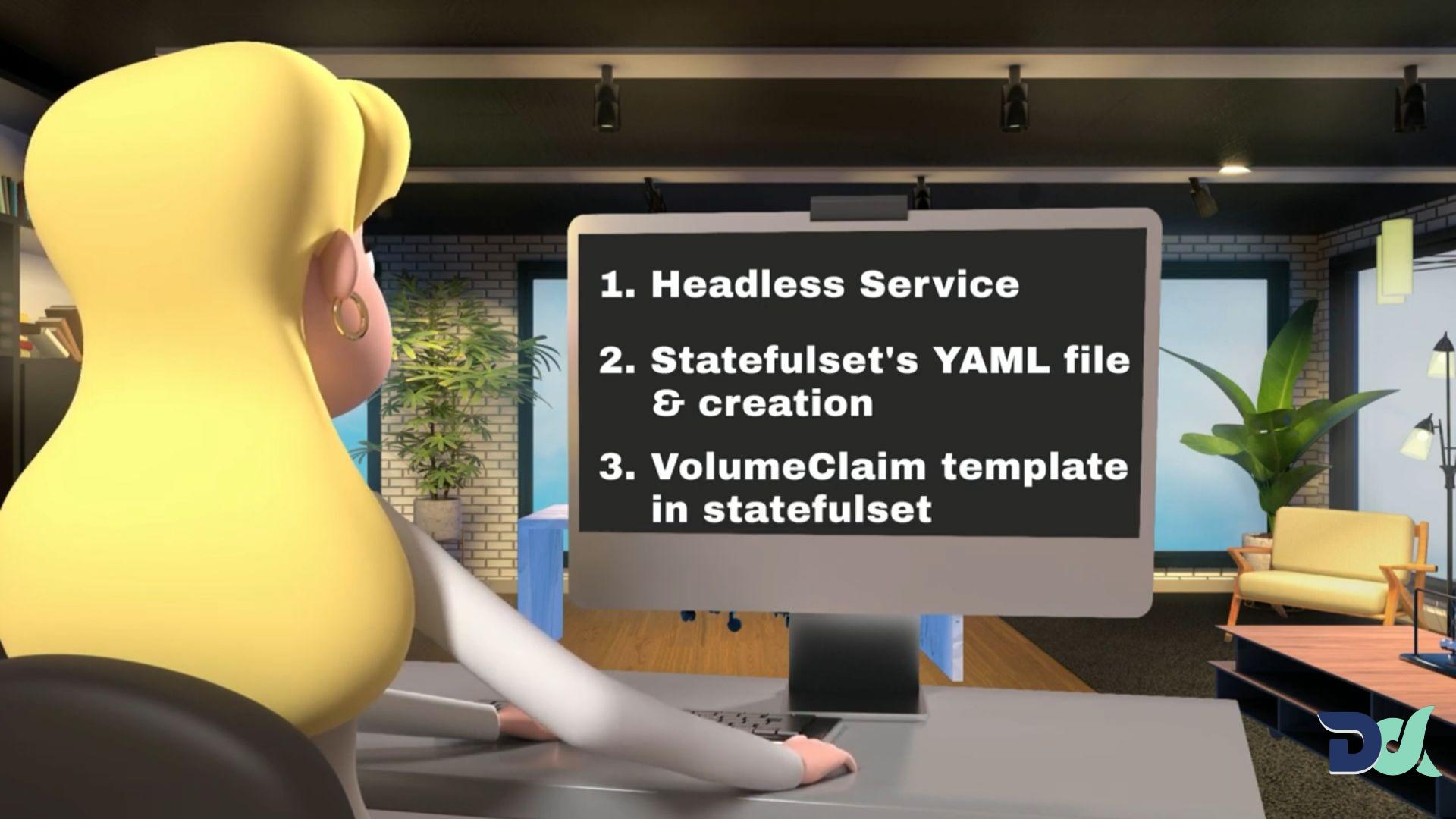


- 
- 1. Headless Service**
  - 2. Statefulset's YAML file & creation**
  - 3. VolumeClaim template in statefulset**

