COMPSCI 677 Lablet 6 - Spring 2023

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Below is the details of the steps that I followed to build the dashboard: -

```
Swati@DESKTOP-MT699OG MINGW64 ~
$ minikube start
* minikube v1.30.1 on Microsoft Windows 11 Home Single Language 10.0.22000.1817 Build
22000.1817
* Automatically selected the docker driver. Other choices: virtualbox, ssh
* Using Docker Desktop driver with root privileges
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
* Downloading Kubernetes v1.26.3 preload ...
    > gcr.io/k8s-minikube/kicbase...:  373.53 MiB / 373.53 MiB  100.00% 15.73 M
* Creating docker container (CPUs=2, Memory=4000MB) ...
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.7130838s
* Restarting the docker service may improve performance.
* Preparing Kubernetes v1.26.3 on Docker 23.0.2 ...
  - Generating certificates and keys ...
  - Booting up control plane ...
  - Configuring RBAC rules ...
* Configuring bridge CNI (Container Networking Interface) ...
* Verifying Kubernetes components...
  - Using image gcr.io/k8s-minikube/storage-provisioner:v5
* Enabled addons: storage-provisioner, default-storageclass
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by
default

Swati@DESKTOP-MT699OG MINGW64 ~
$ docker ps | findstr minikube
47525bc2d8ff   gcr.io/k8s-minikube/kicbase:v0.0.39   "/usr/local/bin/entr…"   23
minutes ago   Up 23 minutes   127.0.0.1:62110->22/tcp, 127.0.0.1:62111->2376/tcp,
127.0.0.1:62107->5000/tcp, 127.0.0.1:62108->8443/tcp, 127.0.0.1:62112->32443/tcp
minikube

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl get po -A
NAMESPACE     NAME                                    READY   STATUS    RESTARTS      AGE
kube-system   coredns-787d4945fb-flgk7                1/1     Running   0             22m
kube-system   etcd-minikube                           1/1     Running   0             22m
kube-system   kube-apiserver-minikube                 1/1     Running   0             22m
kube-system   kube-controller-manager-minikube        1/1     Running   0             22m
kube-system   kube-proxy-djlc6                         1/1     Running   0             22m
kube-system   kube-scheduler-minikube                 1/1     Running   0             22m
kube-system   storage-provisioner                     1/1     Running   1 (21m ago)   22m

Swati@DESKTOP-MT699OG MINGW64 ~
$ minikube kubectl -- get po -A
NAMESPACE     NAME                                    READY   STATUS    RESTARTS      AGE
kube-system   coredns-787d4945fb-flgk7                1/1     Running   0             22m
kube-system   etcd-minikube                           1/1     Running   0             22m
kube-system   kube-apiserver-minikube                 1/1     Running   0             22m
kube-system   kube-controller-manager-minikube        1/1     Running   0             22m
kube-system   kube-proxy-djlc6                         1/1     Running   0             22m
kube-system   kube-scheduler-minikube                 1/1     Running   0             22m
kube-system   storage-provisioner                     1/1     Running   1 (22m ago)   22m

Swati@DESKTOP-MT699OG MINGW64 ~
$ alias kubectl="minikube kubectl --"
```

```
Swati@DESKTOP-MT699OG MINGW64 ~
$ minikube dashboard
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5271231s
* Restarting the docker service may improve performance.
* Enabling dashboard ...
  - Using image docker.io/kubernetesui/dashboard:v2.7.0
  - Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
* Some dashboard features require the metrics-server addon. To enable all features
please run:

        minikube addons enable metrics-server


* Verifying dashboard health ...
* Launching proxy ...
* Verifying proxy health ...
* Opening http://127.0.0.1:62308/api/v1/namespaces/kubernetes-
dashboard/services/http:kubernetes-dashboard:/proxy/ in your default browser...


Swati@DESKTOP-MT699OG MINGW64 ~
$ minikube delete --all
minikube start
minikube dashboard
* Deleting "minikube" in docker ...
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5045372s
* Restarting the docker service may improve performance.
* Removing C:\Users\Swati\.minikube\machines\minikube ...
* Removed all traces of the "minikube" cluster.
* Successfully deleted all profiles
* minikube v1.30.1 on Microsoft Windows 11 Home Single Language 10.0.22000.1817 Build
22000.1817
* Automatically selected the docker driver. Other choices: virtualbox, ssh
