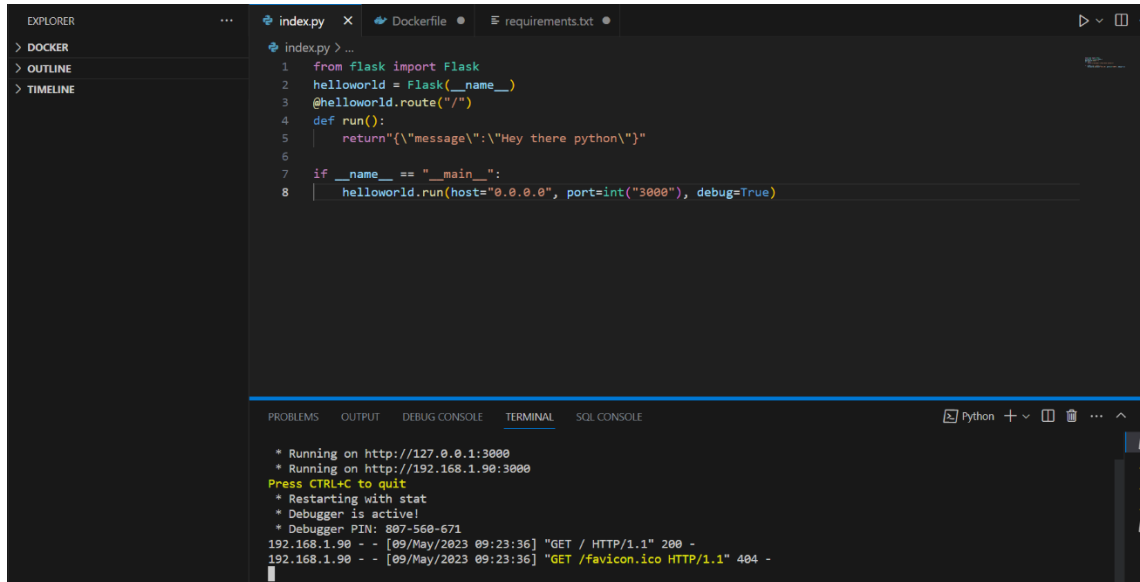


Project Deployment using Kubernetes

- Python file

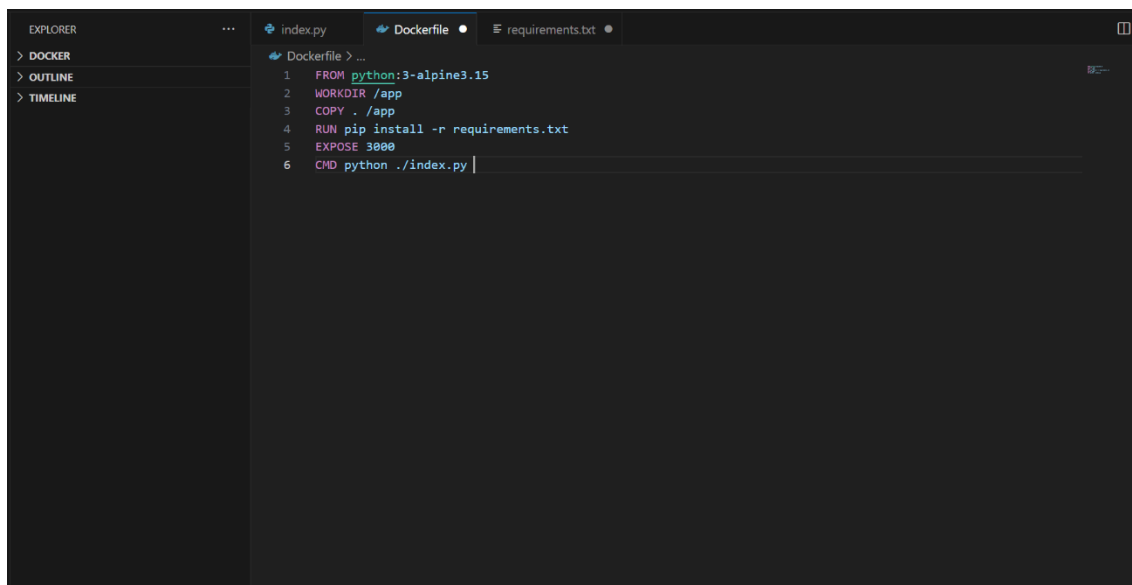


The screenshot shows a VS Code editor with three tabs: `index.py`, `Dockerfile`, and `requirements.txt`. The `index.py` tab is active, displaying a Flask application. The terminal at the bottom shows the application running on `http://127.0.0.1:3000` and `http://192.168.1.90:3000`, with a `GET /favicon.ico` request returning a 404 status.

```
1 from flask import Flask
2 helloworld = Flask(__name__)
3 @helloworld.route("/")
4 def run():
5     return {"message": "Hey there python"}
6
7 if __name__ == "__main__":
8     helloworld.run(host="0.0.0.0", port=int("3000"), debug=True)
```

```
* Running on http://127.0.0.1:3000
* Running on http://192.168.1.90:3000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 887-568-671
192.168.1.90 - - [09/May/2023 09:23:36] "GET / HTTP/1.1" 200 -
192.168.1.90 - - [09/May/2023 09:23:36] "GET /favicon.ico HTTP/1.1" 404 -
```

