Certified Kubernetes Application Developer (CKAD) & Certified Kubernetes Administrator (CKA)

Duration - 9 Days / 72 Hours

Program Description

The training covers Kubernetes architecture, deployment, and observability, focusing on security, cost optimization, and performance. Topics include best practices for application design, securing EKS clusters, networking, and managing workloads.
Additionally, it addresses troubleshooting, backup, disaster recovery, and optimizing costs through Fargate and diverse workload strategies. Security aspects like IAM, RBAC, and Kubeconfig management are emphasized.

Learning Goals

- To equip individuals with the knowledge and skills needed to become proficient Kubernetes application developers
- Achieving CKAD certification demonstrates a candidate's ability to design, build, configure, and expose cloud-native applications for Kubernetes.
- To become proficient in the administration of Kubernetes clusters.
- Achieving CKA certification demonstrates a candidate's ability to design, deploy, configure, and manage Kubernetes clusters efficiently and securely

Course Topics

- Application Design and Build
- Application Deployment
- Application observability and maintenance
- Application Environment, Configuration and Security
- Services & Networking
- Securing Applications and Images
- Kubernetes Best Practices
- Cluster Architecture, Installation & Configuration
- Workloads & Scheduling
- Services & Networking
- Storage
- Troubleshooting
- Kubernetes Backup & Disaster Recovery
- Kubernetes Ingress Controller
- Performance:
  - Growing Cost Awareness
  - Optimizing Computing cost
  - Running Serverless with Fargate
  - Optimizing Storage Costs
  - Running Diverse Workloads
- Securing an EKS cluster:
  - IAM User, Role, and Group
  - Demystifying Kubernetes Security for Applications
  - Kubeconfig
  - Granting Admin Access to other users
  - Granting Granular Access to other users using RBAC