QUICKSTART

Over 35 Years Of Technology Training

Document Generated: 10/31/2024

Learning Style: On Demand

Provider: Microsoft

Difficulty: Intermediate

Course Duration: 16 Hours

Devops for Databases

About this course:

This course observes the solutions and challenges of incorporating your database into a development process of DevOps software. This course will assist you in learning the difficulties of working with different information stores while changing and developing your software at a fast pace.

You will realize how and where databases can fit into the processes of DevOps.

The course will cover:

- Committing database code to a Continuous Integration, version control system (VCS), and unit testing database code.
- Release management for databases, in domains, for example, deploying releases, release gates to numerous situations, validating deployments with rolling back deployments and smoke tests.
- Checking database code, cross-database conditions, branching and merging database code, unified databases, upgrading various databases, dark launching, federated databases, error handling and cleaning up specialized debts with databases.

Finally, while the course will fundamentally utilize MS SQL Server (and tailor our models for it), other non-relational or relational database stages have comparative ideas that can be applied.

Course Objective:

- Define DevOps and comprehend DevOps according to Databases
- Include your database code with other application code in a rendition control system (VCS)
- Recognize the difficulties of using databases that are different from other software platforms and languages
- Compose and include mechanized unit tests for your database code
- Database Development Issues in a DevOps Process
- Database Development Paradigms
- Set up the platform of Continuous Integration (CI) for your database code
- Build up a process of automated release that deploys database changes to both cloud and on-premises databases.
- Committing Database Code to a VCS
- Continuous Integration for Databases
- Unit Testing Database Code
- Execute branching and merging for your database code.
- Instrument and monitor the database after deployment
- Monitoring Your Systems
- Branching and Merging Database Code
- Provisioning Best Practices
- Advanced Customer Scenarios

Prerequisite:

- Comprehend relational database advancement
- Comprehend essential database advancement
- Information and experience using essential version control
- Information on how to execute contents against a database stage

Course Outline:

Overview of DevOps

- Module 1 Overview
- Overview of DevOps
- Database Development Issues in a DevOps Process
- Database Development Paradigms
- Collaboration
- Labs
- Module 1 Review Questions

DevOps Database Development

- Module 2 Learning Objectives
- Overview of DevOps for Databases
- Committing Database Code to a VCS
- Continuous Integration for Databases
- Unit Testing Database Code
- Labs
- Module 2 Review Questions

Releasing Database Changes

- Module 3 Learning Objectives
- Overview of Release Management
- Deploying Releases
- Release Gates
- Release Details
- Rollbacks
- Labs
- Module 3 Review Questions

Advanced Topics

- Module 4 Learning Objectives
- Monitoring Your Systems
- Branching and Merging Database Code
- Provisioning
- Best Practices
- Advanced Customer Scenarios
- Labs
- Module 4 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