# DATABASE



mysql-0



mysql-1

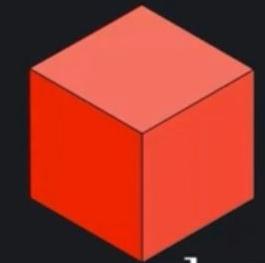


mysql-2

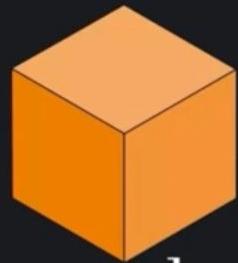




# DATABASE



mysql-0



mysql-1



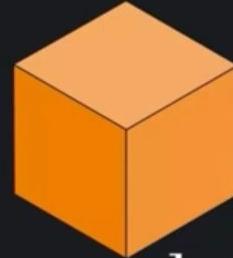
mysql-2



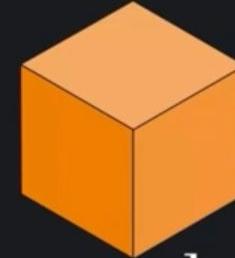
# DATABASE



mysql-0



mysql-1



mysql-2

DNS Name



# DATABASE



mysql-0



mysql-1



mysql-2

DNS Name





**mysql-0.<headless\_service\_name>.<namespace>.svc.cluster.domain**

**mysql-0.headless-svc.default.svc.cluster.local**



# Headless Service creation

```
apiVersion: v1
kind: Service
metadata:
  name: headless-svc
spec:
  selector:
    app: nginx
  ports:
    - port: 80
      name: web
  clusterIP: None
```





```
devopspro:-$ kubectl apply -f svc.yml  
service/headless-svc created  
devopspro:-$ kubectl get service headless-svc
```

NAME	TYPE	CLUSTER_IP	EXTERNAL_IP	PORT(S)
headless-svc	ClusterIP	None	<none>	80/TCP



# StatefulSet YAML

```
apiVersion: apps/v1
kind: StatefulSet
metadata:
  name: web
spec:
  serviceName: "headless-svc"
  replicas: 2
  selector:
    matchLabels:
      app: nginx
  template:
    metadata:
      labels:
        app: nginx
  spec:
    containers:
      - name: nginx
        image: registry.k8s.io/nginx-slim:0.8
        ports:
          - containerPort: 80
            name: web
```





```
devopspro:-$ kubectl apply -f svc.yml
```

```
service/headless-svc created
```

```
devopspro:-$ kubectl get statefulset web
```

NAME	DESIRED	CURRENT	AGE
web	2	1	20s

```
devopspro:-$ kubectl get pods -w -l app=nginx
```

NAME	READY	STATUS	RESTART	AGE
web-0	0/1	Pending	0	0s
web-0	0/1	Pending	0	0s
web-0	0/1	Container creating	0	0s
web-0	0/1	Runing	0	19s
web-1	0/1	Pending	0	0s
web-1	0/1	Pending	0	0s
web-1	0/1	Container creating	0	0s
web-1	0/1	Runing	0	18s

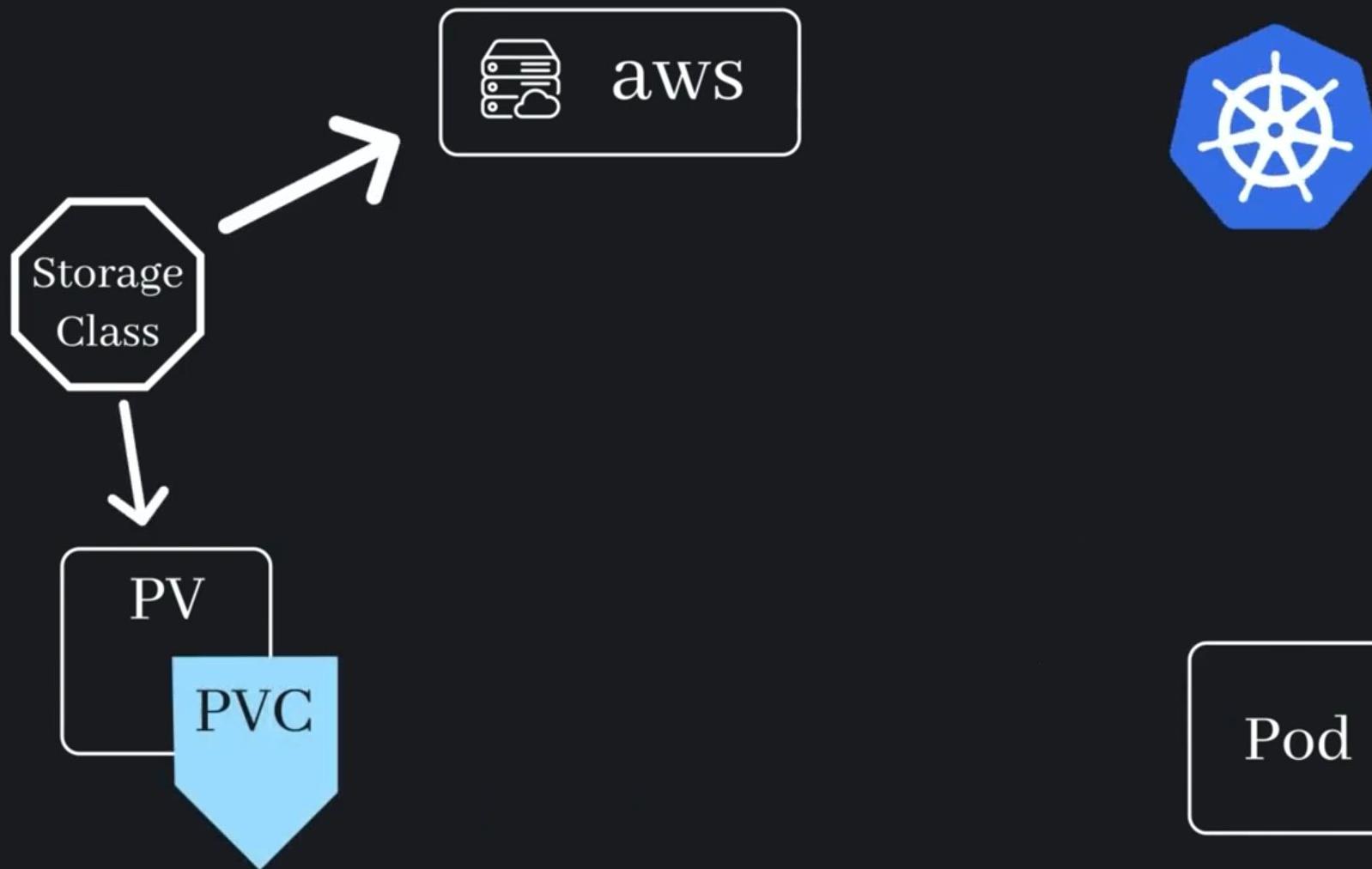
```
devopspro:-$ kubectl scale sts web --replica=4
```