* Using Docker Desktop driver with root privileges
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
* Creating docker container (CPUs=2, Memory=4000MB) ...
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5096944s
* Restarting the docker service may improve performance.
* Preparing Kubernetes v1.26.3 on Docker 23.0.2 ...
  - Generating certificates and keys ...
  - Booting up control plane ...
  - Configuring RBAC rules ...
* Configuring bridge CNI (Container Networking Interface) ...
* Verifying Kubernetes components...
  - Using image gcr.io/k8s-minikube/storage-provisioner:v5
* Enabled addons: storage-provisioner, default-storageclass
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by
default
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5883484s
* Restarting the docker service may improve performance.
* Enabling dashboard ...
  - Using image docker.io/kubernetesui/dashboard:v2.7.0
  - Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
* Some dashboard features require the metrics-server addon. To enable all features
please run:

        minikube addons enable metrics-server


* Verifying dashboard health ...
* Launching proxy ...
* Verifying proxy health ...
* Opening http://127.0.0.1:62463/api/v1/namespaces/kubernetes-
dashboard/services/http:kubernetes-dashboard:/proxy/ in your default browser...


Swati@DESKTOP-MT699OG MINGW64 ~
```

```
$ kubectl create deployment hello-minikube --image=kicbase/echo-server:1.0
deployment.apps/hello-minikube created

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl expose deployment hello-minikube --type=NodePort --port=8080
service/hello-minikube exposed

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl get services hello-minikube
NAME             TYPE        CLUSTER-IP       EXTERNAL-IP    PORT(S)          AGE
hello-minikube   NodePort    10.111.155.235   <none>         8080:32554/TCP   30s

Swati@DESKTOP-MT699OG MINGW64 ~
$ minikube service hello-minikube
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5416623s
* Restarting the docker service may improve performance.
|-----------|----------------|-------------|--------------------------|
| NAMESPACE |      NAME      | TARGET PORT |           URL            |
|-----------|----------------|-------------|--------------------------|
| default   | hello-minikube |        8080 | http://192.168.49.2:32554 |
|-----------|----------------|-------------|--------------------------|
* Starting tunnel for service hello-minikube.
|-----------|----------------|-------------|----------------------|
| NAMESPACE |      NAME      | TARGET PORT |         URL          |
|-----------|----------------|-------------|----------------------|
| default   | hello-minikube |             | http://127.0.0.1:62634 |
|-----------|----------------|-------------|----------------------|
* Opening service default/hello-minikube in default browser...
! Because you are using a Docker driver on windows, the terminal needs to be open to
run it.
* Stopping tunnel for service hello-minikube.


Swati@DESKTOP-MT699OG MINGW64 ~
$ minikube service hello-minikube
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5542761s
* Restarting the docker service may improve performance.


Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl port-forward service/hello-minikube 7080:8080
Forwarding from 127.0.0.1:7080 -> 8080
Forwarding from [::1]:7080 -> 8080
Handling connection for 7080
Handling connection for 7080


Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl get pods # List Pods
NAME                              READY    STATUS     RESTARTS    AGE
hello-minikube-77b6f68484-vgmsc   1/1      Running    0           6m30s

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl get services # List services
NAME             TYPE        CLUSTER-IP       EXTERNAL-IP    PORT(S)          AGE
hello-minikube   NodePort    10.111.155.235   <none>         8080:32554/TCP   6m24s
kubernetes       ClusterIP   10.96.0.1        <none>         443/TCP          21m

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl get deployment # List deployment
NAME             READY    UP-TO-DATE    AVAILABLE    AGE
hello-minikube   1/1      1             1            6m47s

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl describe pod hello-minikube
Name:            hello-minikube-77b6f68484-vgmsc
Namespace:       default
Priority:        0
Service Account: default
