



Duration:

5 days

Skill Level:



Immediate

All team members

Version:

2012
2010
2008

Application Lifecycle Management solutions using Microsoft Visual Studio Team Foundation Server 2012

Course Description

This five day course is designed to get your entire team working efficiently with Microsoft's Application Lifecycle Management solution based around Visual Studio Team Foundation Server 2012. The course is divided into different topics on each of the days to help you gain a complete understanding of the features and capabilities of Visual Studio 2012 and Team Foundation Server 2012.

This class is designed for individuals or complete development teams who need to learn how to use Visual Studio 2012 and Team Foundation Server 2012 for Agile software development. This course covers project management, Agile development, test management strategies, and TFS administration.

This course can also be taught onsite at your facilities and can be custom-tailored to meet the needs of team members and place emphasis specific job roles to ensure a successful TFS deployment.

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;

- Describe the full feature-set of Microsoft's Application Lifecycle Management suite
- Create and manage work using Work Item tracking
- Use the version control system to maintain their source code
- Branching and merge their code
- Manage their projects using the Agile Planning tools
- Manage work in teams including sprints and backlogs
- Perform a variety of testing using the testing tools in Microsoft Test Manager

Who Should Attend?

This event is designed for all team members looking to effectively use the team oriented features provided by Microsoft Visual Studio 2012 and Team Foundation Server 2012. This includes developers, testers, project managers and business analysts.

Prerequisites

Attendees should be familiar with Visual Studio and the basic use of Team Foundation Server.

For more information about this or any of our courses,
please visit <http://www.quicklearn.com>

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TRAINING

Day One – Team Development

Module 1: Introducing Microsoft Visual Studio 2012 and Team Foundation Server 2012

- A look at the Visual Studio 2012 product family
- Introducing Microsoft Test Professional 2012
- The role of Team Foundation Server

Module 2: Organising work with Team Projects

- Understanding Team Projects and Team Project Collections
- Creating Team Projects

Module 3: Managing work using Work Items

- Introduction to Work Items
- Creating Work Items
- Linking Work Items to provide traceability

- Creating and using custom Work Item Queries

Module 4: Integrating the team using different clients

- Using Team Explorer
- Using Microsoft Excel to create and manage work items
- Using Microsoft Project integrate with Work Items
- Team Web Access
- Third Party clients

Module 5: Putting the Project portal to best use

- Using the Project Portal
- Storing project documents in the document library
- Linking documents to Work Items

Day Two – Administration

Module 1: Overview of TFS Administration

- Overview of TFS Administration tasks
- Understanding TFS topologies
- Pre-requisites for installing TFS

Module 2: Migrating to TFS

- Overview of Migration Options
- Upgrading from previous versions of TFS
- Migrating from Visual SourceSafe
- Migrating content to hosted TFS

Module 3: Managing TFS instances

- Using the TFS Administration Console
- TFS Server health monitoring
- Options for external client access
- TFS Backup and Restore strategies

Module 4: Creating and managing Team Projects

- Creating Team Projects
- Understanding Team Project Collections
- Deleting Team Projects

Module 5: Managing Security and Permissions

- Overview of TFS security
- Configuring security using standard groups
- Understanding and configuring Teams
- Fine-grain security options
- Troubleshooting security

Module 6: Managing Process Templates

- Understanding project templates & basics of template customisation
- Adding new fields to Work Item Types
- Adding new queries and reports
- Updating an upgraded Team Project

Day Three – Managing Projects using TFS

Module 1: Initiating a new project

- Organising projects in TFS
- Understanding Process Templates
- Creating a new Team Project
- Setting Team Project properties

Module 2: Gathering Requirements

- Overview of Work Items
- Examining Requirement types in TFS
- Storing Requirements in TFS
- Traceability between work items

Module 3: Using Storyboards

- Overview of Storyboarding capabilities
- Creating a storyboard to illustrate a requirement

- Linking a storyboard to a work item

Module 4: Getting our product backlog started

- Creating backlog items
- Prioritizing the backlog
- Estimating items on the backlog
- Techniques for improving estimations
- Grooming the backlog

Module 5: Planning and running a sprint

- Understanding team capacity
- Selecting items for the sprint backlog
- Forecasting using team capacity
- Tracking progress using the taskboard
- Using Burndown charts to track progress

Day Four – Agile Development

Module 1: Effective use of TFS Version Control

- Create source control folder structures
- Setting team project wide source control settings
- Setup and manage workspaces
- Changesets and Shelving
- Backward compatibility using the MSSCCI provider

Module 2: Branching and Merging

- Defining a branching strategy
- How to branch
- Branch visualisation and tracking changes
- Merging and resolving conflicts
- Custom differencing tools

Module 3: Unit Testing & Code Quality Tools

- Unit Testing in Visual Studio 2012
- Visual Studio Test Explorer

- Code Metrics
- Code Clone Analysis

Module 4: Code Reviews

- Requesting a code review
- Responding to a request for code review
- Providing code review feedback

Module 5: IntelliTrace

- IntelliTrace debugging scenarios
- Debugging with IntelliTrace
- Collecting IntelliTrace information
- Navigation with IntelliTrace

Module 6: Overview of Team Build

- Understanding Build infrastructure
- MSBuild vs Team Build
- Creating build definitions
- Understanding Build workflow
- Monitoring Builds

Day Five – Agile Testing

Module 1: A lap around the testing tools in Visual Studio 2012

- A look at the Visual Studio product family
- Introducing Microsoft Test Manager 2012
- The role of Team Foundation Server 2012

Module 2: 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

Module 3: Executing test cases

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

Module 4: Raising and Verifying Bugs

- Raising a bug from the Microsoft Test Runner
- View bug states
- Verifying a bug fix

Module 5: Tracking our test progress

- Assigning a new build to our test plan
- Determining what's changing between builds
- Examining impacted tests

Module 6: Refactoring Test Cases

- Creating Shared Steps
- Reusing Shared Steps
- Shared Steps in the Test Runner
- Best Practises for Shared Steps

Module 7: Exploratory Testing with MTM

- What is Exploratory Testing?
- Exploratory Testing in Microsoft Test Manager
- Creating Bugs and Test Cases from exploratory tests

NOTE: Our courses are frequently being updated to ensure they remain as accurate as possible and cater for the latest releases of service packs and powertools. This outline is subject to change without notice. Please download the latest outline from our website at <http://www.quicklearn.com>