Designing and Implementing Microsoft DevOps Solutions (AZ-400)

Koulutuksessa käsitellään sekä teoria että konkreettisesti rakennetaan toimiva DevOps prosessi. Pääsasiallisesti keskitytään Azure DevOpsiin, mutta koulutuksessa käsitellään laajasti myös GitHubia. Sekä kolmansien osapuolien tuotteita, joita voidaan hyödyntää Azure DevOpsin yhteydessä.

Tavoite

Ota DevOps syvällisesti haltuun – teoriassa ja käytännössä. Tässä koulutuksessa käsitellään sekä teoria että konkreettisesti rakennetaan toimiva DevOps prosessi.

Kenelle

Koulutus on suunniteltu sovellusarkkitehdeille ja IT-alan ammattilaisille, joiden tehtävänä on suunnitella ja toteuttaa kehitysprojekteja.

Lisätiedot

Koulutus valmentaa Microsoftin viralliseen AZ-400 Designing and Implementing Microsoft DevOps Solutions -sertifiointitestiin.

Koulutuksen sisältö

Get started on a DevOps transformation journey

- **Introduction to DevOps**

- **Choose the right project**

- **Describe team structures**

- **Choose the DevOps tools**

- **Plan Agile with GitHub Projects and Azure Boards**

- **Introduction to source control**

- **Describe types of source control systems**

- **Work with Azure Repos and GitHub**

Development for enterprise DevOps

- **Structure your Git Repo**

- **Manage Git branches and workflows**

- **Collaborate with pull requests in Azure Repos**

- **Explore Git hooks**

- **Plan foster inner source**

- **Manage Git repositories**

- **Identify technical debt**

Implement CI with Azure Pipelines and GitHub Actions

- **Explore Azure Pipelines**

- **Manage Azure Pipeline agents and pools**

- **Describe pipelines and concurrency**

- **Explore Continuous integration**

- **Implement a pipeline strategy**

- **Integrate with Azure Pipelines**

- **Introduction to GitHub Actions**

- **Learn continuous integration with GitHub Actions**

- **Design a container build strategy**

Design and implement a release strategy

- **Introduction to continuous delivery**

- **Create a release pipeline**

- **Explore release strategy recommendations**

- **Provision and test environments**

- **Manage and modularize tasks and templates**

- **Multi-stage YAML**

- **Automate inspection of health**

Implement a secure continuous deployment using Azure Pipelines

- **Introduction to deployment patterns**

- **Implement blue-green deployment and feature toggles**

- **Implement canary releases and dark launching**

- **Implement A/B testing and progressive exposure deployment**

- **Integrate with identity management systems**

- **Manage application configuration data**

Manage infrastructure as code using Azure and DSC

- **Explore infrastructure as code and configuration management**

- **Create Azure resources using Azure Resource Manager templates**

- **Implement Bicep**

- **Create Azure resources by using Azure CLI**

- **Explore Azure Automation with DevOps**

- **Implement Desired State Configuration (DSC)**

Implement security and validate code bases for compliance

- **Introduction to Secure DevOps**

- **Implement open-source software**

- **Software Composition Analysis**

- **Static analyzers**

- **OWASP and Dynamic Analyzers**

- **Security Monitoring and Governance**

Design and implement a dependency management strategy

- **Explore package dependencies**

- **Understand package management**

- **Migrate, consolidating and secure artifacts**

- **Implement a versioning strategy**

- **Introduction to GitHub Packages**

Implement continuous feedback

- **Implement tools to track usage and flow**

- **Develop monitor and status dashboards**

- **Share knowledge within teams**

- **Design processes to automate application analytics**

- **Manage alerts, Blameless retrospectives and a just culture**

Avainsanat

Microsoft, Microsoft DevOps Solutions, Azure, Chef, Puppet, Ansible, Terraform