Node:            minikube/192.168.49.2
```

```
Start Time:          Tue, 09 May 2023 01:21:12 -0400
Labels:              app=hello-minikube
                     pod-template-hash=77b6f68484
Annotations:         <none>
Status:              Running
IP:                  10.244.0.5
IPs:
  IP:        10.244.0.5
Controlled By:  ReplicaSet/hello-minikube-77b6f68484
Containers:
  echo-server:
    Container ID:
docker://76aedf46c7f588f474ab47b53af589dd7a8ddeaf6581c0c2af294bac4a7b52eb
      Image:          kicbase/echo-server:1.0
      Image ID:       docker-pullable://kicbase/echo-
server@sha256:127ac38a2bb9537b7f252addff209ea6801edcac8a92c8b1104dacd66a583ed6
      Port:           <none>
      Host Port:      <none>
      State:          Running
        Started:      Tue, 09 May 2023 01:21:16 -0400
      Ready:          True
      Restart Count:  0
      Environment:    <none>
      Mounts:
        /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-mchzm (ro)
Conditions:
  Type               Status
  Initialized        True
  Ready              True
  ContainersReady    True
  PodScheduled       True
Volumes:
  kube-api-access-mchzm:
    Type:                    Projected (a volume that contains injected data from
multiple sources)
    TokenExpirationSeconds:  3607
    ConfigMapName:           kube-root-ca.crt
    ConfigMapOptional:       <nil>
    DownwardAPI:             true
QoS Class:                   BestEffort
Node-Selectors:              <none>
Tolerations:                 node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
                             node.kubernetes.io/unreachable:NoExecute op=Exists for
300s
Events:
  Type    Reason     Age    From               Message
  ----    ------     ----   ----               -------
  Normal  Scheduled  7m7s   default-scheduler  Successfully assigned default/hello-
minikube-77b6f68484-vgmsc to minikube
  Normal  Pulling    7m5s   kubelet            Pulling image "kicbase/echo-server:1.0"
  Normal  Pulled     7m3s   kubelet            Successfully pulled image "kicbase/echo-
server:1.0" in 1.9074593s (1.9075009s including waiting)
  Normal  Created    7m3s   kubelet            Created container echo-server
  Normal  Started    7m3s   kubelet            Started container echo-server


Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl delete deployment hello-minikube
deployment.apps "hello-minikube" deleted

Swati@DESKTOP-MT699OG MINGW64 ~
$ minikube start
* minikube v1.30.1 on Microsoft Windows 11 Home Single Language 10.0.22000.1817 Build
22000.1817
* Using the docker driver based on existing profile
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5621653s
* Restarting the docker service may improve performance.
* Updating the running docker "minikube" container ...
* Preparing Kubernetes v1.26.3 on Docker 23.0.2 ...
```

```
* Verifying Kubernetes components...
  - Using image docker.io/kubernetesui/dashboard:v2.7.0
  - Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
  - Using image gcr.io/k8s-minikube/storage-provisioner:v5
* Some dashboard features require the metrics-server addon. To enable all features
please run:

        minikube addons enable metrics-server


* Enabled addons: dashboard, storage-provisioner, default-storageclass
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by
default

Swati@DESKTOP-MT699OG MINGW64 ~
$ minikube dashboard
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5429132s
* Restarting the docker service may improve performance.
* Verifying dashboard health ...
* Launching proxy ...
* Verifying proxy health ...
* Opening http://127.0.0.1:62731/api/v1/namespaces/kubernetes-
dashboard/services/http:kubernetes-dashboard:/proxy/ in your default browser...


Swati@DESKTOP-MT699OG MINGW64 ~
$ ^[[200~kubectl create deployment hello-minikube --image=kicbase/echo-server:1.0~
bash: $'\E[200~kubectl': command not found

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl create deployment hello-minikube --image=kicbase/echo-server:1.0
deployment.apps/hello-minikube created

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl expose deployment hello-minikube --type=NodePort --port=8080
Error from server (AlreadyExists): services "hello-minikube" already exists

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl get services hello-minikube
NAME             TYPE        CLUSTER-IP       EXTERNAL-IP    PORT(S)         AGE
