DEPLOY IN KUBERNETES CLUSTER

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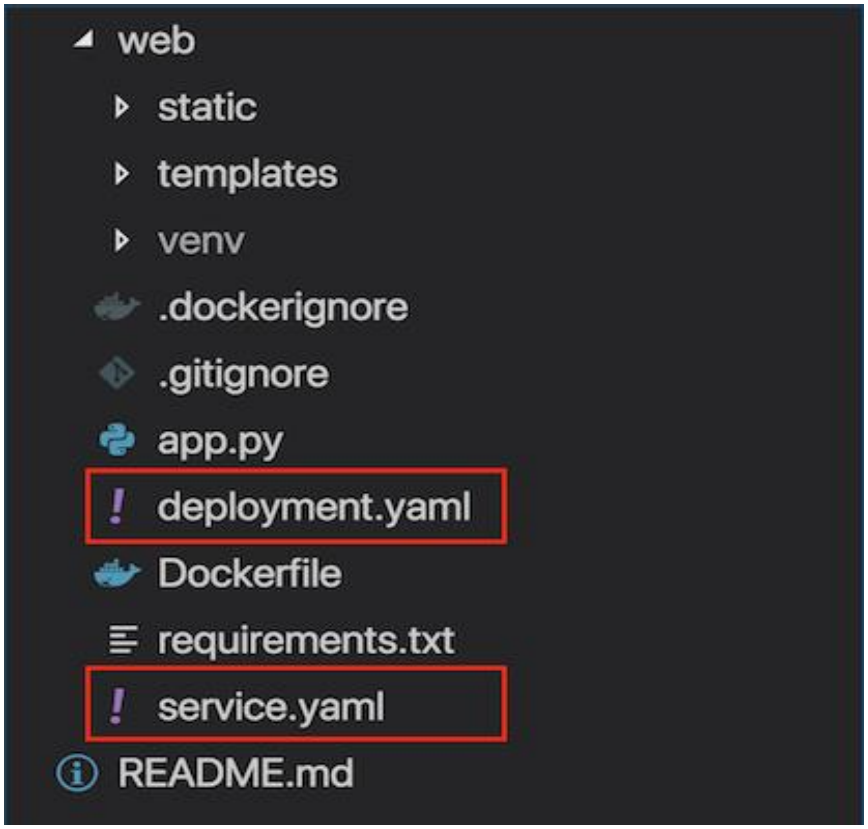
CREATE CONFIGURATION FILES FOR KUBERNETES

STEP 1: Once the image is successfully uploaded to the private registry, go to your project directory and create two files: deployment.yaml and service.yaml.



STEP 2 : In the deployment.yaml file, paste this code:

```
apiVersion: extensions/v1beta1
 kind: Deployment
 metadata:
   name: flask-node-deployment
 spec:
   replicas: 1
   selector:
     matchLabels:
       app: flasknode
   template:
     metadata:
       labels:
         app: flasknode
     spec:
       containers:
```

```
    - name: flasknode
      image: registry.ng.bluemix.net/flask-node/app
      imagePullPolicy: Always
      ports:
      - containerPort: 5000
```

STEP 3 : In the service.yaml file, paste this code:

```
apiVersion: v1
 kind: Service
 metadata:
   name: flask-node-deployment
 spec:
   ports:
   - port: 5000
     targetPort: 5000
   selector:
     app: flasknode
```

DEPLOY YOUR APPLICATION TO KUBERNETES :

STEP 1 : Target the IBM Cloud Kubernetes Service region where you want to work.

ibmcloud cs region-set uk-south

STEP 2 : Set the context for the cluster in your CLI.

a. Get the command to set the environment variable and download the Kubernetes configuration files.

ibmcloud cs cluster-config cluster_kunal

b. Set the KUBECONFIG environment variable. Copy the output from the previous command and paste it in your terminal. The command output should look similar to the following.

> export KUBECONFIG=/Users/$USER/.bluemix/plugins/container-service/clusters/< cluster_name >/< cluster_configuration_file.yaml>

STEP 3 : Verify that you can connect to your cluster by listing your worker nodes.

kubectl get nodes

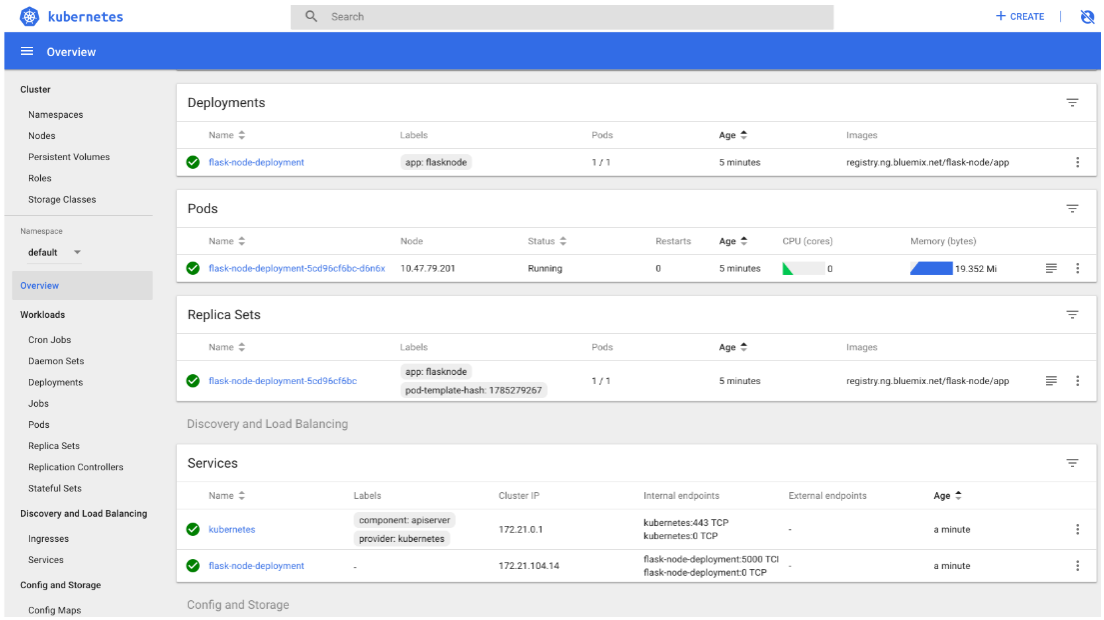
STEP 4 : Create the deployment.

kubectl create -f deployment.yaml

STEP 5 : Create the service.

kubectl create -f service.yaml

STEP 6 : Look at the Kubernetes dashboard from the IBM Kubernetes Service overview page.



STEP 7 : Finally, go to your browser and ping the Public IP of your worker node.