

Application Lifecycle Management Using Visual Studio 2013

Overview

This course provides students with the knowledge & skills to use the Application Lifecycle Management tools found in Visual Studio & on-premises Team Foundation Server to plan, design, develop, test, and deliver value in the form of working software.

Course Objectives

At course completion, attendees will have had exposure to:

- Visual Studio's ALM tools and capabilities
- Creating storyboards in PowerPoint
- TFS components and architecture
- Conducting and tracking a code review
- Using the TFS Administration Console
- Understanding and using version control
- Planning and creating team project collections
- Writing and executing .NET unit tests
- Planning and creating team projects
- Integrating 3rd party unit testing tools (i.e. NUnit)
- Process templates and their purpose
- Using code analysis and code metrics
- Using the respective process template
- Using code clone analysis to find duplicate code
- Managing and securing a team project
- Using IntelliTrace to troubleshoot and diagnose
- Creating and querying work items
- Using Performance Profiler
- Understanding and using work item hierarchies
- Test case management using Test Manager (MTM)
- Using Agile tools to plan and track work
- Planning, creating, and executing manual/UI tests
- Manage a product backlog using Team Web Access
- Planning and running manual tests from the web
- Manage a Sprint Backlog using Team Web Access
- Using coded UI tests to automate UI testing
- Using UML to model and describe a system
- Testing web applications
- Using layer diagrams and sequence diagrams
- Putting tests under load
- Using Architecture Explorer to explore code
- Understanding and using Team Foundation Build
- Obtaining stakeholder feedback
- Configuring build controllers and agents
- Collaborating using a Team Room
- Automating the building and testing of a project

[Register Online](#)

Schedule

Class Length: 3 Days

G2R = "Guaranteed to Run" | OLL = "Online LIVE"
ILT = "Instructor-Led-Training"

This course is not currently available on the public schedule. Please contact us using the information in the footer below to inquire about future dates or to schedule a private class.

Course Outline

Introduction

- Challenges facing development teams
- ALM overview
- ALM support in Visual Studio
- TFS overview
- Features and capabilities by edition and role

Team Projects

- The Project Administrator role
- Team project collections
- Team projects
- Creating a team project
- Configuring and managing a team project

Process Templates and Work Items

- Software development methodologies
- Agile vs. formal processes
- Process templates
- Work item types
- Work item categories
- Work item links and hierarchies
- Creating and managing work items
- The Agile tools in Team Web Access

Version Control

- TFS Version Control overview
- Visual Studio integration
- Types of workspaces
- Source Control Explorer
- Get, check-out, check-in, label
- Managing and resolving conflicts
- Branching and merging overview
- Git Integration

DNNStuff - InjectAnything

Modeling the Application

- Architect activities
- Directed Graph Modeling Language
- Exploring existing code
- Architecture Explorer
- UML models and diagrams
- Sequence diagrams
- Layer diagrams

Collaboration

- Using the My Work window
- Suspending and resuming work
- Shelving and unshelving changes
- Creating storyboards in PowerPoint
- Reviewing code in Visual Studio
- Providing feedback using the client
- Using a Team Room

Writing Quality Code

- Programming vs. testing activities
- Unit testing and code coverage
- Test-Driven Development overview
- Code analysis and code metrics
- Code clone analysis
- Application profiling
- IntelliTrace
- CodeLens

Testing the Application

- Types of tests
- Web performance tests
- Load tests
- Microsoft Test Manager (MTM)
- Test plans, test suites, and test cases
- Manual tests
- Web-based test case management
- Coded UI tests
- Exploratory tests

DNNStuff - InjectAnything

Team Foundation Build

Team Foundation Build
The build process
Build definitions and templates
View, manage and queue builds
Build reports
Automating Team Foundation Build
Continuous Integration (CI)

DNNStuff - InjectAnything