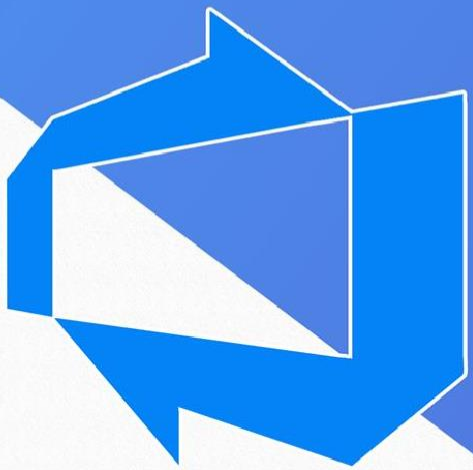
Mastering Azure DevOps



DotNetTricks

Microsoft Azure DevOps | DevOps Certification Training

About the Course

DevOps is the combination of "development and operations" where the Collaboration of software development (Dev) and information-technology operations (Ops) aims to deliver applications and software services at high speed and high velocity using combination of cultural philosophies, practices, and tools.

The Mastering Azure DevOps course makes you proficient in DevOps principles like Continuous Integration (CI), Continuous Deployment or Continuous Delivery (CD) and Continuous Monitoring, using Azure DevOps.

This course includes training on Sprint Planning and Tracking, Azure Repos, Azure Pipelines, Unit testing with Visual Studio, Azure Test Plans, Azure Artifacts and Extensions for Azure DevOps. The curriculum has been designed by Microsoft MVPs & DevOps expert to practice Azure DevOps.

Course objective

At the completion of this course, attendees will be able to;

- Understand DevOps Ecosystem.
- Do sprint planning and tracking.
- Use Kanban and task boards for tracking progress.
- Use git or TFS for source code management.
- Configure automatic source code Management and Continuous Integration (CI).
- Configure Continuous Delivery and Continuous Deployment.
- Build and Perform Test Automation.
- Maintain Code Quality using Unit testing and get Code coverage
- Use Azure DevOps Tools

Who can do this course?

The Mastering Azure DevOps course is designed for the IT professionals who want to pursue a career in Cloud Computing and become DeveOps Engineer. This Azure course is a best fit for:

- IT Professionals/Application Developers
- .Net Developers
- Solutions Architects
- Cloud Developer

Pre-requisites

Anyone who wants to learn this course should have knowledge of developing application using ASP.NET and C#.

Tools/SDK/IDE

Visual Studio 2019, Azure SDK, Git

Course Curriculum

Module 1

Introduction to DevOps

- Understanding DevOps
- DevOps Ecosystem
- DevOps Advantages
- DevOps Engineer Skills
- DevOps Delivery Pipeline

Azure DevOps

- What is Azure DevOps
- VSTS vs. Azure DevOps
- Core Concepts
- Azure DevOps vs. TFS
- Pricing Tiers

Configuring DevOps Organization and Project

- Creating Azure DevOps organization
- Creating and configuring a new team project
- Manage and Configuring teams in VSTS
- Cloning a Git repository into your team project
- Services available in Azure DevOps
- Marketplace
- Connect to a Project from Web Portal and Visual Studio

Module 2

Agile Planning and Azure Boards

- Overview of Agile planning tools
- Create a Project Backlog
- PowerPoint storyboarding

Sprint Planning and Tracking

- Sprint Planning
- Identifying user stores for the next sprint
- Capacity planning
- Defining tasks to complete a user story
- Adjust work to fit team capacity
- Sharing a sprint with stakeholders
- Managing work using teams
- Tracking progress using Kanban and task boards

- Querying Items

Module 3

Azure Repos

- Introduction to Git
- Git Workflow
- Git Concepts - Repository, Fork, Branch, Clone, Commit, Pull Requests
- Using Git and Git Tools
- Creating a local repository
- Cloning a remote repository

