## Testing on Agile Projects: A RoadMap for Success
**Three-Day Course**

### Abstract

This three day course explains how testers can become valued agile team members, how they contribute to delivering a continuous stream of business value, and ways to overcome common cultural and logistical obstacles in transitioning to an agile development process. It describes the values and principles that help testers adopt an agile testing mindset, and how the whole team contributes to the success of any testing practices, including automation.

Students will be shown how to complete testing activities in short iterations, and how testers contribute on a daily basis during each iteration and release cycle. Through interactive exercises and group discussions, participants will discover good strategies for driving development with both executable and manual tests. The course is filled with real-life examples of the many ways agile testers add value.

### Learn how to:

Understand how testers contribute on agile teams, how agile teams successfully cover all dimensions of software quality in short release cycles, and collaborate to deliver the "right" business value at frequent, consistent intervals.

### Is this course for you?

The course is aimed at anyone on who wants to learn what testing means on an agile team. All team members will benefit from understanding their contribution and the interaction with testers on the team. Test/QA and development managers, who work with testers, will also find the course valuable. Basic agile knowledge is recommended so the participants can actively contribute with questions and shared experiences.

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## Program

*Each module includes small group exercises and discussions in addition to the major exercises listed.*

**DAY 1**

**Brief Intro into Agile & How Testing Fits in – Module 1**

- Overview of agile terminology
  - Agile principles - what does it mean to a tester
  - Intro to Scrum, XP, other agile processes
- SDLC - Introduce agile testing activities and approach

**Adapting to Agile - Module 2**

- The whole-team approach
  - Ten Principles for agile testers
  - Roles and responsibilities; collaboration
- Overcoming common obstacles
  - Cultural Issues; mini-waterfalls
- Transitioning typical processes
  - defect tracking
  - quality models, traceability

**Test Automation - How Testing "Keeps Up" with Short Agile Iterations**

- Using Automation So Testing "Keeps up"
  - Value of automation
  - Barriers to Automation
- Getting over the hump
  - Using the Test Automation Pyramid for maximum ROI
  - Using The Agile Testing Quadrants for automation
  - What to should and shouldn't be automated
- Developing an Agile Automation Strategy
  - What hurts most; multi-layered Approach
  - Applying agile principles
  - "Thin slice/steel thread" approach
  - Exercise – Breaking features / stories into thin slices
- Summary: Key Factors to Making Automation Work

**DAY 2**

**Release Planning in Agile Projects – Module 4**

- Release planning
  - Sizing your stories
  - Using an incremental approach
- Roles and Responsibilities
  - Roles of PO, ScrumMaster, Dev
  - How testers contribute
- Exercise: Release Planning Simulation

**Test Planning in Agile Projects - Module 5**

- Using the Agile Testing Quadrants
  - Introduction: Vocabulary, Collaboration
  - Tests that guide development, foundation for quality
    - Developer tests
    - Business-facing
  - Tests to evaluate the product
    - Business-facing
    - Technology-facing
- Plan to stay on track
  - Alternatives to test plans
  - Release-level test plan matrix
- Exercise: Test Planning Simulation

**An Iteration in the Life of a Tester – Module 6 (1:00 – 5:00)**

- Iteration Pre-Planning
  - Going through stories
  - Distributed team communication
- Iteration Planning
  - Simplest thing first - steel thread
  - Acceptance Tests
  - How testers contribute in planning, estimating
  - Exercise – Write high-level test cases as a team
- During the Iteration - Coding & Testing
  - Collaboration
  - Defect tracking
  - Expanding tests
  - Exploratory testing
- The iteration demo
- Retrospectives - improving your process
- Celebrating success

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**DAY 3**

**Exercise: Iteration Simulation**

- Includes Iteration planning, code and test, automation, demo, retrospective
- Debrief Iteration Simulation

**The End Game Module 7**

- Successful delivery
- The end game
- Release retrospective

**Key Success Factors & Wrap-Up - Module 8**

- Seven Factors for Agile Testing Success
- Wrap-Up; Discussion back to original problems that participants are experiencing