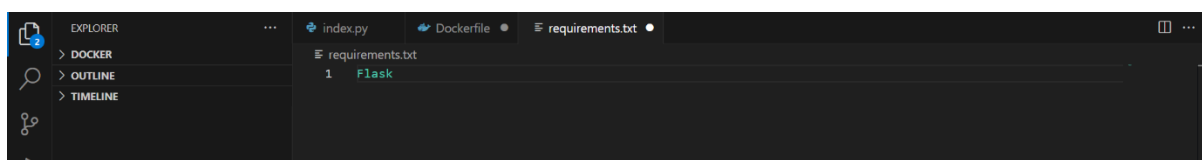
- Docker File



The screenshot shows a VS Code editor with three tabs: `index.py`, `Dockerfile`, and `requirements.txt`. The `Dockerfile` tab is active, displaying the Dockerfile content.

```
1 FROM python:3-alpine3.15
2 WORKDIR /app
3 COPY . /app
4 RUN pip install -r requirements.txt
5 EXPOSE 3000
6 CMD python ./index.py
```


- Requirements





The screenshot shows a VS Code editor with three tabs: `index.py`, `Dockerfile`, and `requirements.txt`. The `requirements.txt` tab is active, displaying the requirements content.

```
1 Flask
```



```
PS C:\Users\User\Desktop\Docker> kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
flask-6f4f9ffb76-m54fh    1/1     Running   0           3h3m
mysqldb-7ffffd74d4-zdc88  0/1     CreateContainerConfigError 0           3h2m
PS C:\Users\User\Desktop\Docker> kubectl run flask-6f4f9ffb76-m54fh/pythonimage:latest --port==5000
error: required flag(s) "image" not set
PS C:\Users\User\Desktop\Docker> kubectl run flask-6f4f9ffb76-m54fh --image=simran2711/pythonimage:latest --port==5000
error: Invalid image name "simran2711/pythonimage:latest": invalid reference format
PS C:\Users\User\Desktop\Docker> docker tag pythonimage simran2711/simran2711/indeximage:latest
PS C:\Users\User\Desktop\Docker> docker push simran2711/indeximage:latest
The push refers to repository [docker.io/simran2711/indeximage]
da9765c9f539: Mounted from simran2711/docker
9ac05d67292f: Mounted from simran2711/docker
712f788756bc: Mounted from simran2711/docker
0c5c99074fa8: Mounted from simran2711/docker
eb71c8b7b3b7: Mounted from simran2711/docker
76d682e14461: Mounted from simran2711/docker
d59c8eb8f9a4: Mounted from simran2711/docker
34d5ebaa5410: Mounted from simran2711/docker
latest: digest: sha256:f3f71acb49ed785798790cb3c23d6014de90bb0e9ed2ef635c154e323e9b3472 size: 1997
PS C:\Users\User\Desktop\Docker>
```

 **simran2711 / indeximage**

Description
This repository does not have a description 

 Last pushed: a few seconds ago

Tags
This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
 latest		Image	---	a few seconds ago


[See all](#) [Go to Advanced Image Management](#)

Docker commands [Public View](#)

To push a new tag to this repository,

```
docker push simran2711/indeximage:tagname
```

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Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

Available with Pro, Team and Business subscriptions. [Read more about automated builds](#)  [Upgrade](#)

```
PS C:\Users\User\Desktop\Docker> kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
flask-6f4f9ffb76-m54fh    1/1     Running   0           3h10m
mysqldb-7ffffd74d4-zdc88  0/1     CreateContainerConfigError 0           3h10m
PS C:\Users\User\Desktop\Docker> kubectl run flask-6f4f9ffb76-m54fh --image=simran2711/indeximage:latest --port==5000
error: Invalid image name "simran2711/indeximage:latest": invalid reference format
PS C:\Users\User\Desktop\Docker> kubectl run flask-6f4f9ffb76-m54fh --image=simran2711/docker:latest --port==5000
error: Invalid image name "simran2711/docker:latest": invalid reference format
PS C:\Users\User\Desktop\Docker> kubectl run flask-6f4f9ffb76-m54fh --image=simran2711/docker:latest --port==5000
error: strconv.Atoi: parsing "5000": invalid syntax
PS C:\Users\User\Desktop\Docker> kubectl run flask-6f4f9ffb76-m54fh --image=simran2711/docker:latest --port=5000
Error from server (AlreadyExists): pods "flask-6f4f9ffb76-m54fh" already exists
PS C:\Users\User\Desktop\Docker> kubectl run pod1 --image=simran2711/docker:latest --port==5000
error: Invalid image name "simran2711/docker:latest": invalid reference format
PS C:\Users\User\Desktop\Docker> kubectl run pod1 --image=simran2711/docker:latest --port=5000
pod/pod1 created
PS C:\Users\User\Desktop\Docker> kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
```

```
PS C:\Users\User\Desktop\Docker> kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
flask-6f4f9ffb76-m54fh    1/1     Running   0           3h15m
mysqlb-7ffffd74d4-zdc88   0/1     CreateContainerConfigError 0           3h14m
pod1           0/1     ContainerCreating 0            9s
PS C:\Users\User\Desktop\Docker> kubectl expose pod pod1 --name=pod1svc --port=5000
service/pod1svc exposed
PS C:\Users\User\Desktop\Docker> kubectl get svc
NAME         TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)    AGE
kubernetes   ClusterIP   10.96.0.1     <none>         443/TCP    43h
mysql        ClusterIP   10.106.10.243 <none>         3306/TCP   3h15m
pod1svc      ClusterIP   10.110.185.252 <none>         5000/TCP   10s
web1svc      ClusterIP   10.102.25.62  <none>         5000/TCP   3h9m
PS C:\Users\User\Desktop\Docker> kubectl port-forward service/pod1svc 5000:5000
Forwarding from 127.0.0.1:5000 -> 5000
Forwarding from [::1]:5000 -> 5000
```