

## Day - 1

- Understanding the Need of Kubernetes
- Understanding Kubernetes Architecture
- Understanding Kubernetes Masters and its Component
- Understanding Kubernetes Nodes and its Component
- Understand Kubernetes Concepts
- Understand Kubernetes Terminology
- Kubernetes Clusters Requirements
- Understanding Kubernetes Clusters using kubeadm
- Demo: Installing and Configuring Kubernetes Master
- Demo: Installing and Configuring Kubernetes Workers
- Demo: Install and Configure Workstation using Kubectl
- Understanding a concept of Namespace
- Demo: Define your first Kubernetes pod
- Demo: Working and Deep Dive with Kubernetes pod

## Day - 2

- Understanding Kubernetes replication controllers
- Demo: Define your first replication controllers
- Demo: Working with Kubernetes replication controllers
- Understanding Kubernetes deployments
- Demo: Define your first deployment
- Demo: Working and Deep Dive with Kubernetes deployment
- Understanding Kubernetes Labels
- Demo: Define your first Kubernetes Labels
- Demo: Working with Kubernetes Labels
- Understanding Kubernetes Services
- Demo: Define your first Kubernetes Services
- Demo: Working and Deep Dive with Kubernetes Services
- Demo: Deploy a Java Stake app using Kubernetes
- Demo: Deploy a Nodejs Stake app using Kubernetes

- **Understanding Kubernetes Volumes**
- **Understanding Types of Volumes**
- **Static and Dynamic Provisioning**
- **Understanding Persistent Volume and Persistent Volume Claim**
- **Understanding ConfigMap and Secret**
- **Understanding Storage Class**
- **Demo: Working with Persistent Volume and Persistent Volume Claim**
- **Demo: Working with ConfigMap and Secret**
- **Demo: Storage Class**
- **Understanding StatefulSet and DaemonSet**
- **Understanding CronJob and Job**
- **Demo: Working with Working StatefulSet**
- **Demo: Working with DaemonSet**
- **Demo: Working with CronJob**
- **Demo: Working with Job**
- **Demo: Stateless Example: PHP Guestbook with Redis**