Working with Git

- Staging files
- Committing files
- Adding branches to your workflow
- Merge vs. Rebase
- Synchronizing with a remote repository
- Pull Requests
- Working with Visual Studio and command line tools
- Create Repository and host it in Azure Repos

Module 4

Azure Pipelines

- Introduction to Pipelines
- Core Concepts - Agents, Artifacts, Deployment Target
- Core Concepts - Pipeline, Build, Release

Automating Builds (CI)

- Create your first Pipeline using Visual Designer
- Using YAML for configuring Pipelines
- Build and Deploy .NET Core App
- Customizing your build using tasks
- A closer look at build attributes
- Triggering builds

Module 5

Creating Automated Release Pipelines (CD)

- Overview of release management
- Understanding artifacts
- Creating a release definition
- Understanding environments
- Approval work flows and notifications

A Closer Look at Build and Release Definitions

- Configuring Continuous Deployment (CD)
- Multi-machine deployment using deployment groups
- Managing secrets in the Azure Key Vault

Module 6

Azure Test Plans

- Introduction to Azure Test Plan
- Test Plan, test suite, test case
- Running manual tests using the Test Runner
- Parameters and Shared Steps
- Action recording
- Creating bug work items
- Minimize retesting using impact analysis

Azure Artifacts

- Introduction
- Create and host packages
- Using shared packages
- Protect your packages

Extensions for Azure DevOps

- Introduction
- Using Azure DevOps Extensions

Build Real-Projects with Azure DevOps Practices

Apply your coding skills to solve real-world problems. You'll learn how to start a project from scratch by following recommended architecture, practices and deploy to server.

Build Food Delivery Website
(Like Swiggy, Dominoz)

Learn to build an online food delivery website like Swiggy, Zomato, Dominoz etc.

Build Music Website
(Like Gana.com, JioSaavn)

Learn to build a music website like Gana.com, JioSaavn etc.

Build Online Shopping Website
(Like Flipkart, Pepperfry)

Learn to build an online shopping website like Flipkart, Pepperfry, Amazon etc.

Build Job Hunting Website
(Like Naukri, Indeed)

Learn to build job hunting website like Naukri, Indeed, Shine etc.

Build Doctor Consultation Website
(Like Practo, 1mg)

Learn to build online doctor appointment, consulation like Practo, 1mg etc.

Build Service Offering Website
(Like Urbanclap, Helpr)

Learn to build service offering websites like Urbanclap, Helpr etc.

Build Online Education Website
(Like DotNetTricks, Coursera)

Learn to build service offering websites like DotNetTricks, Coursera etc.

Build Social Media Website
(Like Twitter, Facebook)

Learn to build social media websites like Twitter, Facebook etc.

