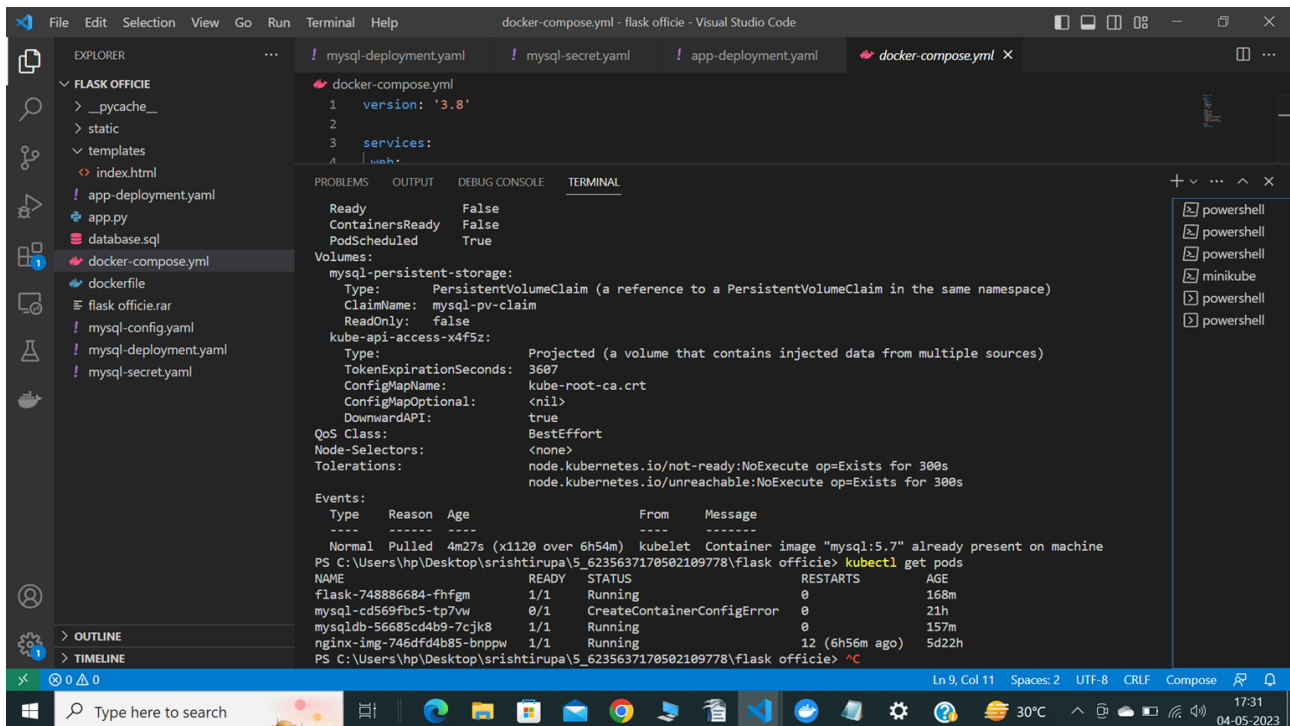


Date 04-05-2023

Kubernetes Deployment



```
docker-compose.yml
1 version: '3.8'
2
3 services:
4   web:
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Ready False
ContainersReady False
PodScheduled True

Volumes:

mysql-persistent-storage:
Type: PersistentVolumeClaim (a reference to a PersistentVolumeClaim in the same namespace)
ClaimName: mysql-pv-claim
ReadOnly: false
kube-api-access-x4f5z:
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

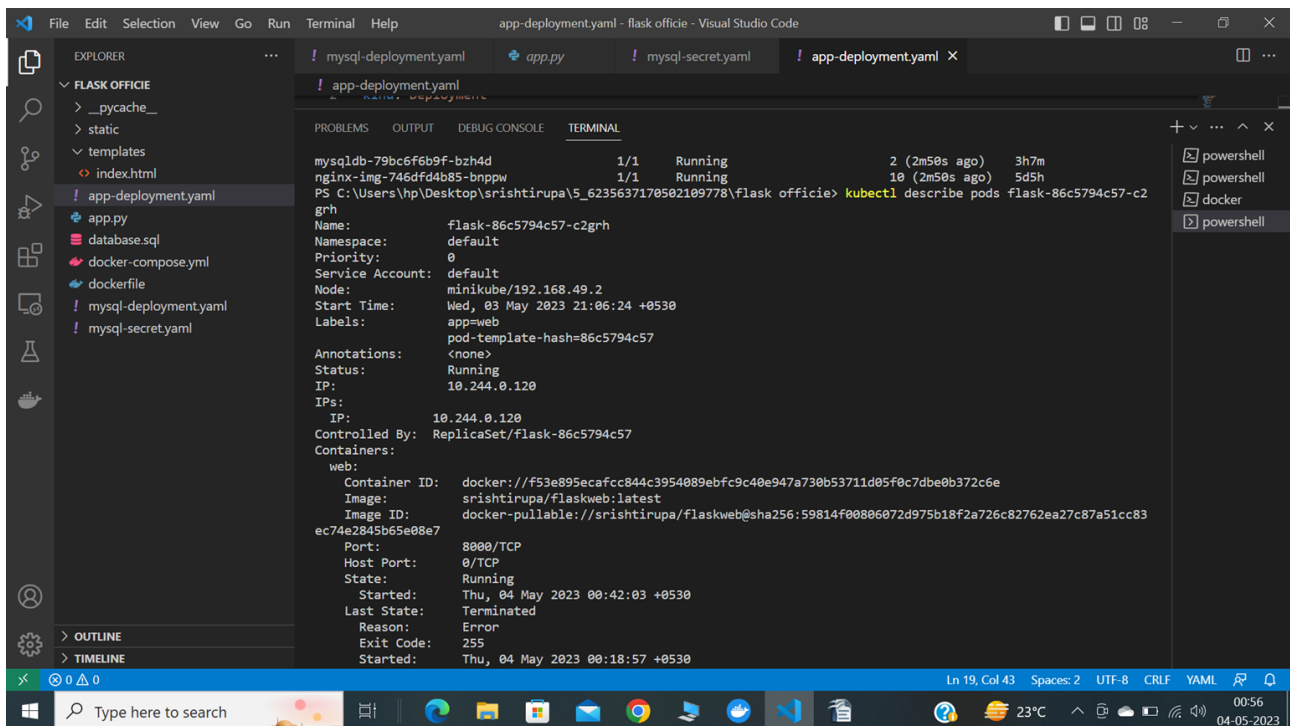
Events:

Type	Reason	Age	From	Message
Normal	Pulled	4m27s (x1120 over 6h54m)	kubelet	Container image "mysql:5.7" already present on machine

PS C:\Users\hp\Desktop\srishtirupa\5_6235637170502109778\flask officie> kubectl get pods

NAME	READY	STATUS	RESTARTS	AGE
flask-748886684-fhfgm	1/1	Running	0	168m
mysql-cd569fbc5-tp7vw	0/1	CreateContainerConfigError	0	21h
mysqlb-56685cd4b9-7cj8	1/1	Running	0	157m
nginx-img-746dfd4b85-bnppw	1/1	Running	12 (6h56m ago)	5d22h

PS C:\Users\hp\Desktop\srishtirupa\5_6235637170502109778\flask officie> ^C



```
app-deployment.yaml
1 apiVersion: apps/v1
2 kind: Deployment
3 metadata:
4   name: flask
5 spec:
6   replicas: 1
7   selector:
8     matchLabels:
9       app: flask
