statement
  - Product features
  - Relationship to business modeling
- Trace Requirements
  - Traceability strategy definition and application
  - Requirements identification
  - Feature-to-use case traceability
  - Hierarchical requirements
- Manage Scope
  - Scope management and the four phases of the iterative lifecycle
  - Establish scope with use case model
  - Using requirements attributes
- Manage Change
  - Requirements change management in the iterative lifecycle
  - Project change board
  - Change management process
  - Traceability and impact analysis

Duration	Course #
1 day	01-0702

Audience

- Customer representative
- Project manager
- Business architect
- Business analyst
- System analyst
- Technical writer
- Test analyst

Prerequisites

- Participation in software development projects as either customer, user, or development team member
- Experience with traditional requirements elicitation techniques – or – Requirements Gathering Fundamentals course

Continuing education

- Use Case Modeling Fundamentals
- UML Fundamentals
- Object-Oriented Analysis with UML

Classroom requirements

- No computers required

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