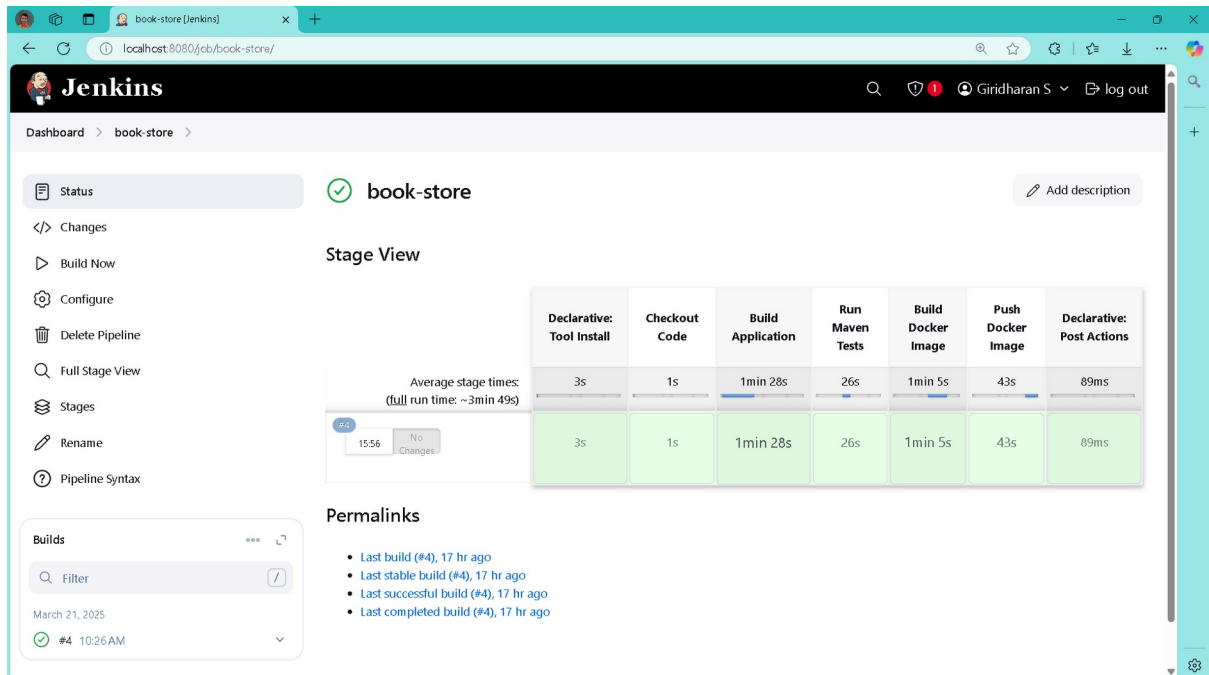


Spring Application Deployment



A Jenkins CI/CD pipeline dashboard for a "book-store" project, monitoring the successful execution of build stages (tool install, code checkout, application build, testing, and Docker image creation/pushing).

```
girdharan@UserUnknown: ~$ kubectl apply -f spring-deployment.yaml
deployment.apps/bookdir-app-deployment unchanged
service/bookdir-app-service unchanged
girdharan@UserUnknown: ~$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
bookdir-app-deployment-6c9f6c4dd6-hvqhl 1/1     Running   0           11m
bookdir-app-deployment-6c9f6c4dd6-v78bl 1/1     Running   0           11m
nginx-deployment-647677fc66-b5772      1/1     Running   0           18m
nginx-deployment-647677fc66-jwzkk      1/1     Running   0           18m
nginx-deployment-647677fc66-zpzqw      1/1     Running   0           18m
nginx-login-b6fd8c4cf-cf97x           1/1     Running   0           18m
girdharan@UserUnknown: ~$ minikube service bookdir-app-service --url
http://127.0.0.1:37439
! Because you are using a Docker driver on linux, the terminal needs to be open to run it.
*Girdharan@UserUnknown:~$ kubectl port-forward service/bookdir-app-service 30007:8080
Forwarding from 127.0.0.1:30007 -> 8080
Forwarding from [::]:30007 -> 8080
Handling connection for 30007
Handling connection for 30007
Handling connection for 30007
Handling connection for 30007
Handling connection for 30007
Handling connection for 30007
```

Kubernetes commands in a terminal to deploy the application, check pod status, and set up port forwarding to make the service accessible locally.

