



Lab Experiment – 12

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COURSE – B. Tech CSE- DevOps Batch 1

SUBJECT – Application Containerization

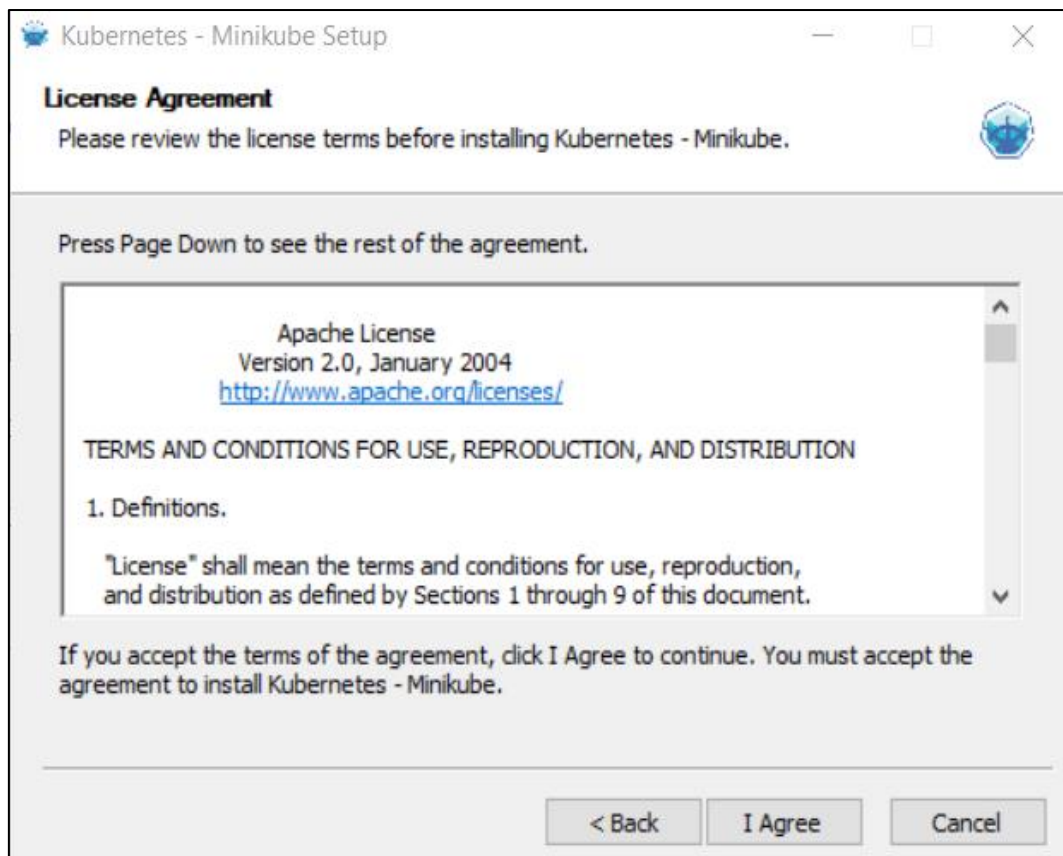
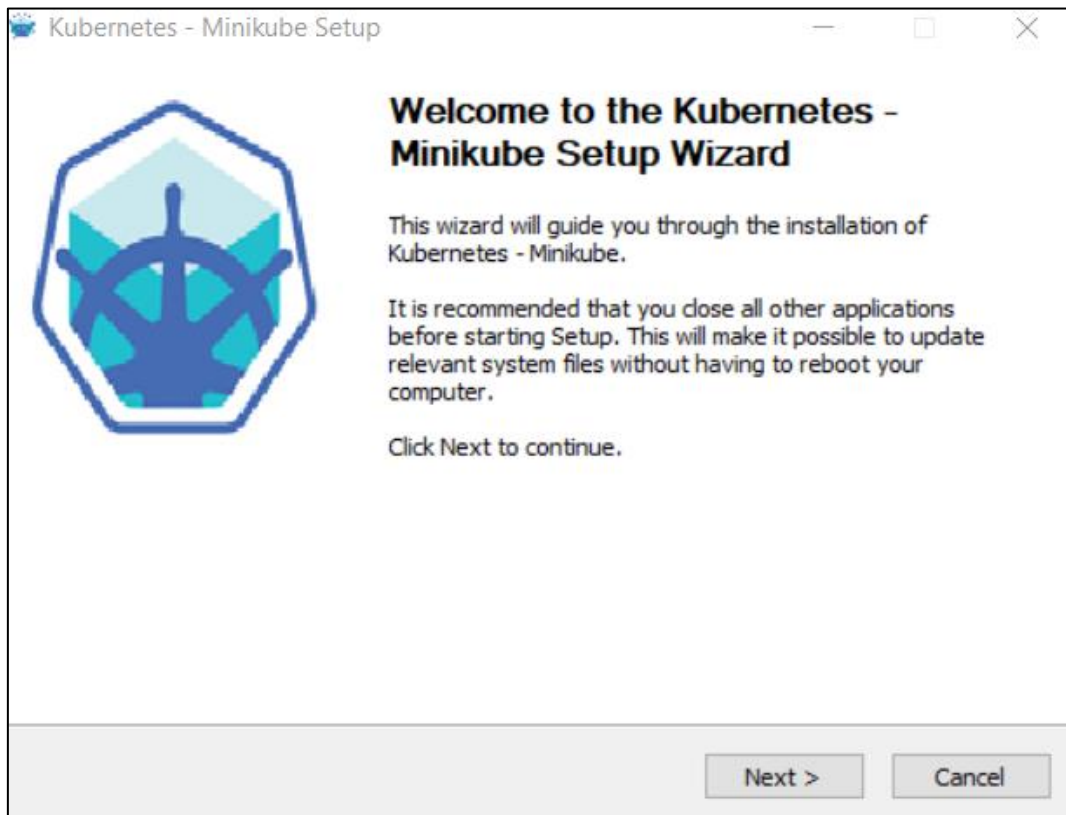
SEMESTER – 6th semester