10  template:
11    metadata:
12      labels:
13        app: flask
14    spec:
15      containers:
16      - name: flask
17        image: srishtirupa/flaskweb:latest
18        ports:
19        - containerPort: 8000
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

mysqlb-79bc6f6b9f-bzh4d 1/1 Running 2 (2m50s ago) 3h7m
nginx-img-746dfd4b85-bnppw 1/1 Running 10 (2m50s ago) 5d5h

PS C:\Users\hp\Desktop\srishtirupa\5_6235637170502109778\flask officie> kubectl describe pods flask-86c5794c57-c2

grh

Name: flask-86c5794c57-c2grh
Namespace: default
Priority: 0
Service Account: default
Node: minikube/192.168.49.2
Start Time: Wed, 03 May 2023 21:06:24 +0530
Labels: app=web
pod-template-hash=86c5794c57
Annotations: <none>
Status: Running
IP: 10.244.0.120
IPs: 10.244.0.120
Controlled By: ReplicaSet/flask-86c5794c57
Containers:

web:
Container ID: docker://f53e895ecafcc844c3954089ebfc9c40e947a730b53711d05f0c7d8e0b372c6e
Image: srishtirupa/flaskweb:latest
Image ID: docker-pullable://srishtirupa/flaskweb@sha256:59814f08806072d975b18f2a726c82762ea27c87a51cc83
ec74e2845b65e08e7
Port: 8000/TCP
Host Port: 0/TCP
State: Running
Started: Thu, 04 May 2023 00:42:03 +0530
Last State: Terminated
Reason: Error
Exit Code: 255
Started: Thu, 04 May 2023 00:18:57 +0530

