# **Mastering Azure Repos**

MARS | 1 Day

Azure DevOps provides a set of cloud-hosted tools that software teams can use to quickly plan, develop, test, and deliver value in the form of working software. Azure Repos provide public or private Git repositories that enable better collaboration and cleaner code. To maximize learning, students will work in teams, in a common Azure DevOps project, on a common codebase.

# Who should take this class?

This course is appropriate for all software developers who are using or considering using Azure Repos for Git version control. Having some experience with version control is recommended. Experience with Git, Visual Studio or Visual Studio Code, and C# are also helpful, but not required.

## Course content

This course contains several modules, progressively explaining how to configure and use Azure Repos in basic and advanced ways in order to manage changes to code in a software development effort.

#### 1. INTRODUCTION TO AZURE REPOS

- Azure DevOps overview
- Azure Repos overview
- Public vs. private repos
- Creating, configuring, and securing repos
- Hands-on

### 2. GIT CONCEPTS

- DVCS concepts and Git overview
- Using Git from the command line
- Creating/cloning a repository
- Git commit and history
- Basic Git workflows
- Git for Windows
- Hands-on

#### 3. IDE INTEGRATION

- Visual Studio Integration
- Visual Studio Code Integration
- Connecting-to a repository
- Basic Git workflows revisited
- Associating comments and work items
- Viewing commit history
- Ignoring files when committing
- Hands-on

#### 4. WORKING WITH AZURE REPOS

- Annotating changes (for blame/praise)
- Tagging
- Editing commit history
- Checkout to a previous version
- Reverting to a previous version
- Resetting to a previous version
- Stashing changes
- Branching and merging
- Rebasing
- Pull requests
- Branch policies
- Code reviews using pull requests
- Hands-on

#### 5. MASTERING AZURE REPOS

- Git Hooks and Git extensions
- Code Search
- GitHub integration
- Forking
- Workflows (Git Flow, GitHub Flow)
- Scalar (f.k.a. VFS for Git)
- Repository limits
- Hands-on

# Course Designer

This course was designed by Richard Hundhausen, Microsoft's first Visual Studio ALM/DevOps MVP, Professional Scrum Trainer, co-creator of the Nexus Scaled Professional Scrum framework, and an experienced software developer. To see other Azure DevOps courses, visit <a href="https://www.accentient.com">www.accentient.com</a>.

