

## Managing Agile Projects Using Azure DevOps

### Course Summary

#### Description

This three-day course provides project managers, scrum masters, and team leads with the essential skills required to effectively manage a software development project using Microsoft Visual Studio Team Services (VSTS).

The course focuses on Agile methodologies, and includes discussions and content focused on both Scrum and Kanban practices. We look at how VSTS supports the team during the sprint planning and daily Scrum events, as well as how to create and manage the product backlog and sprint backlog artifacts.

Attendees will plan a new software development project and go through the steps to initiate the project using VSTS. 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 class also covers using storyboards to prototype experiences, requesting stakeholder feedback, team collaboration, and reporting.

This course includes hands-on labs to reinforce practical skills and ensure that you're ready to use the tools upon your return to the workplace. All demonstrations and hands-on exercises use Visual Studio Team Services. All Scrum content adheres to the latest version of the official Scrum Guide and provides helpful preparation for anyone considering gaining Scrum certification.

#### Objectives

After taking 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 using ad hoc and managed queries
- Use a variety of client tools to interact with team members
- Initiate a new team project
- Enter requirements into VSTS 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
- Create work item charts and add them to the dashboard
- Use PowerBI to create a report

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### Course Summary (cont'd)

#### Topics

- Introducing the Microsoft Visual Studio 2017 Family
- Initiating a New Project
- Getting Our Team Started
- Creating our Product Backlog
- Enhancing Requirements
- Agile Estimation
- Working in Sprints (Planning)
- Working in Sprints (Execution)
- Working in Sprints (Delivery)
- Retrospectives
- Working from the Product Backlog
- A Closer Look at Work Items
- Tracking Progress with Dashboards and Reports
- Getting Stakeholder Feedback

#### Audience

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

#### Prerequisites

Before taking this course, attendees should have some familiarity with leading a software development team.

#### 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 VSTS
  - B. Understanding process templates
  - C. Creating a new team project
  - D. Setting team project properties
- III. Getting Our Team Started**
  - A. Configuring teams in our team project
  - B. Setting team properties
  - C. Configuring iterations for VSTS teams
- IV. Creating our Product Backlog**
  - A. Understanding requirement types
  - B. A review of user stories
  - C. Creating backlog items in TFS
  - D. Traceability between work items
  - E. Creating requirement hierarchies using features
  - F. The importance of acceptance criteria
- V. Enhancing Requirements**
  - A. Creating and recording personas
  - B. Overview of storyboarding capabilities
  - C. Creating a storyboard to illustrate a requirement
  - D. Linking a storyboard to a work item
- VI. Agile Estimation**
  - A. Introduction to Agile estimation
  - B. Using story points
  - C. Planning Poker and other popular estimation techniques
  - D. Adding your estimates to VSTS work items
- VII. Working in Sprints (Planning)**
  - A. Our Sprint planning meeting
  - B. Specifying your sprint schedule and your team capacity
  - C. Selecting items for the sprint backlog using forecasting
  - D. Decomposing requirements into tasks
  - E. Using burndown charts to track progress
  - F. Monitoring work using the task board
  - G. Working with unparented work items
- VIII. Working in Sprints (Execution)**
  - A. Overview of Agile testing
  - B. A lap around web-based test management
  - C. Creating a test plan
  - D. Creating manual test cases from requirements
  - E. Overview of Agile development
  - F. Using My Work to select tasks from the sprint backlog
  - G. Understanding the value of linking changesets to work items
- IX. Working in Sprints (Delivery)**
  - A. Understanding potentially shippable increments
  - B. Ensuring you're ready for the review meeting
  - C. Continuous integration
  - D. Release Management
- X. Retrospectives**
  - A. The importance of retrospectives
  - B. Conducting an efficient sprint retrospective
  - C. What you should avoid in your retrospective
- XI. Working from the Product Backlog**
  - A. Introducing the Kanban board
  - B. Entering and editing details on the Kanban board

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### Course Outline (cont'd)

- C. Customizing columns, including using split columns and limiting WIP
  - D. Recording our Definition of Done (DoD)
  - E. Understanding the Cumulative Flow Diagram
- XII. A Closer Look at Work Items**
- A. Overview of work items
  - B. Searching and creating custom queries
  - C. Work item tagging
  - D. Configuring project notifications
- XIII. Tracking Progress with Dashboards and Reports**
- A. Searching and creating custom queries
  - B. Work item charting and pinning charts
  - C. Creating dashboards
  - D. Introduction to PowerBI
  - E. Using the PowerBI content pack
- XIV. 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