Visual Studio Code interface showing the deployment of a Flask application to a Kubernetes cluster. The Explorer pane on the left shows the project structure for 'FLASK OFFICE', including files like `app-deployment.yaml`, `app.py`, `database.sql`, `docker-compose.yml`, `dockerfile`, `mysql-deployment.yaml`, and `mysql-secret.yaml`.

The main editor displays the `app-deployment.yaml` file. The terminal output shows the deployment process:

```
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       3h37m default-scheduler Successfully assigned default/flask-86c5794c
57-c2grh to minikube
Normal    Pulling         3h37m kubelet        Pulling image "srishtirupa/flaskweb:latest"
Normal    Pulled          3h37m kubelet        Successfully pulled image "srishtirupa/flaskweb:latest" in 3.392421375s including waiting)
Normal    Created         3h37m kubelet        Created container web
Normal    Started         3h37m kubelet        Started container web
Normal    SandboxChanged  25m   kubelet        Pod sandbox changed, it will be killed and r
Normal    Pulled          24m   kubelet        Container image "srishtirupa/flaskweb:latest"
" already present on machine
Normal    Created         24m   kubelet        Created container web
Normal    Started         24m   kubelet        Started container web
Warning   NodeNotReady    14m   node-controller Node is not ready
Normal    SandboxChanged  2m12s (x2 over 2m26s) kubelet        Pod sandbox changed, it will be killed and r
e-created.
Normal    Pulling         2m10s kubelet        Pulling image "srishtirupa/flaskweb:latest"
Normal    Pulled          113s kubelet        Successfully pulled image "srishtirupa/flaskweb:latest" in 4.383134778s (17.014805528s including waiting)
Normal    Created         113s kubelet        Created container web
Normal    Started         113s kubelet        Started container web
```

Visual Studio Code interface showing the deployment of a Flask application to a Kubernetes cluster. The Explorer pane on the left shows the project structure for 'FLASK OFFICE', including files like `app-deployment.yaml`, `app.py`, `database.sql`, `docker-compose.yml`, `dockerfile`, `mysql-deployment.yaml`, and `mysql-secret.yaml`.

The main editor displays the `app-deployment.yaml` file. The terminal output shows the deployment process:

```
PS C:\Users\hp\Desktop\srishtirupa\5_6235637170502109778\flask officie> kubectl describe pods mysqldb-79bc6f6b9f-bzh4d
Name:         mysqldb-79bc6f6b9f-bzh4d
Namespace:    default
Priority:      0
Service Account: default
Node:         minikube/192.168.49.2
Start Time:   Wed, 03 May 2023 21:35:54 +0530
Labels:       app=mysql
              pod-template-hash=79bc6f6b9f
Annotations:  <none>
Status:       Running
IP:           10.244.0.119
IPs:          IP: 10.244.0.119
Controlled By: ReplicaSet/mysqldb-79bc6f6b9f
Containers:
  mysqldb:
    Container ID:  docker://c4e1d25981df331dab563b3e528ea27f771cd0aab34970e51ed64430d3b47e5e
    Image:          srishtirupa/mysql:latest
    Image ID:       docker-pullable://srishtirupa/mysql@sha256:b45a7c3e6fb15526e8bf62ebb940cd460617e36f46155b8514
    Port:           3307/TCP
    Host Port:      0/TCP
    State:          Running
      Started:      Thu, 04 May 2023 00:41:59 +0530
    Last State:     Terminated
      Reason:       Error
      Exit Code:    255
    Started:        Thu, 04 May 2023 00:10:02 +0530
    Finished:       Thu, 04 May 2023 00:40:38 +0530
    Ready:          True
```