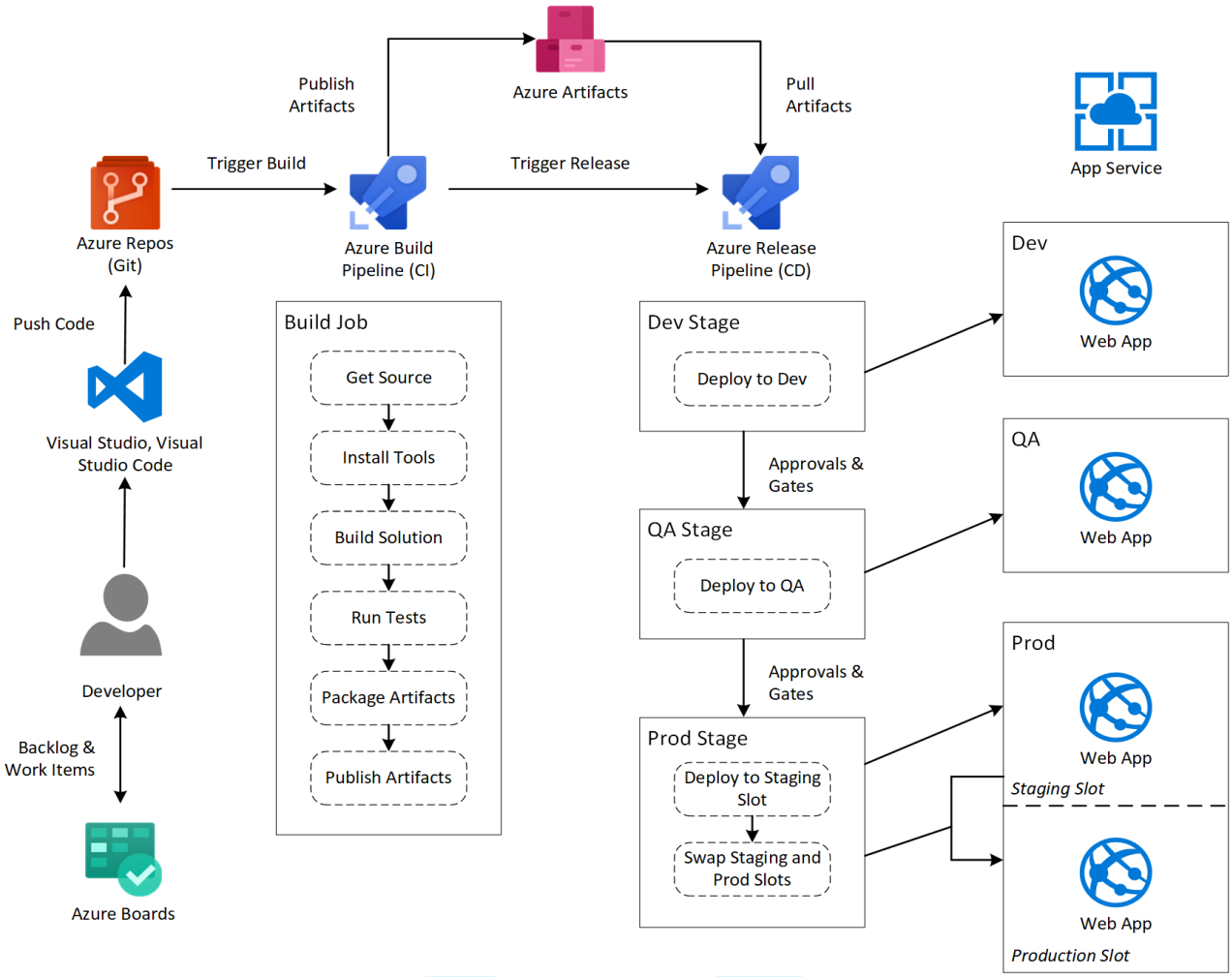
Build Online Booking Website
(Like MakeMyTrip, OYO)

Learn to build online booking websites like MakeMyTrip, OYO etc.

Azure DevOps Project Architecture

The primary purpose of an application architecture is to support the development life cycle of the system. Good architecture makes the system easy to understand, easy to develop, easy to maintain, and easy to deploy. The ultimate benefit of architecture is to minimize the lifetime cost of the system and to maximize programmer productivity.

The goal of the given architecture is to learn and implement important principles and design patterns to build various domains applications like eCommerce, edTech, Food Delivery or other Service based industries applications.



What you will learn through project?

At the completion of project, attendees will be able to;

- Create Sprint Plans and Tracking.
- Manage backlogs, Bugs and Capacity planning.
- Manage source code using Git or TFS.
- Create Build pipelines for dev environment.
- Create release pipelines for code deployment to production.
- Integrate Azure PaaS Services into CI/CD pipeline.
- Deploy Database to SQL Server or Azure SQL.
- Manage environment specific settings and variables.
- Publish own packages using Artifacts.
- Monitoring Applications.

Contact Us

- For more information about the course, visit: http://www.dotnettricks.com/masters-program/microsoft-azure
- Feel free to call us at **+91 9999 123 502/03** or email us at info@dotnettricks.com