# Creating & Managing Agile Requirements



## What you'll learn:

- Powerful techniques for identifying, documenting, and verifying requirements
- The best of both the formal Plan-Driven and Agile requirements approaches
- Use the Product Vision as a roadmap to success
- How to elicit and document system requirements
- New skills with practical, interactive exercises

Clear, concise, and accurate requirements will help avoid late, over budget, or canceled projects. Too much documentation or inflexible requirements can bog down a project. Find the right mix of formal written requirements and Agile documentation -- user stories, use cases, prototypes, and visual models -- that works best for you.

This practical, hands-on course will provide a flexible requirements development approach customized to your environment and the skills needed to successfully discover, analyze, communicate, and evaluate requirements.

Learn how requirements within Plan-Driven and Agile development approaches differ in terms of requirements timing, depth, and documentation. How agile planning is properly done and where requirements fit into this iterative planning process. Understand different types of requirements, their purpose, and how to iteratively create and manage them as software is planned, built, tested, and deployed.

#### **Practice New Skills with Interactive Exercises**

This course offers interactive exercises to provide practical experience and improve your requirements development skills. Use a real-world case study to identify stakeholders, develop a vision statement, and produce concise, accurate, and usable requirements documentation. Find ways to transfer the newly learned techniques back to your organization's requirements process and take away a framework for understanding business and user needs to develop a suitable software solution.

#### Who Should Attend

Whether you are a requirements or business analyst, software engineer, developer, test engineer, user, stakeholder, or a member of the QA staff responsible for gathering, analyzing, documenting, confirming, and maintaining requirements, this course is for you.

## **Course Outline**

#### Requirements Overview

- What are requirements
- Types of requirements
- The benefits of "good" requirements
- What are characteristics of "Bad" requirements/antipatterns
- When and how much to document requirements
- Introduction to Case Study
- Exercise: Refine Cosmic Comix business requirements

## **Software Development Approaches and Requirements**

- Plan-driven: Values, core practices, and documentation
- Value-driven: Values, core practices, and documentation

- Other forms of requirements
  - Features
  - Research spikes
  - Team Tasks
- Three C's

## **Agile Planning Process**

- Agile planning horizons
  - Product Vision
  - Product Planning
  - Increment Planning
  - Iteration/Sprint Planning
  - Daily Planning
- Product Vision

 The value of an Agile approach Comparing Agile to Waterfall Exercise: Show how important agility is in requirements definition

## **Requirements Roles and Responsibilities**

- Product Owner/Product manager
  - Voice of the customer
  - Responsible for definition at all levels
  - Responsible for prioritization
  - Responsible for managing stakeholders
  - Responsible for engaging customers
- Business Stakeholders
  - Key requirements input
- Business Analyst
  - Proxy for PO when needed
- Development Team
  - o Part of refinement effort
  - Testability is key
  - Part of 3 Amigos (discussed later)
- End Customer

#### **Agile Requirements**

- User Stories
  - INVEST
  - Tasks
  - Priorities
  - Estimation

- Business requirements
- Roles
- Charters
- User Personas
- Product Planning
  - o Backlogs
  - Architecture
  - Screen mocks and wireframes
  - Test strategy
  - Roadmaps
- Iteration Planning
  - Intro to Scrum and Kanban
  - Backlog Refinement
  - Iteration planning
  - Iteration kickoff
  - Daily Planning

# Agile Requirements Models

- Overall approach
- Test Driven Development (TDD)
- Behavioral Driven Development (BDD)
- TDD/BDD process & tools
- Three amigos
- Pairing/mobbing
- Exercise: Three amigos small set of stories