

# **Introduction to Kubernetes using Docker - Retired2020**

**Modality: On Demand**

**Duration: 5 Hours**

## **About this Course:**

Docker dramatically changed (for the better) the lives of those who transfer, install and manage software applications on a regular basis. It made the process much less complicated and virtually eliminated any stress involved. Now, Kubernetes has made the whole thing even easier (yes, it's possible). Want to learn how to containerize your application and then automate it from start to finish? This is the course for you...

## **Understand the World of Microservices**

- Install Docker and a Kubernetes cluster from scratch
- Learn how to run and manage containers effectively
- Create Kubernetes pods, deployments and services
- Build Docker images and configure Docker Hub from scratch
- Deploy a multi-component software application efficiently and easily

## **Develop, Ship and Run Applications with Ease**

This course is suitable for everyone, from complete beginners right up to expert computer nerds. All you need is a fast internet connection, a credit card to set up a free trial on Google Cloud (no extra cost), and a basic working knowledge of modern technology.

You'll start off by getting familiar with Google Cloud, Docker and Kubernetes, learning what they do and how you'll be using them. Then you'll take an in-depth look at the two most important tools, Docker and Kubernetes. Once you've gotten a good grasp on how each one works, you'll move on to the course projects. You'll install WordPress using Google Cloud, which includes creating Docker files, images, and containers along with deploying the site live.

Next you'll create and configure a back-end and front-end master and slave nodes with replication controllers; apps managed by Kubernetes using a cluster of VMs. Sound confusing? Don't worry, you'll get hands-on training at every step to guide you in the right direction.

By the end of this course you will know what containers are and more than one way to use them to deliver software applications faster. You'll know everything you need to know about Docker and Kubernetes, and you'll never have to worry about using either one for your software application project ever again!

## **About Kubernetes and Docker**

Docker is the world's leading software containerization platform. It packages your application into one standardised unit, wrapping it into a complete file system that contains everything needed to run

on a server. Kubernetes is a system created by Google to automate the deployment, scaling and management of containerized applications (like the ones Docker creates). The two combined make life a breeze for anyone needing to transport, install and maintain complex software applications anywhere.

## **Course Outline:**

- Course Introduction
- Getting Started
- Working with Docker
- All About Kubernetes
- Real World Projects
- Conclusion