Docker and Kubernetes Basics

Objective:

This course helps to understanding basics architecture, installation on Docker and Kubernetes. It gains knowledge on basic objects, networking and storage in Kubernetes and also provide exposure in Docker and Kubectl tool commands.

Course Duration: 2 Days / 16 Hours

Theory of Contents:

1. **Introduction on Docker**

   Explore the basic requirements on containerization

   Learn about the overview on Docker Container Runtime Engine

   Understandings the architecture and workflow on containerization using Docker

   Learn about container image registry

2. **Docker CLI Commands**

   Understanding the CLI commands

   Exploring the commands through containerization

3. **Introduction on Kubernetes**

   Learn about the overview on Kubernetes Orchestration Tool

   Understanding the architecture and workflow on Kubernetes

   Explore the components on Kubernetes

4. **Kubernetes Installation**

   Discuss about the Kubectl CLI Tool

   Understanding the kubeadm tool for Kubernetes Installation
   Kubernetes Installation and Management

5. **Basic Kubernetes objects**

   Explore and creation of Kubernetes objects

   Implementing orchestration through Kubernetes

6. **Networking and Storage**

   Exploring Networking with containerization and Kubernetes

   Providing stateful containers through Persistent Storage

7. **Monitoring**

   Monitoring using Docker and Kubectl commands

   Exploring Octant for monitoring

   Collecting Logs and forwarding using Fluentd