Visual Studio Code interface showing the deployment of a Flask application with MySQL. The Explorer pane on the left lists files: `__pycache__`, `static`, `templates`, `index.html`, `app-deployment.yaml`, `app.py`, `database.sql`, `docker-compose.yml`, `dockerfile`, `mysql-deployment.yaml`, and `mysql-secret.yaml`. The Terminal pane shows the output of the deployment process, including pulling images and creating containers.

```
Normal SandboxChanged 3h8m kubelet Pod sandbox changed, it will be killed and re
-created.
Normal Pulled 3h8m kubelet Successfully pulled image "srishtirupa/mysql:
latest" in 3.334679956s (3.334738243s including waiting)
Normal Pulled 3h8m kubelet Successfully pulled image "srishtirupa/mysql:
latest" in 3.075621594s (3.075633097s including waiting)
Normal Pulled 3h8m kubelet Successfully pulled image "srishtirupa/mysql:
latest" in 4.500107382s (4.500152178s including waiting)
Normal Pulled 3h7m kubelet Successfully pulled image "srishtirupa/mysql:
latest" in 3.857572463s (3.857600295s including waiting)
Normal Pulled 3h7m kubelet Successfully pulled image "srishtirupa/mysql:
latest" in 3.882744451s (3.882847424s including waiting)
Normal Pulled 3h7m kubelet Successfully pulled image "srishtirupa/mysql:
latest" in 3.494935074s (3.494943151s including waiting)
Normal Pulling 3h7m (x8 over 3h8m) kubelet Pulling image "srishtirupa/mysql:latest"
Warning Failed 3h6m (x8 over 3h8m) kubelet Error: secret "mysql-secret" not found
Normal Pulled 3h6m kubelet Successfully pulled image "srishtirupa/mysql:
latest" in 3.158671586s (3.158726581s including waiting)
Normal Pulled 3h3m (x11 over 3h6m) kubelet (combined from similar events): Successfully
pulled image "srishtirupa/mysql:latest" in 4.299827834s (4.299836456s including waiting)
Normal SandboxChanged 25m kubelet Pod sandbox changed, it will be killed and re
-created.
Normal Pulled 25m kubelet Successfully pulled image "srishtirupa/mysql:
latest" in 7.715464133s (7.715664931s including waiting)
Normal Started 25m kubelet Started container mysqlpdb
Normal SandboxChanged 2m46s (x2 over 3m) kubelet Pod sandbox changed, it will be killed and re
-created.
Normal Pulling 2m44s kubelet Pulling image "srishtirupa/mysql:latest"
Normal Pulled 2m31s kubelet Successfully pulled image "srishtirupa/mysql:
latest" in 3.452851751s (13.213253198s including waiting)
Normal Created 2m31s kubelet Created container mysqlpdb
--name=web --port=5000
```

Visual Studio Code interface showing the deployment of a Flask application with MySQL. The Explorer pane on the left lists files: `__pycache__`, `static`, `templates`, `index.html`, `app-deployment.yaml`, `app.py`, `database.sql`, `docker-compose.yml`, `dockerfile`, `mysql-deployment.yaml`, and `mysql-secret.yaml`. The Terminal pane shows the output of the deployment process, including pulling images and creating containers.

```
service/web1 exposed
PS C:\Users\hp\Desktop\srishtirupa\5_6235637170502109778\flask officie> kubectl get services
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
helloworld-service LoadBalancer 10.110.72.56 <pending> 80:31086/TCP 5d5h
kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 7d8h
mysql ClusterIP None <none> 3307/TCP 33h
web ClusterIP 10.98.19.74 <none> 5000/TCP 8h
web1 ClusterIP 10.104.203.177 <none> 5000/TCP 14s
PS C:\Users\hp\Desktop\srishtirupa\5_6235637170502109778\flask officie> kubectl port-forward service/web1 5000:50
00
Forwarding from 127.0.0.1:5000 -> 5000
Forwarding from [::1]:5000 -> 5000
Handling connection for 5000
Handling connection for 5000
PS C:\Users\hp\Desktop\srishtirupa\5_6235637170502109778\flask officie> ^C
PS C:\Users\hp\Desktop\srishtirupa\5_6235637170502109778\flask officie> []
```

Introducing ChatGPT x Kubernetes node not ready. x 500 Internal Server Error x Kubernetes Dashboard x +

127.0.0.1:51296/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/workloads?namespace=de...

kubernetes default Search

Workloads

- Workloads
- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods
- Replica Sets
- Replication Controllers
- Stateful Sets
- Service
- Ingresses
- Ingress Classes
- Services
- Config and Storage
- Config Maps
- Persistent Volume Claims
- Secrets
- Storage Classes
- Cluster

	mysql	mysql:5.7	app: mysql	tier: database	0 / 1	3 days ago	
	helloworld-deployment	<your-docker-image>:latest	-	-	0 / 3	5 days ago	
	nginx-ing	nginx	app: nginx-ing	-	1 / 1	5 days ago	

