Software testing with Visual Studio 2013

<table>
<thead>
<tr>
<th>Duration</th>
<th>3 days</th>
<th>Version</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill level</td>
<td>Intermediate</td>
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<tr>
<td>Audience</td>
<td>Testers, QA Engineers, Developers</td>
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<tr>
<td>Products and technologies</td>
<td>The following product and technologies will be covered in this course</td>
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<tr>
<td></td>
<td>• Microsoft Test Manager</td>
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<td></td>
<td>• Team Foundation Server 2013</td>
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Course Description

This three day course is designed for testers who need to gain a solid practical knowledge of testing applications using Microsoft Visual Studio 2013.

The course focuses primarily on the use of Microsoft Test Professional 2013 which is a standalone product or part of Visual Studio 2013 Premium and Ultimate editions. The course teaches you how to design test plans including test cases, test suites and test configurations. Best practices are also discussed including how you can make your tests as resilient as possible.

Attendees will learn how testers and developers can work more closely together to reduce the time it takes to find and fix software defects. Through the efficient use of new data collectors, developers should be able to pinpoint issues quicker than ever before.

Testers will also learn how to manage their test plans over multiple iterations and releases of a product including how to deal with different code branches within the same Team Project.

This course includes hands-on labs to reinforce practical skills and ensure you’re ready to use the tools on your return to your workplace.

Course Objectives

At the completion of this course, attendees will be able to;

• Understand the role of a tester in modern Agile teams
• Explain the testing capabilities of the Visual Studio ALM product suite
• Create and manage test plans and test suites
• Manage test configurations and assign non default configurations to test cases
• Create high quality, maintainable test cases
• Execute tests using the Microsoft Test Runner
• Use Test Case Fast Forward to help speed up the testing process
• Create actionable, high quality bug reports
• Verify resolved bugs and manage the bug lifecycle
• Conduct exploratory testing using Microsoft Test Manager
• Use the web-based Test Management interface to create and execute tests
• Manage Test Plans over multiple iterations and releases
• Report on test results and testing progress
• Understand how to test new Windows 8.x style applications
• Understand the benefit of Lab Management and how it helps testers
• Gain an overview of how to create automated Coded UI tests

**Audience**

This course is designed for team members that perform the role of Tester within their team in either a full time or part time capacity. The course would also be beneficial for developers looking to increase their knowledge of testing.

**Pre-requisites**

Attendees should be familiar with testing theory and practices.

**Modules**

**Module 1 - Introduction to Agile Testing**

• Traditional vs Agile Testing
• How “Agile” relates to testing
• Becoming an Agile tester
• Understanding testing terminology
• Keys to effective testing

**Module 2 - A lap around the testing tools in Visual Studio 2013**

• A look at the Visual Studio product family
• Introducing Microsoft Test Manager 2013
• The role of Team Foundation Server 2013

**Module 3 - Creating our first Test Plan using Microsoft Test Manager**

• Creating Test Suites
• Mapping requirements to tests
• Creating and managing test cases
• Configuring Test settings including data collectors
• Balancing storage considerations

**Module 4: Executing test cases**

• Assigning a test case to a tester
• Navigating the Microsoft Test Runner
• Recording reliable action recordings
• Test Case fast Forward

**Module 5 - Raising and Verifying Bugs**

• Raising a bug from the Microsoft Test Runner
• The bug lifecycle
• View bug states
• Verifying a bug fix

Module 6 - The role of builds in testing
• Assigning a new build to our test plan
• Determining what’s changing between builds
• Examining impacted tests

Module 7 - Refactoring Test Cases
• Creating Shared Steps
• Reusing Shared Steps
• Shared Steps in the Test Runner
• Best Practises for Shared Steps

Module 8 - Exploratory Testing with MTM
• What is Exploratory Testing?
• Exploratory Testing in Microsoft Test Manager
• Creating Bugs and Test Cases from exploratory tests

Module 9 - Web-based Test Management
• A lap around browser-based test management and execution
• Creating Test Plans using a browser
• Switching to MTM from the web client
• Configuring views
• Using the web-based Test Runner
• Bulk editing in the Grid View

Module 10 - Test Release Management
• The need for a Test Release Management plan
• Moving from Iteration to Iteration
• Cloning Test Plans
• Copying Test cases to the next iteration
• Dealing with multiple branches

Module 11 - Reporting test progress and the status of tests
• A lap around the out of the box reports
• Producing test progress reports
• Using Test Scribe to produce Test Plan documents
• Creating ad-hoc reports using Excel

Module 12 - Testing Windows 8.x Style Applications
• Configuring your Windows 8.x device for testing
• Configuring Data Collectors for Windows 8.x application testing
• Testing on remote Windows 8.x devices
• Exploratory testing on Windows 8.x devices

Module 13 - An overview of Lab Management

• What is Lab Management?
• Using the Lab Center in MTM
• Creating and managing lab environments
• Installing and configuring test agents
• Configuring tests to run in a lab environment

Module 14 - An overview of Coded UI Testing

• Creating Coded UI tests from action recordings
• Using the Coded UI Test Builder

All of our public classes can be attended either in-person or remotely, online from anywhere.

In addition to our public schedule of courses, all ALM-Training courses can be delivered onsite for your company.

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