Implementing Continuous Delivery (AZ-400.3)

Modality: On Demand

Duration: 8 Hours

This course prepares you for the AZ-400 Exam leading to AZ-400 Certification. This course does not include the Official Exam Voucher, however, you can request to purchase the Official Exam Voucher separately.

About this course:

This course provides the knowledge and skills to implement continuous delivery. Students will learn how to design a release strategy, set up a release management workflow, and implement an appropriate deployment pattern.

Course Objective:

- Differentiate between a release and a deployment
- Define the components of a release pipeline
- Explain things to consider when designing your release strategy
- Classify a release versus a release process, and outline how to control the quality of both
- Describe the principle of release gates and how to deal with release notes and documentation
- Explain deployment patterns, both in the traditional sense and in the modern sense
- Choose a release management tool
- Explain the terminology used in Azure DevOps and other Release Management Tooling
- Describe what a Build and Release task is, what it can do, and some available deployment tasks
- Classify an Agent, Agent Queue and Agent Pool
- Explain why you sometimes need multiple release jobs in one release pipeline
- Differentiate between multi-agent and multi-configuration release job
- Use release variables and stage variables in your release pipeline
- Deploy to an environment securely, using a service connection
- Embed testing in the pipeline
- List the different ways to inspect the health of your pipeline and release by using, alerts, service hooks and reports
- Create a release gate
- Describe deployment patterns
- Implement Blue Green Deployment
- Implement Canary Release
- Implement Progressive Exposure Deployment

Audience:

- Agile Developer
- DevOps

Prerequisite:

- Students should have fundamental knowledge about Azure, version control, Agile software development, and core software development principles. It would be helpful to have experience in an organization that delivers software.
- It is recommended that you have experience working in an IDE, as well as some knowledge of the Azure portal. However, students who may not have a technical background in these technologies, but who are curious about DevOps practices as a culture shift, should be able to follow the procedural and expository explanations of continuous integration regardless.

Course Outline:

Design a Strategy

- Introduction Continuous Delivery
- Strategy Recommendations
- Building a High Quality Pipeline
- Choosing a Deployment Pattern
- Choosing the Right Management Tool
- Module 1 Review Questions
- Lab Building a Strategy

Set Up a Managment Workflow

- Create a Pipeline
- Provision and Configure Environments
- Manage And Modularize Tasks and Templates
- Integrate Secrets with the Pipeline
- Configure Aumated Integration and Functional Test Aumation
- Aumate Inspection of Health
- Module 2 Review Questions

Implement an Appropriate Deployment Pattern

- Introduction in Deployment Patterns
- Implement Blue Green Deployment
- Feature Toggles
- Canary s
- Dark Launching
- AB Testing
- Progressive Exposure Deployment
- Module 3 Review Questions

Course Conclusion

- Final Exam