Agile Test Design Techniques

- Learn strategies for pairing with developers to influence better unit test design
- Find more defects faster using any of the four black-box (functional) techniques practiced during the class
- Design white-box (structural) test cases to support unit and automation testing
- Implement exploratory testing to successfully supplement black and white box testing
- Choose the techniques that are most useful for your current project's challenges

Agile Test Design Techniques begins where many software testing courses end: when it is time to create specific test cases. Because testing everything is impossible and agile practices demand we test strategically focusing on risk to give us the highest return on our testing investment. This course shows you how to create an effective set of test cases and develops your practical skills to become a better tester—in just two days.

Explore the science and the art of functional, structural, and exploratory testing, getting hands on with practical exercises designed to challenge and deepen your skills. The respected instructor shares key agile focused test design techniques, including equivalence class, boundary value, decision table, state transition, and pair/triwise. Leave this class with a newfound confidence for developing test cases that find important bugs earlier.

Practice all techniques with a simple example during the class. Students receive a full set of optional test case writing exercises (including a specification and example answers) to practice the techniques in greater detail after the class.

Who Should Attend

This course is appropriate for both anyone who participates or engages in software testing. Developers in an agile environment who are expected to write unit tests will find it extremely useful. Test and development managers can also benefit. A background of basic development processes and test levels is helpful but not required.

Course Outline

Introduction
What is testing?
Current challenges in test design?
What are test cases?
The impossibility of testing everything

Getting Started
Aligning your test strategy with your test design technique

Black Box Science
What is black-box testing?
Equivalence class partitioning (exercise)
Boundary value testing (exercise)
Decision table testing (exercise)
Pairwise and Triwise (exercise)

White Box Science
What is white-box testing?
Coverage measures
Statement, Decision, and Case testing (exercise)

Black Box Art
What is experience-based testing?
Heuristics
Exploratory testing (exercise)

Wrap-Up
Choosing the appropriate technique