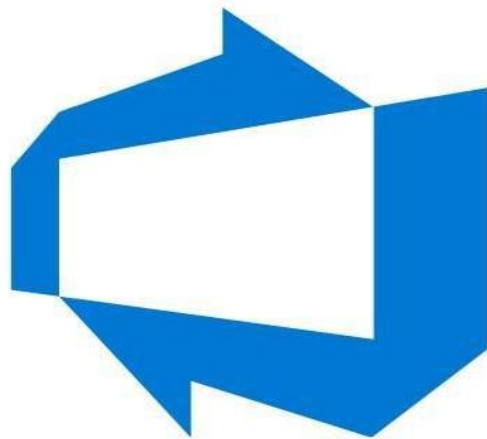


IntelliQ IT



Azure DevOps

AZURE DEVOPS COURSE CONTENT

Duration: Fee:

Date: Timings:

Faculty:

AZURE DEVOPS COURSE CONTENT

- | S.No | Azure Service Name |
|-------------|--|
| 1. | Create Azure AKS Cluster using Azure Portal |
| 2. | Docker Fundamentals |
| 3. | Imperative Method: Kubernetes Fundamentals using kubectl |
| 4. | Declarative Method: Kubernetes Fundamentals using YAML |
| 5. | Azure Disks for AKS Storage |
| 5.1 | <ul style="list-style-type: none">• Custom Storage Class, PVC and PV |
| 5.2 | <ul style="list-style-type: none">• AKS default Storage class, PVC and PV |
| 5.3 | <ul style="list-style-type: none">• User Management Web Application Deployment with MySQL as storage using Storage Class, PVC and PV |
| 6. | Azure MySQL for AKS Storage |
| 7. | Kubernetes Secrets |
| 8. | Azure Files for AKS Storage |
| 9. | Ingress |
| 10. | Kubernetes Requests & Limits |
| 11. | Kubernetes Namespaces |
| 12. | Azure Virtual Nodes for AKS |
| 13. | Azure Container Registry for AKS |
| 13.1 | <ul style="list-style-type: none">• Integrate Azure Container Registry ACR with AKS |

S.No Azure Service Name

14. Azure DevOps with AKS Cluster

14.1 • Azure DevOps - Build and Push Docker Image to Azure Container Registry

14.2 • Azure DevOps - Build, Push to ACR and Deploy to AKS

14.3 • Azure DevOps - Create Pipeline

15. **Terraform**

- IAC

Terraform life cycle

15.1 • Terraform Language Basics

15.2 • Using Azure Terraform provides

- Creating azure resources like vm's,acr,storage accounts,virtual networks etc using terraform scripts.
- Creating reusable terraform scripts with variables

Azure Services Covered

Kubernetes Concepts Covered

S.No	Kubernetes Concept Name
1.	Kubernetes Architecture
2.	Pods
3.	ReplicaSets
4.	Deployments
5.	Services - Load Balancer Service
6.	Services - Cluster IP Service
7.	Services - External Name Service
8.	Services - Ingress Service
9.	Services - Ingress SSL & SSL Redirect
10.	Services - Ingress & External DNS
11.	Services - Domain Name based Routing
12.	Imperative - with kubectl
13.	Declarative - Declarative with YAML
14.	Secrets
15.	Init Containers

S.No	Kubernetes Concept Name
16.	Requests & Limits
17.	Namespaces - Imperative
18.	Namespaces - Limit Range
19.	Namespaces - Resource Quota
20.	Storage Classes
21.	Persistent Volumes
22.	Persistent Volume Claims
23.	Services - Load Balancers
24.	Annotations
25.	HPA - Horizontal Pod Autoscaler
26.	CA - Cluster Autoscaler
27.	Config Maps
28.	Virtual Kubelet
29.	Secrets - Image Pull Secrets