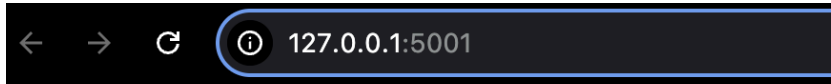


Final Exam - Fix App Outputs

Name: Hanil Zarbailov

After fixing the app.py file and running the app locally:



Running EC2 Instances

ID	State	Type	Public IP
i-04c626ffece0d241b	running	t3.medium	54.161.131.247
i-0452289e4262900bc	running	t4g.medium	34.207.125.155
i-0476ccfb8b6903df0	running	t3.medium	54.164.16.229
i-0cde8ebc1591e22c8	running	t3.medium	34.238.39.188
i-09f0f850867de3b36	running	t3.medium	3.239.180.126
i-0dceafa917df59f88	running	t3.medium	3.239.188.109
i-09cfce9052177f0b9	running	t3.medium	3.235.155.70
i-065aaaa2177e13008	terminated	t3.medium	N/A
i-03634a73a0c7b3301	running	t3.medium	3.219.215.180
i-0ee8e5026c4af6cf1	running	t4g.medium	44.200.53.30
i-0c0966db60aad496	running	t3.medium	3.89.81.217
i-0d1f41cc74cf17260	running	t3.medium	3.236.186.248
i-0642c6787ab7c56e9	running	t3.medium	44.192.109.161
i-009006cf8fc393f2c	running	t3.medium	34.231.255.8
i-0b78771567ef067d8	running	t3.medium	3.239.197.40
i-0b1664a23e6ebf2c6	running	t3.medium	3.239.170.16
i-0c4e923066b99e1be	running	t3.medium	54.236.59.109
i-0e1b6619a95b36ad9	running	t3.medium	3.236.186.219
i-0683b6972f83166b1	running	t3.medium	98.80.202.61
i-09f9a1a10d300acf8	running	t3.medium	98.84.42.110
i-07ed3ce2143261483	running	t3.medium	3.239.106.200
i-00d8aea4fc8da2958	running	t3.medium	44.220.251.124
i-075c9ac8688269d81	running	t3.medium	3.92.48.226
i-0998ef48512c2b6b9	running	t3.medium	44.211.124.5
i-03150d7625ae55798	running	t3.medium	34.228.210.179

VPCs

VPC ID	CIDR
vpc-044604d0bfb707142	172.31.0.0/16

Load Balancers

LB Name	DNS Name
---------	----------

Available AMIs

AMI ID	Name
ami-09538f653a1b556ed	daniel-ec2-image
ami-0ecc0e0d5986a576d	terraform-workshop-image-do-not-delete
ami-0565d81d4e11c58aa	guy-ec2-image

Docker build and run in instance:

build:

```

```
ubuntu@ip-172-31-4-198:~/matrix-finalexam$ git fetch --all
Fetching origin
remote: Enumerating objects: 14, done.
remote: Counting objects: 100% (14/14), done.
remote: Compressing objects: 100% (9/9), done.
remote: Total 10 (delta 3), reused 8 (delta 1), pack-reused 0 (from 0)
Unpacking objects: 100% (10/10), 326.98 KiB | 5.84 MiB/s, done.
From https://github.com/hanilz/matrix-finalexam
 fd9c444..a336bf6 docker -> origin/docker
 3e250bb..a336bf6 dev -> origin/dev
* [new branch] fix-app -> origin/fix-app
ubuntu@ip-172-31-4-198:~/matrix-finalexam$ git pull --all
Fetching origin
Updating fd9c444..a336bf6
Fast-forward
```

```
README.md | 4 +++-
docker/final_exam_docker_outputs.pdf | Bin 0 -> 369061 bytes
docker/readme.md | 82
```

```
+++++
```

```
3 files changed, 17 insertions(+), 69 deletions(-)
create mode 100644 docker/final_exam_docker_outputs.pdf
ubuntu@ip-172-31-4-198:~/matrix-finalexam$ git checkout fix-app
Branch 'fix-app' set up to track remote branch 'fix-app' from 'origin'.
Switched to a new branch 'fix-app'
ubuntu@ip-172-31-4-198:~/matrix-finalexam$ ll
total 28
drwxrwxr-x 6 ubuntu ubuntu 4096 Mar 17 11:56 ./
drwxr-x--- 5 ubuntu ubuntu 4096 Mar 17 10:46 ../
drwxrwxr-x 8 ubuntu ubuntu 4096 Mar 17 11:56 .git/
-rw-rw-r-- 1 ubuntu ubuntu 283 Mar 17 11:56 README.md
drwxrwxr-x 2 ubuntu ubuntu 4096 Mar 17 11:56 docker/
drwxrwxr-x 2 ubuntu ubuntu 4096 Mar 17 11:56 fix-app/
drwxrwxr-x 2 ubuntu ubuntu 4096 Mar 17 10:46 terraform/
ubuntu@ip-172-31-4-198:~/matrix-finalexam$ cd fix-app/
ubuntu@ip-172-31-4-198:~/matrix-finalexam/fix-app$ ll
total 24
drwxrwxr-x 2 ubuntu ubuntu 4096 Mar 17 11:56 ./
drwxrwxr-x 6 ubuntu ubuntu 4096 Mar 17 11:56 ../
-rw-rw-r-- 1 ubuntu ubuntu 343 Mar 17 11:56 Dockerfile
-rw-rw-r-- 1 ubuntu ubuntu 2886 Mar 17 11:56 app.py
-rw-rw-r-- 1 ubuntu ubuntu 884 Mar 17 11:56 readme.md
-rw-rw-r-- 1 ubuntu ubuntu 27 Mar 17 11:56 requirements.txt
ubuntu@ip-172-31-4-198:~/matrix-finalexam/fix-app$ docker build -t flask-fix-test .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with BuildKit:
https://docs.docker.com/go/buildx/
```

