

Document Generated: 10/31/2024

Learning Style: On Demand

Provider: Microsoft

Difficulty: Intermediate

Course Duration: 16 Hours

DevOps Practices and Principles



About this Course:

This course gives the key ideas to set you up for more profound jumps into explicit the practices of DevOps.

We will include configuring and deploying automating builds, standardized

infrastructure, and deployments using continuous deployment and continuous integration with automating testing and Visual Studio Team Services (VSTS) before release and while underway.

Also, the course will cover continuous learning from creation, and how to scale and improve business results dependent on application monitoring.

Subsequent to completing this course, you ought to have the option to see how to begin crafting a release pipeline that includes continuous testing works on, continuous integration strategies, monitoring, treating configuration and infrastructure as code, and deploying and automatically frequently.

It is intended for both Operations and Development experts, who are interested in adopting and learning DevOps practices.

Course Objective:

- DevOps fundamental principles values, and practices
- Instructions to deploy to IaaS and PaaS conditions in Microsoft Azure using ARM formats, Desired State Configuration (DSC) and other deployment apparatuses
- Create and deploy applications consequently to Test, Dev, and Production conditions
- Continuous learning from production to scale and improve the results of business
- Integration tests, Unit tests, UI tests, load tests, and test-driven advancement
- Exposure control strategies, Information maintenance techniques, and theory-driven advancement
- Compliance and Security in DevOps
- Change Agents and the DevOps Journey
- Deployment and Configuration
- IaaS, PaaS, and Containers
- ARM Templates and DSC
- Package Management and Containers
- Application Performance Monitoring
- Exposure Strategies
- Hypothesis-Driven Development

Prerequisite:

- Experience working in an association delivering software, either being developed or in tasks
- Experience and information working with Cloud-based arrangements, ideally experience using MS Azure

Course Outline:

DevOps Fundamentals

- Module 1 Learning Objectives
- Why DevOps
- Sustainable DevOps
- Compliance and Security in DevOps
- · Change Agents and the DevOps Journey
- Module 1 Supplemental Learning
- Module 1 Review Questions

Standardizing Environments

- Module 2 Learning Objectives
- Deployment and Configuration
- · IaaS, PaaS and Containers
- ARM Templates and DSC
- Module 2 Labs
- Module 2 Supplemental Learning
- Module 2 Review Questions

Building and Deploying to Production

- Module 3 Learning Objectives
- Automated Builds
- Automated Deployments
- Package Management and Containers
- Module 3 Labs
- Module 3 Supplemental Learning
- Module 3 Review Questions

Testing Automatically

- Module 4 Learning Objectives
- DevOps Testing Concepts
- Continuous Testing
- Module 4 Labs
- Module 4 Supplemental Learning
- Module 4 Review Questions

Continuous Learning

- Module 5 Learning Objectives
- Application Performance Monitoring
- Exposure Strategies
- Hypothesis-Driven Development
- Module 5 Supplemental Learning
- Module 5 Review Questions

Final Exam

Graded Final Exam

Credly Badge:



Display your Completion Badge And Get The Recognition You Deserve.

Add a completion and readiness badge to your Linkedin profile, Facebook page, or Twitter account to validate your professional and technical expertise. With badges issued and validated by Credly, you can:

- Let anyone verify your completion and achievement by clicking on the badge
- Display your hard work and validate your expertise
- Display each badge's details about specific skills you developed.

Badges are issued by QuickStart and verified through Credly.

Find Out More or See List Of Badges