hello-minikube   NodePort    10.111.155.235   <none>         8080:32554/TCP  16m

Swati@DESKTOP-MT699OG MINGW64 ~
$ minikube service hello-minikube
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5855409s
* Restarting the docker service may improve performance.
|-----------|----------------|--------------|--------------------------|
| NAMESPACE |      NAME      | TARGET PORT  |           URL            |
|-----------|----------------|--------------|--------------------------|
| default   | hello-minikube |        8080  | http://192.168.49.2:32554 |
|-----------|----------------|--------------|--------------------------|
* Starting tunnel for service hello-minikube.
|-----------|----------------|--------------|-----------------------|
| NAMESPACE |      NAME      | TARGET PORT  |          URL          |
|-----------|----------------|--------------|-----------------------|
| default   | hello-minikube |              | http://127.0.0.1:62774 |
|-----------|----------------|--------------|-----------------------|
* Opening service default/hello-minikube in default browser...
! Because you are using a Docker driver on windows, the terminal needs to be open to
run it.
* Stopping tunnel for service hello-minikube.


Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl port-forward service/hello-minikube 7080:8080
Forwarding from 127.0.0.1:7080 -> 8080
Forwarding from [::1]:7080 -> 8080


Swati@DESKTOP-MT699OG MINGW64 ~
```

```
$ kubectl get pods # List Pods
NAME                             READY   STATUS    RESTARTS   AGE
hello-minikube-77b6f68484-bdqxr   1/1     Running   0          2m7s

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl get services # List services
NAME            TYPE        CLUSTER-IP       EXTERNAL-IP   PORT(S)          AGE
hello-minikube   NodePort    10.111.155.235   <none>        8080:32554/TCP   17m
kubernetes       ClusterIP   10.96.0.1        <none>        443/TCP          32m

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl get deployment # List deployment
NAME            READY   UP-TO-DATE   AVAILABLE   AGE
hello-minikube   1/1     1            1           2m25s

Swati@DESKTOP-MT699OG MINGW64 ~
$ kubectl describe pod hello-minikube
Name:               hello-minikube-77b6f68484-bdqxr
Namespace:          default
Priority:           0
Service Account:    default
Node:               minikube/192.168.49.2
Start Time:         Tue, 09 May 2023 01:36:48 -0400
Labels:             app=hello-minikube
                    pod-template-hash=77b6f68484
Annotations:        <none>
Status:             Running
IP:                 10.244.0.10
IPs:
  IP:               10.244.0.10
Controlled By:  ReplicaSet/hello-minikube-77b6f68484
Containers:
  echo-server:
    Container ID:
docker://2349e7f32c2434185dd336e0e2af7afe7b7b863f02e587bcdab404de9035b19d
    Image:          kicbase/echo-server:1.0
    Image ID:       docker-pullable://kicbase/echo-
server@sha256:127ac38a2bb9537b7f252addff209ea6801edcac8a92c8b1104dacd66a583ed6
    Port:           <none>
    Host Port:      <none>
    State:          Running
      Started:      Tue, 09 May 2023 01:36:50 -0400
    Ready:          True
    Restart Count:  0
    Environment:    <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-f2v59 (ro)
Conditions:
  Type            Status
  Initialized     True
  Ready           True
  ContainersReady True
  PodScheduled    True
Volumes:
  kube-api-access-f2v59:
    Type:                    Projected (a volume that contains injected data from
multiple sources)
    TokenExpirationSeconds:  3607
    ConfigMapName:           kube-root-ca.crt
    ConfigMapOptional:       <nil>
    DownwardAPI:             true
QoS Class:                   BestEffort
Node-Selectors:              <none>
Tolerations:                 node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
                             node.kubernetes.io/unreachable:NoExecute op=Exists for
300s
Events:
  Type    Reason     Age    From               Message
  ----    ------     ----   ----               -------
  Normal  Scheduled  3m6s   default-scheduler  Successfully assigned default/hello-
minikube-77b6f68484-bdqxr to minikube
```

```
   Normal  Pulled     3m4s  kubelet          Container image "kicbase/echo-
server:1.0" already present on machine
   Normal  Created    3m4s  kubelet          Created container echo-server
   Normal  Started    3m4s  kubelet          Started container echo-server
```

