Managing Agile Projects Using TFS 2017

Course Summary

Description

This three-day course provides project managers, Scrum masters and team leads the essential skills required to effectively manage a software development project using Microsoft Visual Studio Team Foundation Server 2017.

This course focuses on Agile methodologies and includes discussions and content focused on both Scrum and Kanban practices.

In this course, attendees will plan a new software development project and go through the steps to initiate the project using Visual Studio 2017. This includes recording requirements, creating a product backlog, and estimating effort for backlog items. We’ll cover planning and running a sprint, as well as using the task board and burndown chart to track progress.

The course also demonstrates how TFS facilitates the use of storyboards to prototype experiences, request stakeholder feedback, foster team collaboration, and generate reports. The final two modules of the course provide an overview of how testers and developers can work effectively using appropriate tools in the Visual Studio family.

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. All Scrum content adheres to the latest version of the official Scrum Guide and provides helpful preparation for anyone considering gaining Scrum certification.

Objectives

By the end of this course, students will be able to:

- Describe the full feature set of Microsoft’s Application Lifecycle Management suite
- Understand how Work Item Tracking (WIT) can be used across the entire team
- Search work items and create custom work item queries
- Create work item charts and add them to the dashboard
- Use a variety of client tools to interact with team members
- Initiate a new team project
- Enter requirements into Team Foundation Server including storyboards to illustrate requirements and experiences
- Use the Kanban board to work with the product backlog
- Record estimates in your requirement types
- Plan and run a sprint including tracking progress using task boards and burndown charts
- Understand several of the quality indicators available
- Use dashboards to view team performance and quality indicators
- Record team capacity and monitor a team’s velocity
- Capture quality feedback from stakeholders
- Configure notifications for team members
- Understand the out-of-the-box reports and what they can tell us about our project
- Create ad hoc reports using Microsoft Excel
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Course Summary (cont’d)

Topics

- Introducing the Microsoft Visual Studio 2017 Family
- Initiating a New Project
- Work Item Primer
- Creating our Product Backlog
- Agile Estimation
- Working from the Product Backlog
- Working in Sprints
- Retrospectives
- Working with TFS Teams
- Enhancing Requirements Using Storyboards
- Getting Stakeholder Feedback
- Fostering Team Collaboration
- Creating and Customizing Reports
- Overview of Agile Testing
- Overview of Agile Development

Audience

This course is designed for project managers, Scrum masters, business analysts, and team leaders looking to effectively manage their development projects using Team Foundation Server 2017.

Prerequisites

Before taking this course, attendees should have some familiarity with the basic use of TFS.

Duration

Three days

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Course Outline

I. Introducing the Microsoft Visual Studio 2017 Family
   A. What’s new in Visual Studio 2017
   B. Overview of the Visual Studio 2017 family
   C. Overview of product features
   D. Project workflow across the Visual Studio 2017 suite of products

II. Initiating a New Project
    A. Organizing projects in TFS
    B. Understanding process templates
    C. Creating a new team project
    D. Setting team project properties
    E. Switching between team projects

III. Work Item Primer
     A. Overview of work items
     B. Traceability between work items
     C. Searching and creating custom queries
     D. Work item charting and pinning charts
     E. Work item tagging
     F. Configuring project notifications

IV. Creating our Product Backlog
    A. Examining requirement types
    B. Creating backlog items
    C. Creating requirement hierarchies using features
    D. The importance of acceptance criteria

V. Agile Estimation
   A. Introduction to estimation
   B. Using story points
   C. Planning Poker and other popular estimation techniques
   D. Adding your estimates to TFS work items

VI. Working from the Product Backlog
    A. Introducing the Kanban board
    B. Entering and editing details on the Kanban board

C. Customizing columns, including using split columns and limiting WIP
D. Recording our Definition of Done (DoD)
E. Understanding the Cumulative Flow Diagram

VII. Working in Sprints
     A. Specifying your sprint schedule and your team capacity
     B. Selecting items for the sprint backlog using forecasting
     C. Decomposing requirements into tasks
     D. Using burndown charts to track progress
     E. Monitoring work using the task board
     F. Working with unparented work items

VIII. Retrospectives
      A. The importance of retrospectives
      B. Conducting an efficient sprint retrospective
      C. What you should avoid in your retrospective

IX. Working with TFS Teams
    A. Configuring teams in our team project
    B. Managing work from a master backlog
    C. Allocating work to our teams
    D. Configuring iterations for TFS teams

X. Enhancing Requirements Using Storyboards
   A. Overview of storyboarding capabilities
   B. Creating a storyboard to illustrate a requirement
   C. Linking a storyboard to a work item

XI. Getting Stakeholder Feedback
    A. Introducing the Microsoft Feedback Client
    B. Using the Microsoft Feedback Client to provide rich feedback to the team
    C. Adding continuous feedback into your workflow

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Course Outline (cont’d)

XII. Fostering Team Collaboration
A. An overview of the various clients
B. The use of email in sharing information
C. Choosing the appropriate client tool

XIII. Creating and Customizing Reports
A. Overview of reporting architecture
B. Reviewing the out of the box reports
C. Adding new reports
D. Creating ad hoc reports using Excel

XIV. Overview of Agile Testing
A. The role of the tester in a sprint planning meeting
B. A lap around web-based test management
C. Creating a test plan
D. Creating manual test cases from requirements

XV. Overview of Agile Development
A. Using My Work to select tasks from the sprint backlog
B. Understanding the value of linking changesets to work items
C. The importance of unit testing
D. Creating a continuous integration build