Rancher PRIME Training

Curriculum 5 Days

Day - 1

- **Introduction to Rancher and Kubernetes**
  - **Morning Session:**
    - Introduction to Rancher and its features
    - Overview of Kubernetes fundamentals
    - Understanding containerization concepts
  - **Afternoon Session:**
    - Setting up Rancher environment
    - Deploying Kubernetes clusters using Rancher
    - Hands-on lab: Rancher installation and cluster provisioning

Day - 2

- **Rancher Basics and Management**
  - **Morning Session:**
    - Rancher architecture and components
    - Managing users, roles, and permissions in Rancher
    - Introduction to Rancher projects and namespaces
  - **Afternoon Session:**
    - Configuring Rancher workloads: Pods, Deployments, Services
    - Monitoring and logging with Rancher
    - Hands-on lab: Rancher workload management and monitoring

Day - 3	Day - 4

• **Advanced Kubernetes Concepts**
  • **Morning Session:**
  ○ Advanced Kubernetes networking concepts
  ○ Understanding Kubernetes storage options
  ○ Introduction to Helm for package management
  • **Afternoon Session:**
  ○ Implementing CI/CD pipelines with Rancher and Kubernetes
  ○ Introduction to Kubernetes Operators
  ○ Hands-on lab: Implementing advanced Kubernetes features
	• **Security and Best Practices**
	  • **Morning Session:**
	  ○ Kubernetes security best practices
	  ○ Implementing RBAC and network policies in Rancher
	  ○ Introduction to Rancher security features
	  • **Afternoon Session:**
	  ○ Securing containerized applications in Rancher
	  ○ Disaster recovery and backup strategies
	  ○ Hands-on lab: Implementing security measures in Rancher clusters

Day - 5

- **Optimization and Scalability**
  - **Morning Session:**
    - Scaling Rancher clusters for performance
    - Monitoring and optimizing resource usage
    - Introduction to Rancher Catalog and app management
  - **Afternoon Session:**
    - Auto scaling and load balancing with Rancher
    - Multi-cluster management strategies
    - Hands-on lab: Optimizing Rancher clusters for scalability