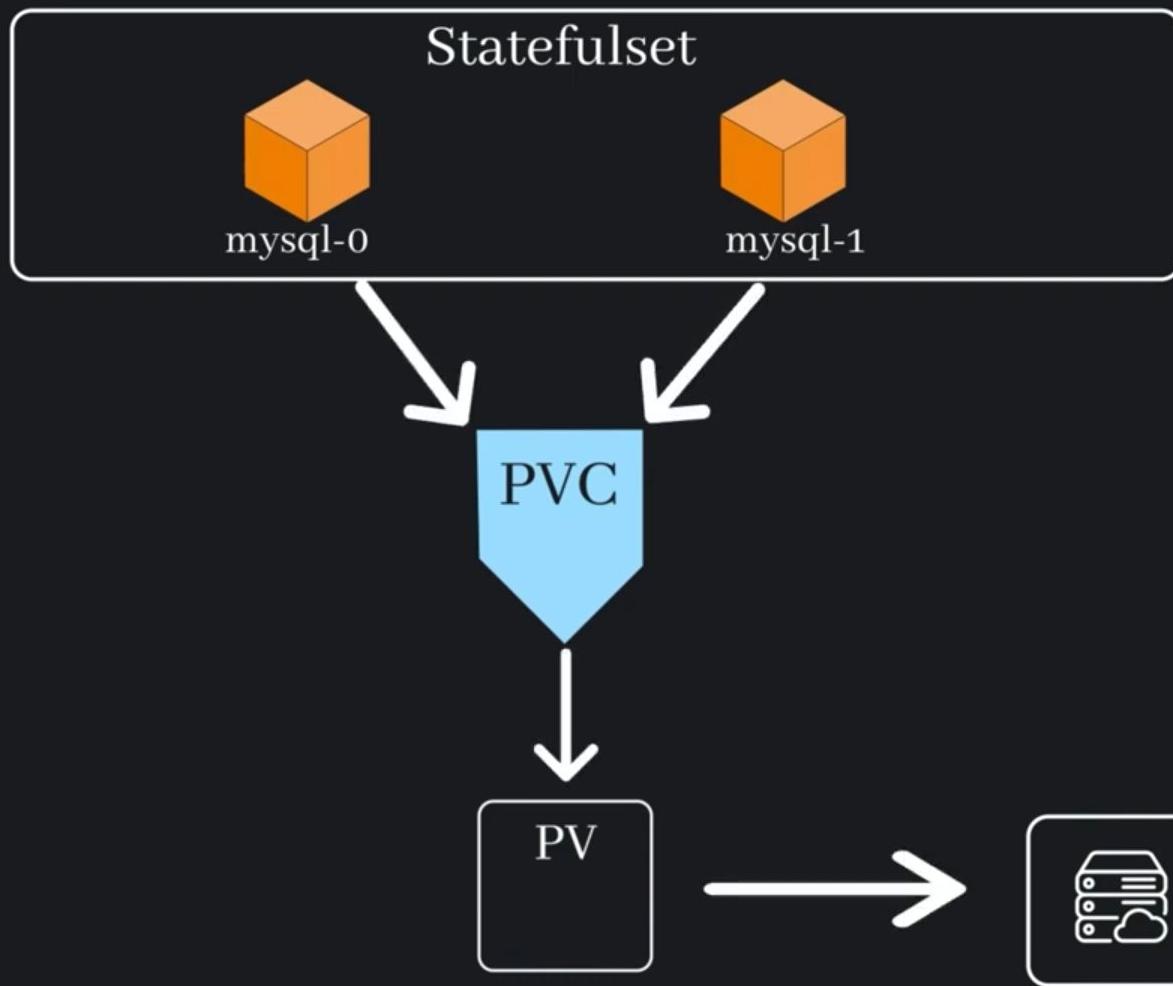
```
Statefulset/web scaled
```

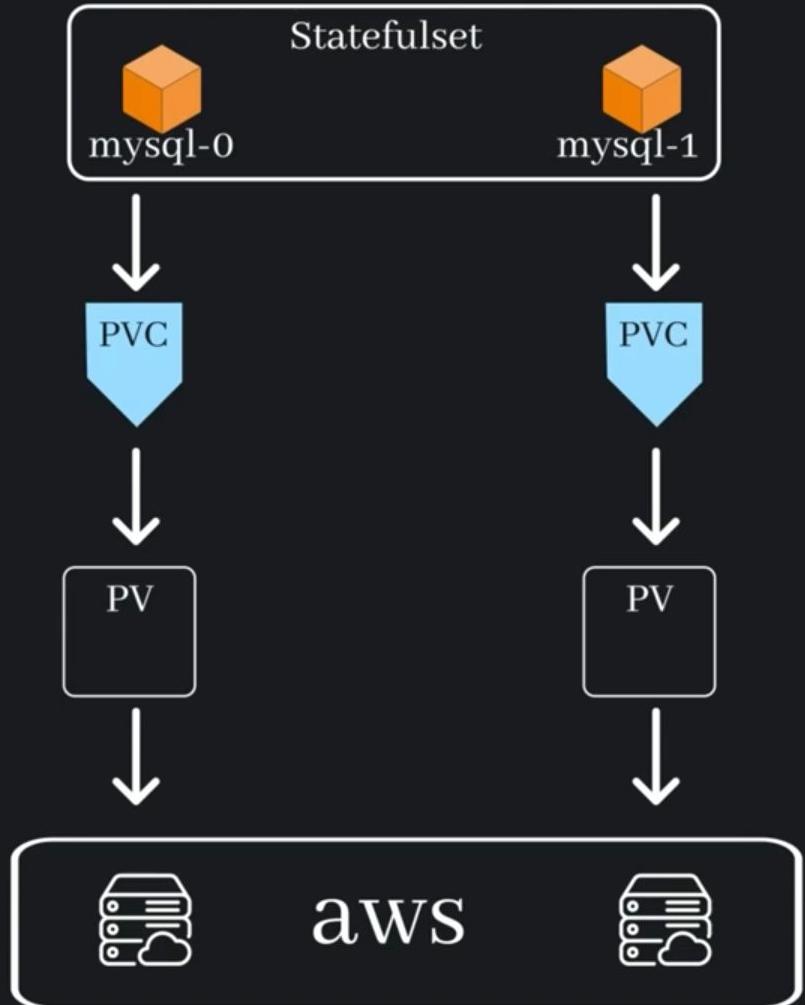
```
devopspro:-$ kubectl delete sts web
```

```
Statefulset/web deleted
```









```
apiVersion: apps/v1
kind: StatefulSet
metadata:
  name: web
spec:
  serviceName: "headless-svc"
  replicas: 2
  selector:
    matchLabels:
      app: nginx
  template:
    metadata:
      labels:
        app: nginx
    spec:
      containers:
      - name: nginx
        image: registry.k8s.io/nginx-slim:0.8
        ports:
        - containerPort: 80
          name: web
      volumeMounts:
      - name: web-pvc
        mountPath: /usr/share/nginx/html
  volumeClaimTemplates:
  - metadata:
      name: web-pvc
    spec:
      accessModes: [ "ReadWriteOnce" ]
      resources:
        requests:
          storage: 1Gi
```



**1. Headless service in kubernetes**



**2. Statefulset YAML file & its creation**



**3. VolumeClaim Templates in statefulset**

