COMPENDIUM CENTRUM EDUKACYJNE

Training: The Linux Foundation
LFD254 Containers for Developers and Quality Assurance

TRAINING GOALS:

Containers are becoming the de-facto standard to deploy applications, as they are very easy to use, as well as cost-effective. Containers can help everyone involved in the application lifecycle, be it Developers, Quality Assurance Engineers, or Operations Engineers. In this course we will see how Developers and Quality Assurance Engineers can automate and streamline their processes with Docker.

We will quickly review some Docker basics and then, with the help of a sample application, we will walk through the lifecycle of that application with Docker. Throughout the course we will see how a Developer working on his workstation can confidently deploy the application in production. The Developer would work on his/her IDE, from which he/she would commit the code to GitHub. Once the code is committed, test cases would get triggered and, if they pass, the application would get deployed in the staging environment. We will also see how the process can be extended to deploy the application in production.

CONSPECT:

- Course Introduction
- Installing Docker
- Docker Essentials for Developers and Quality Assurance
- Becoming Familiar with Sample Applications
- Deploying a Multi-Container App with Docker Compose
- Setting Up the Development Environment
- CI/CD and Jenkins Overview
- Docker Containers as Jenkins Agents
- CI/CD with Jenkins
- Basics of Container Orchestration
- Container Orchestration with Docker Swarm
- Service Discovery, Reverse Proxy and Load Balancing
- The End-to-End Workflow of an App with Containers
- Introduction to Microservices

REQUIREMENTS:

- Access to a workstation with Linux, Mac, or Windows installed
- Familiarity with the command line
- Working knowledge of Docker, Git, and GitHub
- Basic understanding of Cloud
- Access to a Linux server or Linux desktop/laptop, if not accessing the DigitalOcean Cloud
- Basic knowledge of Python.

Difficulty level

CERTIFICATE:

The participants will obtain certificates signed by The Linux Foundation.

TRAINER:

40 hours self-course material

ADDITIONAL INFORMATION:

40 hours self-course material

Video Content.

12 Months of Access to Online Course.

Discussion Forums.