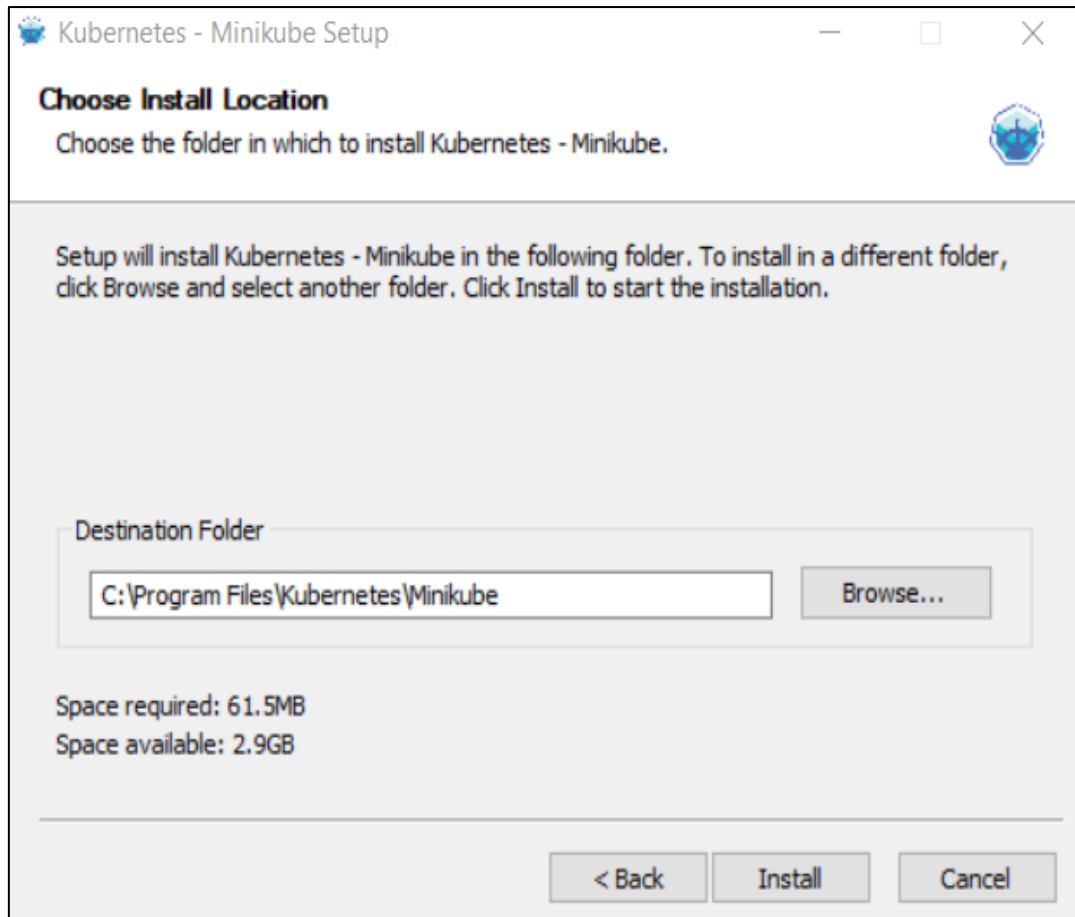
Submitted To:

Dr. Hitesh Kumar Sir

Kubernetes-Minikube installation and fundamentals

- Installing **minikube** via the **Windows Installer**:





- After downloading **minikube** the directory would look something like the following:

```
Microsoft Windows [Version 10.0.19042.928]
(c) Microsoft Corporation. All rights reserved.

C:\Program Files\Kubernetes\Minikube>dir
Volume in drive C is OS
Volume Serial Number is 4AC4-550E

Directory of C:\Program Files\Kubernetes\Minikube

04-07-2020  19:45    <DIR>          .
04-07-2020  19:45    <DIR>          ..
05-06-2020  22:34       78,064,128  eksctl.exe
14-05-2020  12:18      44,517,888  kubectl.exe
05-04-2020  02:33       265,118  logo.ico
05-04-2020  02:33     54,858,240  minikube.exe
21-05-2020  09:07        149     pod.yml
21-05-2020  09:25        285     rc.yml
14-05-2020  12:19      428,340  uninstall.exe
05-04-2020  02:33        2,982  update_path.ps1
            8 File(s)      178,137,130 bytes
            2 Dir(s)      2,903,621,632 bytes free

C:\Program Files\Kubernetes\Minikube>
```

- Downloading the **kubectl** command to interact with the **kubernetes** cluster, downloading in the **same** location as the minikube program:

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19042.928]
(c) Microsoft Corporation. All rights reserved.

C:\Program Files\Kubernetes\Minikube>curl -LO https://dl.k8s.io/release/v1.21.0/bin/windows/amd64/kubectl.exe
```

- Starting the **minikube** cluster configured with **kubernetes** and checking its status:

```
C:\Program Files\Kubernetes\Minikube>minikube.exe start --driver=virtualbox --kubernetes-version=v1.20.0
* minikube v1.16.0 on Microsoft Windows 10 Pro 10.0.18363 Build 18363
* Using the virtualbox driver based on existing profile
* Starting control plane node minikube in cluster minikube
* Restarting existing virtualbox VM for "minikube" ...
* Preparing Kubernetes v1.20.0 on Docker 20.10.0 ...
* Verifying Kubernetes components...
* Enabled addons: storage-provisioner, dashboard
* Done! kubectl is now configured to use "minikube" cluster and "" namespace by default
E0107 21:50:04.622370 14412 start.go:271] kubectl info: exec: fork/exec kubectl.exe: The process cannot access the file because it is being used by another process.

C:\Program Files\Kubernetes\Minikube>minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured
timeToStop: Nonexistent
```