

Commands used for deploying the flask application on the ec2 instance

Install Docker on EC2 instance

```
#To install docker on EC2:
sudo amazon-linux-extras install docker

sudo yum install docker

#start to docker service
sudo service docker start

#change the user permissions
sudo usermod -a -G docker ec2-user
```

Copy the files to EC2 Instance

```
>>scp -i SDK_keys.pem model\ deployment\ files/requirements.txt
ec2-user@ec2-54-160-80-35.compute-1.amazonaws.com:/home/ec2-user
>>scp -i SDK_keys.pem model\ deployment\ files/model_age_sc01.pkl
ec2-user@ec2-54-160-80-35.compute-1.amazonaws.com:/home/ec2-user
>>scp -i SDK_keys.pem model\ deployment\ files/model_gender_sc01.pkl
ec2-user@ec2-54-160-80-35.compute-1.amazonaws.com:/home/ec2-user
>>scp -i SDK_keys.pem model\ deployment\ files/Dockerfile
ec2-user@ec2-54-160-80-35.compute-1.amazonaws.com:/home/ec2-user
>>scp -i SDK_keys.pem model\ deployment\ files/app.py
ec2-user@ec2-54-160-80-35.compute-1.amazonaws.com:/home/ec2-user
>>scp -i SDK_keys.pem model\ deployment\ files/templates/index.html
ec2-user@ec2-54-160-80-35.compute-1.amazonaws.com:/home/ec2-user
scp -i SDK_keys.pem model\ deployment\ files/Test_csv_50.csv
ec2-user@ec2-54-160-80-35.compute-1.amazonaws.com:/home/ec2-user
```

Build and run the docker image

```
sudo chmod 666 /var/run/docker.sock

#build docker image
docker build -t genderagepredict .

docker run -p 5000:5000 genderagepredict
```

The screenshot of the final output for predicting the campaigns for the 50 customers

	Device_id	Gender_predicted_probab	Age_predicted	Gender	Selected campaign (Based on Gender)	Selected campaign (Based on Age)
0	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
1	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
2	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
3	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
4	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
5	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
6	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
7	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
8	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
9	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
10	3664197211064620000	0.000003	[36]	M	Campaign 3	Campaign 6
11	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
12	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
13	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
14	7901567308091950000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
15	3664197211064620000	0.000003	[36]	M	Campaign 3	Campaign 6
16	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
17	3864672045456310000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
18	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
19	3864672045456310000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
20	6072749575904930000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
21	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
22	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
23	2366047595700040000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
24	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
25	8808776377817700000	0.000003	[36]	M	Campaign 3	Campaign 6
26	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
27	4152972437347800000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
28	6645298727498060000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
29	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
30	3396214697706440000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
31	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
32	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
33	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
34	3864672045456310000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
35	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
36	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
37	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
38	3864672045456310000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
39	3864672045456310000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
40	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
41	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
42	3420118953158270000	0.000003	[36]	M	Campaign 3	Campaign 6
43	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
44	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
45	3926780516486000000	0.000003	[36]	M	Campaign 3	Campaign 6
46	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
47	3801125596591300000	0.000003	[36]	M	Campaign 3	Campaign 6
48	7430743708779660000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
49	6072749575904930000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5

Above screenshot taken on local. After running above commands on EC2 we deployed the flask application successfully.

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	Device_id	Gender_predicted_probab	Age_predicted	Gender	Selected campaign (Based on Gender)	Selected campaign (Based on Age)
0	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
1	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
2	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
3	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
4	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
5	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
6	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
7	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
8	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
9	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
10	-3664197211064620000	0.000003	[36]	M	Campaign 3	Campaign 6
11	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
12	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
13	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
14	7901567308091950000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
15	-3664197211064620000	0.000003	[36]	M	Campaign 3	Campaign 6
16	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
17	3864672045456310000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
18	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
19	3864672045456310000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
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21	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
22	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
23	2366047595700040000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
24	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
25	-8808776377817700000	0.000003	[36]	M	Campaign 3	Campaign 6
26	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
27	4152972437347800000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
28	6645298727498060000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
29	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
30	3396214697706440000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
31	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
32	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
33	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
34	3864672045456310000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
35	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
36	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
37	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
38	3864672045456310000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
39	3864672045456310000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5
40	9125896648976320000	0.999980	[25]	F	Campaign 1 and Campaign 2	Campaign 5