



Agile Testing Fundamentals

Applying Testing Best Practices to Agile Projects

Description

Effective software testing is critical to the success of agile development projects. Unlike traditional software development approaches, agile incorporates testing into the entire lifecycle and asks developers and testers to work together to perform a variety of testing activities. Many testers struggle to understand their role within agile projects and how to best apply their testing knowledge and experiences within the agile paradigm.

This course prepares you to be an effective member of an agile team by teaching you everything you need to know about agile software testing. Learn the fundamentals of agile, how quality is viewed and achieved within agile projects, and the role that effective testers play during the development process. Understand how to plan and execute a variety of necessary testing activities to support the development process and effectively critique the product during short development iterations. Explore key agile testing techniques such as:

- Test Driven Development (TDD),
- Acceptance Test Driven Development (ATDD),
- Iterative testing of non-functional requirements, and
- Exploratory Testing

Understand the role of quality metrics within agile and how to wield them effectively. Leave this course with an understanding of how to apply testing best practices to agile projects. Attendees successfully completing the course are eligible for the ICAgile Certified Professional in Agile Testing (ICP-TST) designation from the internationally recognized ICAgile certification body.

Hands-On Experience

During *Agile Testing Fundamentals*, you will explore agile testing tools and techniques through a variety of examples and hands-on exercises. Participants will work in small groups to plan and execute tests within an agile development process.

Who Should Attend?

This course is appropriate for both novice and experienced software testers. Developers expected to test within agile teams will find this course extremely useful. Test and development managers also will benefit from this course. A background of basic development and testing processes is helpful.



2-Day Course Outline

Agile Testing Mindset and Culture

- The Agile Manifesto
- Agile Principles
- Agile Testing Origins
- Agile Testing vs Traditional Testing
- Agile Testing Principles
- Team Based Quality
- Building Quality in
- Continuous Improvement and Feedback

Agile Testing Techniques

- Categories of Testing
- Test Design
- Test Automation
 - Test Selection
 - Process and Execution
 - Planning
 - Frameworks
- Collaborating with Development
 - Unit and Component Testing
 - Developer Testing Techniques
- Example Driven Development
 - Test Driven Development
 - Acceptance Test Driven Development
 - Behavior Driven Development
 - Specification by Example
- Feature and Story Testing
 - User Story Testing
 - Feature Testing
 - Exploratory Testing
 - Non-functional Testing

Agile Testing Process

- Roles and Responsibilities



- Team Based Testing
- Agile Roles (Product Owner, Customer, Scrum Master, Team)
- Working with Developers
- Test Manager Role on an Agile Project
- Test Strategy and Planning
 - Release Planning
 - Iteration Planning
 - Documentation
 - Test Plan
 - Estimation using Points
 - Results Reporting and Metrics
- Successful Delivery
 - Time Boxed Delivery
 - Continuous Integration, Deployment, Delivery
 - Sprint Review/UAT/Retrospective
 - Release/End Game and Post Release testing
 - Governance
- Test Environments and Infrastructure
 - Environments
 - Build Orbits
 - Build Pipeline
 - Automated Builds
 - Virtualization
 - Build Management
 - Data Management
- Working on Distributed Teams
 - Collaboration and Communication
 - Scaling Agile

Beyond the Team

- Cultural Challenges

Contact Us for More Information:

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