Pods

Name	Images	Labels	Node	Status	Restarts	CPU Usage (cores)	Memory Usage (bytes)	Created
mysqlqdb-56685cd4b9-tphx2	srishtirupa/mysql:latest	app: mysql pod-template-hash: 56685cd4b9	minikube	Running	0	-	-	8 minutes ago
flask-86c5794c57-c2gfh	srishtirupa/flaskweb:latest	app: web pod-template-hash: 86c5794c57	minikube	Running	3	-	-	4 hours ago
mysql-cd569fbc5-tp7vw	mysql:5.7	app: mysql pod-template-hash: cd569fbc5	minikube	CreateContainer	0	-	-	5 hours ago
helloworld-deployment-7dd6dbb864-5p2wz	<your-docker-image>:latest	app: helloworld pod-template-hash: 7dd6dbb864	minikube	InvalidImageName	0	-	-	9 hours ago
helloworld-deployment-7dd6dbb864-2gn2w	<your-docker-image>:latest	app: helloworld pod-template-hash: 7dd6dbb864	minikube	InvalidImageName	0	-	-	9 hours ago

Type here to search

01:20 04-05-2023

500 Inter x Srishtirupa x (1) What x Google x Topology x https:// x https:// x Image La x Kubernetes x +

127.0.0.1:59217/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/workloads?namespace=default

kubernetes default Search

Workloads

- Workloads
- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods
- Replica Sets
- Replication Controllers
- Stateful Sets
- Service
- Ingresses
- Ingress Classes
- Services
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- Config Maps
- Persistent Volume Claims
- Secrets
- Storage Classes
- Cluster

Workload Status

Deployments: Pending: 1, Running: 3

Pods: Pending: 1, Running: 3

Replica Sets: Pending: 1, Running: 17

Deployments

Name	Images	Labels	Pods	Created
mysqlqdb	srishtirupa/mysql:latest	-	1 / 1	3 days ago
flask	srishtirupa/flaskweb:latest	app: web	1 / 1	3 days ago
mysql	mysql:5.7	app: mysql tier: database	0 / 1	2 days ago
nginx-ing	nginx	app: nginx-ing	1 / 1	5 days ago

Type here to search

17:33 04-05-2023

The screenshot shows the Kubernetes dashboard interface. The left sidebar contains navigation links for Workloads, Cron Jobs, Daemon Sets, Deployments, Jobs, Pods, Replica Sets, Replication Controllers, Stateful Sets, Service, Ingresses, Ingress Classes, Services, Config and Storage, Config Maps, Persistent Volume Claims, Secrets, Storage Classes, and Cluster. The main content area is divided into two sections: Workloads and Pods.

Workloads	mysql	flask	mysql	nginx
Image	srishtirupa/mysql:latest	srishtirupa/flaskweb:latest	mysql:5.7	nginx
App	-	app: web	app: mysql	app: nginx-img
Replicas	1 / 1	1 / 1	0 / 1	1 / 1
Age	1 day ago	1 day ago	2 days ago	5 days ago

Pods	Name	Images	Labels	Node	Status	Restarts	CPU Usage (cores)	Memory Usage (bytes)	Created
mysql	mysql-56685cd4b9-7cjk8	srishtirupa/mysql:latest	app: mysql pod-template-hash: 56685cd4b9	minikube	Running	0	-	-	2 hours ago
flask	flask-748886684-4nfgm	srishtirupa/flaskweb:latest	app: web pod-template-hash: 748886684	minikube	Running	0	-	-	2 hours ago
mysql	mysql-cd569fbc5-tp7vw	mysql:5.7	app: mysql pod-template-hash: cd569fbc5 tier: database	minikube	CreateContainerError	0	-	-	21 hours ago
nginx	nginx-img-746df4db85-bnppw	nginx	app: nginx-img pod-template-hash: 746df4db85	minikube	Running	12	-	-	5 days ago

All containers are running properly but not showing internal server error.

The screenshot shows a web browser window with the address bar displaying 'localhost:5000'. The page content shows a 500 Internal Server Error. The error message reads: 'The server encountered an internal error and was unable to complete your request. Either the server is overloaded or there is an error in the application.'