```
Sending build context to Docker daemon 8.192kB
Step 1/10 : FROM python:3.9 AS builder
--> 9f98746e2033
Step 2/10 : WORKDIR /app
--> Using cache
--> ce71534cfb72
Step 3/10 : COPY requirements.txt .
--> Using cache
--> e96121a4b712
Step 4/10 : RUN pip install --no-cache-dir --upgrade pip && pip install --no-cache-dir
--prefix=/install -r requirements.txt
--> Using cache
--> a804202ca9da
Step 5/10 : FROM python:3.9-slim
--> 1a47c1aaa88f
Step 6/10 : WORKDIR /app
```

```
---> Using cache
---> 57d37b1544ff
Step 7/10 : COPY --from=builder /install /usr/local
---> Using cache
---> 15612b1e5a5b
Step 8/10 : COPY . .
---> 7901b36adea7
Step 9/10 : EXPOSE 5001
---> Running in fb77762cf310
---> Removed intermediate container fb77762cf310
---> 29056ddb8996
Step 10/10 : CMD ["python", "app.py"]
---> Running in 3da02f6a39dc
---> Removed intermediate container 3da02f6a39dc
---> ddf9a80ac2f8
Successfully built ddf9a80ac2f8
Successfully tagged flask-fix-test:latest
...
```

#### Run:

**NOTE: I ran the necessary exports before running this command to securely use environment variables!**

```
...
ubuntu@ip-172-31-4-198:~/matrix-finalexam/docker$ docker run -p 5001:5001 -e
AWS_ACCESS_KEY_ID=$AWS_ACCESS_KEY_ID -e
AWS_SECRET_ACCESS_KEY=$AWS_SECRET_ACCESS_KEY flask-fix-test
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a
production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5001
* Running on http://172.17.0.2:5001
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 123-213-204
...
```

## Screenshots of fixed app running in browser:



Not Secure

3.89.81.217:5001

# Running EC2 Instances

| ID                  | State   | Type       | Public IP      |
|---------------------|---------|------------|----------------|
| i-04c626ffece0d241b | running | t3.medium  | 54.161.131.247 |
| i-0452289e4262900bc | running | t4g.medium | 34.207.125.155 |
| i-0476ccfb8b6903df0 | running | t3.medium  | 54.164.16.229  |
| i-0cde8ebc1591e22c8 | running | t3.medium  | 34.238.39.188  |
| i-09f0f850867de3b36 | running | t3.medium  | 3.239.180.126  |
| i-0dceafa917df59f88 | running | t3.medium  | 3.239.188.109  |
| i-09cfce9052177f0b9 | running | t3.medium  | 3.235.155.70   |
| i-03634a73a0c7b3301 | running | t3.medium  | 3.219.215.180  |
| i-0ee8e5026c4af6cf1 | running | t4g.medium | 44.200.53.30   |
| i-0c0966db60aad496  | running | t3.medium  | 3.89.81.217    |
| i-0d1f41cc74cf17260 | running | t3.medium  | 3.236.186.248  |
| i-0642c6787ab7c56e9 | running | t3.medium  | 44.192.109.161 |
| i-009006cf8fc393f2c | running | t3.medium  | 34.231.255.8   |
| i-0b78771567ef067d8 | running | t3.medium  | 3.239.197.40   |
| i-0b1664a23e6ebf2c6 | running | t3.medium  | 3.239.170.16   |
| i-0c4e923066b99e1be | running | t3.medium  | 54.236.59.109  |
| i-0e1b6619a95b36ad9 | running | t3.medium  | 3.236.186.219  |
| i-0683b6972f83166b1 | running | t3.medium  | 98.80.202.61   |
| i-09f9a1a10d300acf8 | running | t3.medium  | 98.84.42.110   |
| i-07ed3ce2143261483 | running | t3.medium  | 3.239.106.200  |
| i-00d8aea4fc8da2958 | running | t3.medium  | 44.220.251.124 |
| i-075c9ac8688269d81 | running | t3.medium  | 3.92.48.226    |
| i-0998ef48512c2b6b9 | running | t3.medium  | 44.211.124.5   |
| i-03150d7625ae55798 | running | t3.medium  | 34.228.210.179 |

# VPCs

| VPC ID                | CIDR          |
|-----------------------|---------------|
| vpc-044604d0bfb707142 | 172.31.0.0/16 |

# Load Balancers

| LB Name | DNS Name |
|---------|----------|
|---------|----------|

# Available AMIs

| AMI ID                | Name                                   |
|-----------------------|----------------------------------------|
| ami-0ecc0e0d5986a576d | terraform-workshop-image-do-not-delete |
| ami-09538f653a1b556ed | daniel-ec2-image                       |
| ami-0565d81d4e11c58aa | guy-ec2-image                          |