**Lesson 9 Demo 8**

**Understanding Application Troubleshooting**

**Objective:** Troubleshooting applications in the cluster

**Tools required:** kubeadm, kubectl, kubelet, and etcd

**Prerequisites:** kubeadm, kubectl, kubelet, and etcd should be installed. PersistentVolume should be created.

Steps to be followed:

1. Troubleshooting application

**Step 1: Troubleshooting application**

* + 1. Write the following code in the issue-pod.yaml file to create a Pod:

**vi issue-pod.yaml**

**apiVersion: v1**

**kind: Pod**

**metadata:**

**name: openshift**

**labels:**

**Podlabel: simplilearn**

**spec:**

**containers:**

**- name: mycontainer**

**image: docker.io/openshift**

**ports:**

**- containerPort: 80**

A screenshot of a computer

Description automatically generated

* + 1. Create a Pod by using the following command:

**kubectl create -f issue-pod.yaml**

Graphical user interface, text

Description automatically generated

* + 1. Verify the Pod state using the following command:

**kubectl get pods**

**A screenshot of a computer

Description automatically generated**

* + 1. Verify events to verify Pod errors using the following command:

**kubectl get events**

Graphical user interface

Description automatically generated

* + 1. Describe the Pod for more details using the following command:

**kubectl describe pod openshift**

A screenshot of a computer

Description automatically generated

* + 1. Edit the Pod to run it successfully by using the following command:

**kubectl edit pod openshift**

Note: Change the image name as shown in the following image openshift/hello-openshift,

:wq! (Save and exit)

A screenshot of a computer

Description automatically generated

* + 1. Verify the Pods using the following command:

**kubectl get pods**

**A screenshot of a computer

Description automatically generated**