Swati@DESKTOP-MT699OG MINGW64 ~
```
$ kubectl delete deployment hello-minikube
deployment.apps "hello-minikube" deleted
```

Swati@DESKTOP-MT699OG MINGW64 ~
```
$ kubectl create deployment simple-app --image=washraf/simple-app
deployment.apps/simple-app created
```

Swati@DESKTOP-MT699OG MINGW64 ~
```
$ kubectl expose deployment simple-app --type=NodePort --port=80
service/simple-app exposed
```

Swati@DESKTOP-MT699OG MINGW64 ~
```
$ kubectl port-forward service/simple-app 8080:80
Forwarding from 127.0.0.1:8080 -> 80
Forwarding from [::1]:8080 -> 80
```


Swati@DESKTOP-MT699OG MINGW64 ~
```
$ kubectl apply -f simple-app/deploy.yaml
error: the path "simple-app/deploy.yaml" does not exist
```

Swati@DESKTOP-MT699OG MINGW64 ~
```
$ $ kubectl apply -f simple-app/deploy.yaml
bash: $: command not found
```

Swati@DESKTOP-MT699OG MINGW64 ~
```
$ cd C:
```

Swati@DESKTOP-MT699OG MINGW64 /c
```
$ cd 677_spring_2023
```

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023
```
$ ls
677_Final_Codes/
Lab3_Demo/
Lablet5.docx
Scribe/
lab-1-asterix-and-the-stock-bazaar-swati_medha_lab1/
lab2-swati_medha/
lablet-6-minikube-swatiagrawal264/
spring23-lab-3-sa-mg/
spring23-lab-3-sa-mg-Copy/
spring23-lablet-3-docker-containers-swatiagrawal264/
spring23-lablet-4-virtualization-swatiagrawal264/
spring23-lablet-5-cloud-computing-swatiagrawal264/
spring23-lablet0-swatiagrawal264/
spring23-lablet1-rpc-swatiagrawal264/
spring23-lablet2-concurrency-swatiagrawal264/
```

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023
```
$ ^C
```

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023
```
$ cd lablet-6-minikube-swatiagrawal264/
```

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-swatiagrawal264
(main)
```
$ ls
README.md  SS1.png  SS2.png  SS3.png  SS4.png  SS5.png  simple-app/
```