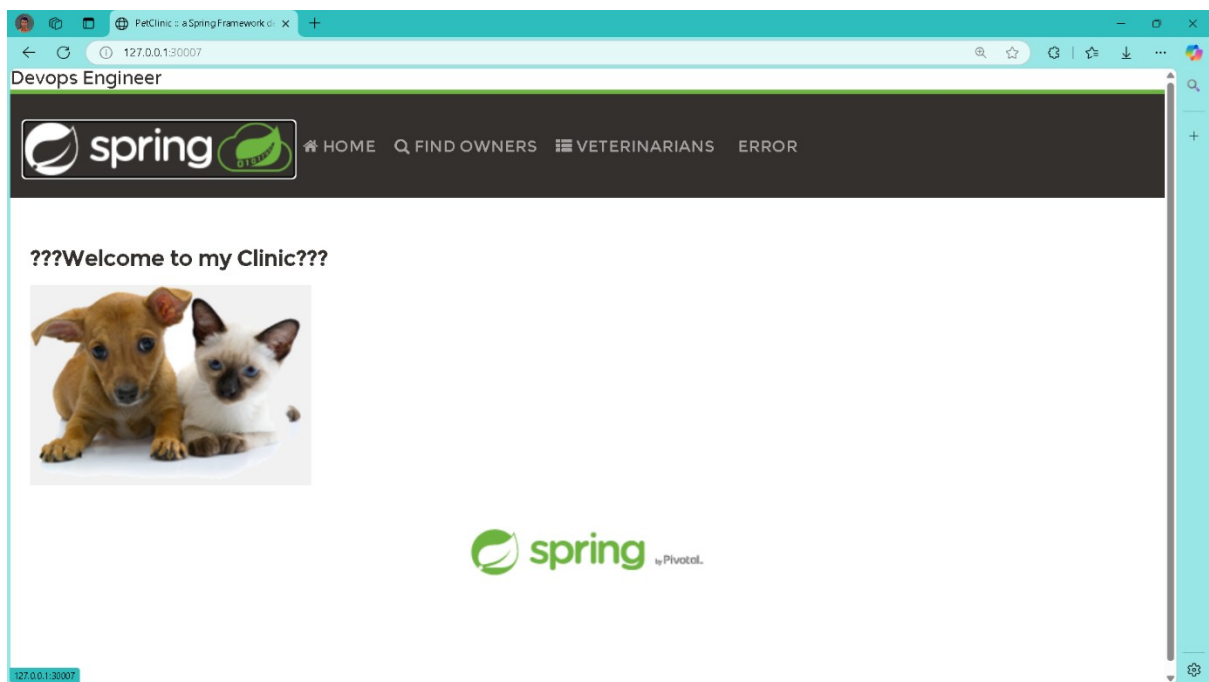
COMMANDS:

- `nano spring-deployment.yaml`
Opens the Kubernetes deployment configuration file in the nano text editor, allowing you to create or edit the deployment specifications.
- `kubectl apply -f spring-deployment.yaml`
Applies the configuration defined in the YAML file to your Kubernetes cluster, creating or updating resources like deployments and services.
- `minikube service bookdir-app-service`
Exposes the service in your minikube cluster, making it accessible and providing the URL to access the application.
- `kubectl port-forward service/bookdir-app-service 30007:8080`
Sets up port forwarding from your local machine's port 30007 to the service's port 8080 in the Kubernetes cluster, allowing you to access the application via localhost.

spring-deployment.yaml

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: bookdir-app-deployment
spec:
  replicas: 2
  selector:
    matchLabels:
      app: bookdir-app
  template:
    metadata:
      labels:
        app: bookdir-app
    spec:
      containers:
        - name: bookdir-app
          image: giridharans1729/social-app:latest
          imagePullPolicy: Always
          ports:
            - containerPort: 8080
---
```

```
apiVersion: v1
kind: Service
metadata:
  name: bookdir-app-service
spec:
  selector:
    app: bookdir-app
  ports:
    - protocol: TCP
      port: 80
      targetPort: 8080
      nodePort: 30007
  type: NodePort
```



The successfully deployed Spring PetClinic application in a browser, confirming that your CI/CD pipeline and Kubernetes deployment worked, though there's a formatting issue with the welcome message.