

## Assignment: Building a Multi-Service Application with In-Place Upgrades on Kubernetes

1-kubectl get pods showing running pods before and after the upgrade.

```
MINGW64:/c/Users/USUARIO/kubernetes_project
$ nano frontend-service.yaml

USUARIO@LENOVO MINGW64 ~/kubernetes_project
$ kubectl apply -f frontend-deployment.yaml
deployment.apps/frontend created
$ kubectl apply -f frontend-service.yaml
service/frontend-service created

USUARIO@LENOVO MINGW64 ~/kubernetes_project
$ minikube service frontend-service --url
http://127.0.0.1:52578
! Porque estás usando controlador Docker en windows, la terminal debe abrirse pa
ra ejecutarlo.

USUARIO@LENOVO MINGW64 ~/kubernetes_project
$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
backend-6d78b47fdc-24bk2            1/1     Running   0           2m9s
backend-6d78b47fdc-dvxhh            1/1     Running   0           2m9s
frontend-76f648b97d-vm4d1          1/1     Running   0           74s

USUARIO@LENOVO MINGW64 ~/kubernetes_project
$
```

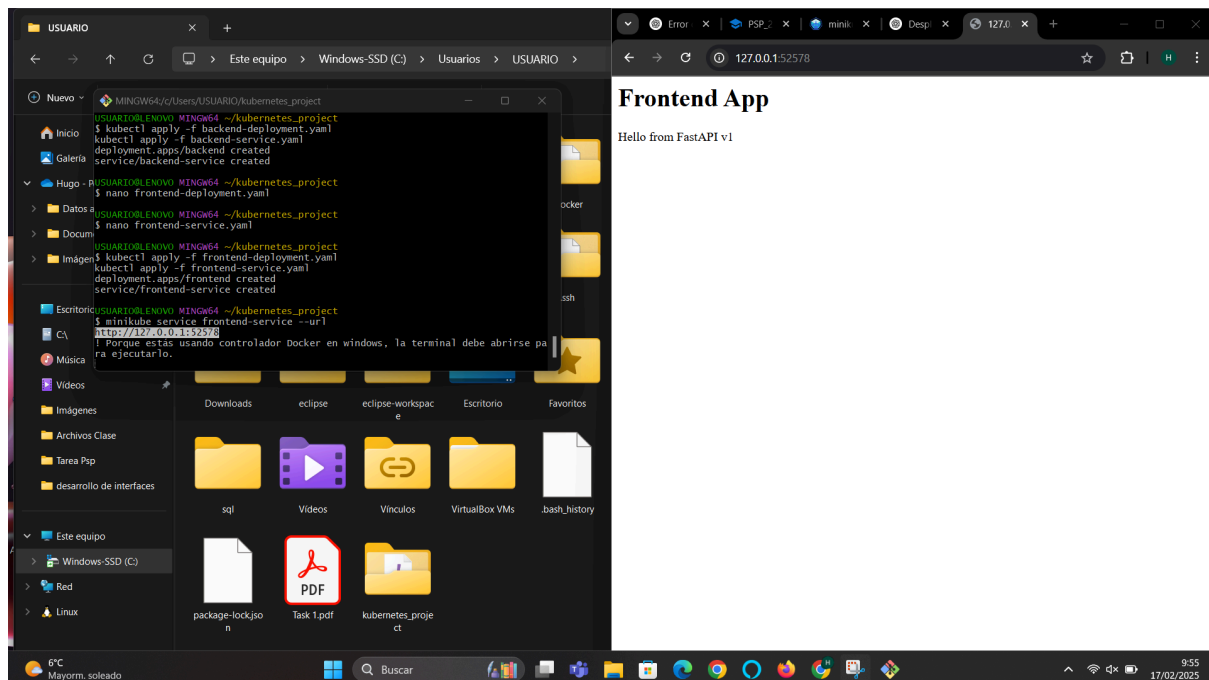
```
MINGW64:/c/Users/USUARIO/kubernetes_project
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 720 bytes | 720.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
to https://github.com/Hugogare/kubernetes_project.git
   e5fbd7e..e72c36c  main -> main

USUARIO@LENOVO MINGW64 ~/kubernetes_project (main)
$ docker get pods
docker: 'get' is not a docker command.
See 'docker --help'

USUARIO@LENOVO MINGW64 ~/kubernetes_project (main)
$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
backend-6b645cbf88-kz7f5            1/1     Running   0           39m
backend-6b645cbf88-wcc4d            1/1     Running   0           39m
frontend-76f648b97d-vm4d1          1/1     Running   0           45m

USUARIO@LENOVO MINGW64 ~/kubernetes_project (main)
$
```

## 2-The frontend displaying data from the upgraded API.



## 3-Output of kubectl rollout status deployment/backend-deployment

```
MINGW64:/c/Users/USUARIO/kubernetes_project/backend

=> CACHED [2/5] WORKDIR /app 0.0s
=> CACHED [3/5] COPY requirements.txt . 0.0s
=> CACHED [4/5] RUN pip install -r requirements.txt 0.0s
=> [5/5] COPY . . 0.1s
=> exporting to image 0.1s
=> => exporting layers 0.1s
=> => writing image sha256:7ca46028216cdc7236a924fee8cc8168e41a56e550b9d 0.0s
=> => naming to docker.io/library/backend:v2 0.0s

USUARIO@LENOVO MINGW64 ~/kubernetes_project/backend
$ kubectl set image deployment/backend=backend:v2
deployment.apps/backend image updated

USUARIO@LENOVO MINGW64 ~/kubernetes_project/backend
$ kubectl rollout status deployment/backend
kubectl get pods
deployment "backend" successfully rolled out
NAME                                READY   STATUS    RESTARTS   AGE
backend-6b645cbf88-kz7f5            1/1     Running   0           10s
backend-6b645cbf88-wcc4d            1/1     Running   0           8s
frontend-76f648b97d-vm4d1          1/1     Running   0          5m56s

USUARIO@LENOVO MINGW64 ~/kubernetes_project/backend
$
```