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-swatiagrawal264
(main)
```
$ cd simple-app/
```

```
Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ kubectl apply -f deploy.yaml
service/simple-app-svc created
Warning: resource deployments/simple-app is missing the kubectl.kubernetes.io/last-
applied-configuration annotation which is required by kubectl apply. kubectl apply
should only be used on resources created declaratively by either kubectl create --
save-config or kubectl apply. The missing annotation will be patched automatically.
The Deployment "simple-app" is invalid: spec.selector: Invalid value:
v1.LabelSelector{MatchLabels:map[string]string{"app":"simple-app", "run":"simple-
app"}, MatchExpressions:[]v1.LabelSelectorRequirement(nil)}: field is immutable

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ kubectl port-forward service/simple-app 8080:80
Forwarding from 127.0.0.1:8080 -> 80
Forwarding from [::1]:8080 -> 80


Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ kubectl get pods
NAME                     READY   STATUS    RESTARTS   AGE
simple-app-f47c59f88-m8klh   1/1     Running   0          8m32s

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ kubectl get deployment
NAME         READY   UP-TO-DATE   AVAILABLE   AGE
simple-app   1/1     1            1           8m48s

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ kubectl get service
NAME             TYPE        CLUSTER-IP       EXTERNAL-IP   PORT(S)          AGE
hello-minikube   NodePort    10.111.155.235   <none>        8080:32554/TCP   31m
kubernetes       ClusterIP   10.96.0.1        <none>        443/TCP          46m
simple-app       NodePort    10.102.123.227   <none>        80:30412/TCP     8m52s
simple-app-svc   ClusterIP   10.106.174.73    <none>        80/TCP           108s

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ kubectl delete -f deploy.yaml
service "simple-app-svc" deleted
deployment.apps "simple-app" deleted

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ minikube pause
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5706645s
* Restarting the docker service may improve performance.
* Pausing node minikube ...
* Paused 18 containers in: kube-system, kubernetes-dashboard, storage-gluster, istio-
operator

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ minikube unpause
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5544308s
* Restarting the docker service may improve performance.
* Unpausing node minikube ...
* Unpaused 18 containers in: kube-system, kubernetes-dashboard, storage-gluster,
istio-operator

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ minikube stop
* Stopping node "minikube"  ...
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.5241591s
```

```
* Restarting the docker service may improve performance.
* Powering off "minikube" via SSH ...
* 1 node stopped.

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ minikube config set memory 16384
! These changes will take effect upon a minikube delete and then a minikube start

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ minikube addons list
|-----------------------------|----------|--------------|---------------------------
---|
|          ADDON NAME         | PROFILE  |    STATUS    |          MAINTAINER
|
|-----------------------------|----------|--------------|---------------------------
---|
| ambassador                  | minikube | disabled     | 3rd party (Ambassador)
|
| auto-pause                  | minikube | disabled     | Google
|
| cloud-spanner               | minikube | disabled     | Google
|
| csi-hostpath-driver         | minikube | disabled     | Kubernetes
|
| dashboard                   | minikube | enabled ✅   | Kubernetes
|
| default-storageclass        | minikube | enabled ✅   | Kubernetes
|
| efk                         | minikube | disabled     | 3rd party (Elastic)
|
| freshpod                    | minikube | disabled     | Google
|
| gcp-auth                    | minikube | disabled     | Google
|
| gvisor                      | minikube | disabled     | Google
|
| headlamp                    | minikube | disabled     | 3rd party (kinvolk.io)
|
| helm-tiller                 | minikube | disabled     | 3rd party (Helm)
|
| inaccel                     | minikube | disabled     | 3rd party (InAccel
|
|                             |          |              | [info@inaccel.com])
|
| ingress                     | minikube | disabled     | Kubernetes
|
| ingress-dns                 | minikube | disabled     | Google
|
| istio                       | minikube | disabled     | 3rd party (Istio)
|
| istio-provisioner           | minikube | disabled     | 3rd party (Istio)
|
| kong                        | minikube | disabled     | 3rd party (Kong HQ)
|
| kubevirt                    | minikube | disabled     | 3rd party (KubeVirt)
|
| logviewer                   | minikube | disabled     | 3rd party (unknown)
|
| metallb                     | minikube | disabled     | 3rd party (MetalLB)
|
| metrics-server              | minikube | disabled     | Kubernetes
|
| nvidia-driver-installer     | minikube | disabled     | Google
|
| nvidia-gpu-device-plugin    | minikube | disabled     | 3rd party (Nvidia)
|
| olm                         | minikube | disabled     | 3rd party (Operator
Framework) |
```
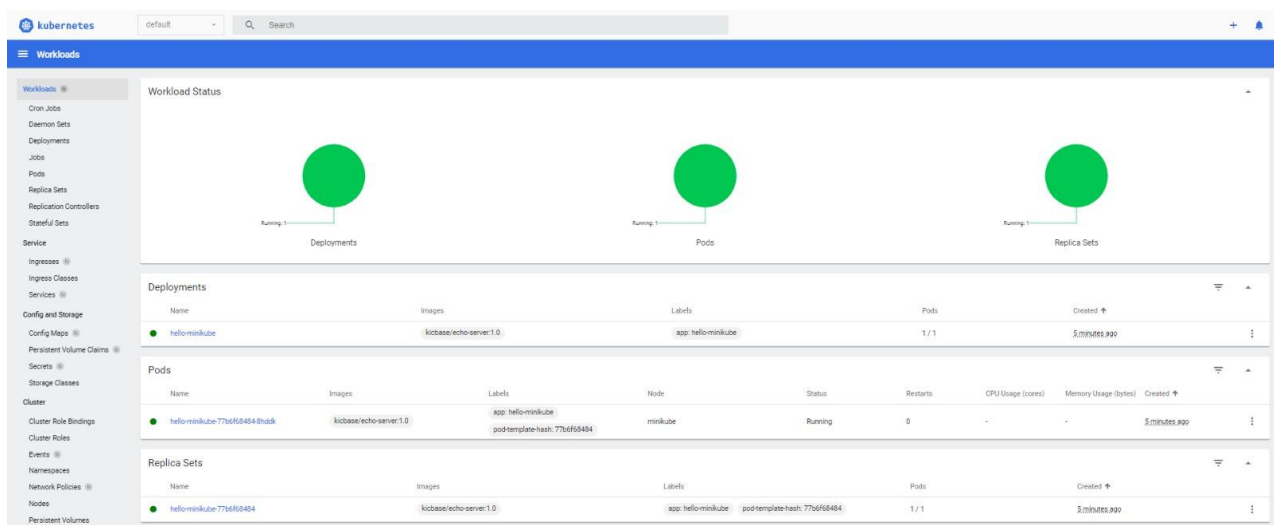
```
| pod-security-policy        | minikube | disabled      | 3rd party (unknown)
|
| portainer                  | minikube | disabled      | 3rd party (Portainer.io)
|
| registry                   | minikube | disabled      | Google
|
| registry-aliases           | minikube | disabled      | 3rd party (unknown)
|
| registry-creds             | minikube | disabled      | 3rd party (UPMC Enterprises)
|
| storage-provisioner        | minikube | enabled ✅     | Google
|
| storage-provisioner-gluster | minikube | disabled     | 3rd party (Gluster)
|
| volumesnapshots            | minikube | disabled      | Kubernetes
|
|----------------------------|----------|--------------|---------------------------
---|
```

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ minikube start -p aged --kubernetes-version=v1.16.1
* [aged] minikube v1.30.1 on Microsoft Windows 11 Home Single Language 10.0.22000.1817
Build 22000.1817
* Automatically selected the docker driver. Other choices: virtualbox, ssh

X Exiting due to MK_USAGE: Docker Desktop has only 7906MB memory but you specified
16384MB

Swati@DESKTOP-MT699OG MINGW64 /c/677_spring_2023/lablet-6-minikube-
swatiagrawal264/simple-app (main)
$ minikube delete --all
* Deleting "minikube" in docker ...
! Executing "docker container inspect minikube --format={{.State.Status}}" took an
unusually long time: 2.6481994s
* Restarting the docker service may improve performance.
* Removing C:\Users\Swati\.minikube\machines\minikube ...
* Removed all traces of the "minikube" cluster.
* Removed all traces of the "aged" cluster.
* Successfully deleted all profiles

Here is the Screenshot of the dashboard and application: -

Port Forwarding:-


```
Request served by hello-minikube-77b6f68484-vgmsc

HTTP/1.1 GET /

Host: 127.0.0.1:62634
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7
Accept-Encoding: gzip, deflate, br
Accept-Language: en-US,en;q=0.9
Connection: keep-alive
Sec-Ch-Ua: "Chromium";v="112", "Google Chrome";v="112", "Not:A-Brand";v="99"
Sec-Ch-Ua-Mobile: ?0
Sec-Ch-Ua-Platform: "Windows"
Sec-Fetch-Dest: document
Sec-Fetch-Mode: navigate
Sec-Fetch-Site: none
Sec-Fetch-User: ?1
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/112.0.0.0 Safari/537.36
```



```
Request served by hello-minikube-77b6f68484-vgmsc

HTTP/1.1 GET /

Host: localhost:7080
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7
Accept-Encoding: gzip, deflate, br
Accept-Language: en-US,en;q=0.9
Cache-Control: max-age=0
Connection: keep-alive
Cookie: username-localhost-8889="2|1:0|10:1682896197|23:username-localhost-8889|44:Njg0MDc2ZWVmYTcwNGUyZGEwNWIyMmQxODU4NzEwMDQ=|1726f33855de8c1f913a8a1b23492e63f9fd2317769aae9c91a980e0d61eab6d"; _xsrf=2|60af0302|1ebc633eb7879c48f6f19f4f8ceb7810|1682896197; username-localhost-8888="2|1:0|10:1683497455|23:username-localhost-8888|44:ODEwYTAzYWVlMmY1NDQyMjgxMjc1NTY2YjY1NTI4ZTM=|dc74a7c98354761b639e4698c54340725896339db437651aa7a0582cb6bb9e24"
Sec-Ch-Ua: "Chromium";v="112", "Google Chrome";v="112", "Not:A-Brand";v="99"
Sec-Ch-Ua-Mobile: ?0
Sec-Ch-Ua-Platform: "Windows"
Sec-Fetch-Dest: document
Sec-Fetch-Mode: navigate
Sec-Fetch-Site: none
Sec-Fetch-User: ?1
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/112.0.0.0 Safari/537.36
```