

# Data Intake Report

Name: Flask App Deployment

Report date: 2-08-2022

Internship Batch: LIMSUM11: 30

Version:1.0

Data intake by: Aliyu Nasir Maharaz

Data intake reviewer:

Data storage location: [https://github.com/MaharazAliyu/Simple\\_Flask\\_Deployment](https://github.com/MaharazAliyu/Simple_Flask_Deployment)

## Tabular data details:

Total number of observations	29
Total number of files	1
Total number of features	2
Base format of the file	.CSV
Size of the data	4 KB

## Stage 1: Creating a virtual environment

```
env — flask run — 98x29
Resolving deltas: 100% (13/13), done.
aliyunasir@Aliyus-MacBook-Pro git-repo % ls
DataSets          SpaceX-Falcon9-Stage1  VC          flask-salary-predictor
aliyunasir@Aliyus-MacBook-Pro git-repo % cd flask-salary-predictor
aliyunasir@Aliyus-MacBook-Pro flask-salary-predictor % python3 -m venv env
aliyunasir@Aliyus-MacBook-Pro flask-salary-predictor % source env/bin activate
aliyunasir@Aliyus-MacBook-Pro flask-salary-predictor % cd env
aliyunasir@Aliyus-MacBook-Pro env % source bin/activate
(env) aliyunasir@Aliyus-MacBook-Pro env % ls
bin          include          lib          pyvenv.cfg
(env) aliyunasir@Aliyus-MacBook-Pro env % pip install -r requirement.txt
ERROR: Could not open requirements file: [Errno 2] No such file or directory: 'requirement.txt'
WARNING: You are using pip version 20.1.1; however, version 22.2.2 is available.
You should consider upgrading via the '/Users/aliyunasir/git-repo/flask-salary-predictor/env/bin/python3 -m pip install --upgrade pip' command.
(env) aliyunasir@Aliyus-MacBook-Pro env % pip install -r requirement.txt
Collecting numpy
  Using cached numpy-1.23.1-cp38-cp38-macosx_10_9_x86_64.whl (18.1 MB)
Collecting sklearn
  Using cached sklearn-0.0.tar.gz (1.1 kB)
Collecting requests
  Downloading requests-2.28.1-py3-none-any.whl (62 kB)
    |#####| 62 kB 1.9 MB/s
Collecting flask
  Downloading Flask-2.2.1-py3-none-any.whl (101 kB)
    |#####| 101 kB 2.4 MB/s
Collecting gunicorn
  Downloading gunicorn-20.1.0-py3-none-any.whl (79 kB)
    |#####| 79 kB 2.9 MB/s
```

## Stage 2: Installing packages (requirement.txt)

```
env — flask run — 98x29
python3 -m pip install --upgrade pip' command.
(env) aliyunasir@Aliyus-MacBook-Pro env % pip install -r requirement.txt
Collecting numpy
  Using cached numpy-1.23.1-cp38-cp38-macosx_10_9_x86_64.whl (18.1 MB)
Collecting sklearn
  Using cached sklearn-0.0.tar.gz (1.1 kB)
Collecting requests
  Downloading requests-2.28.1-py3-none-any.whl (62 kB)
    |████████████████████| 62 kB 1.9 MB/s
Collecting flask
  Downloading Flask-2.2.1-py3-none-any.whl (101 kB)
    |████████████████████| 101 kB 2.4 MB/s
Collecting gunicorn
  Downloading gunicorn-20.1.0-py3-none-any.whl (79 kB)
    |████████████████████| 79 kB 2.9 MB/s
Collecting scikit-learn
  Downloading scikit_learn-1.1.2-cp38-cp38-macosx_10_9_x86_64.whl (8.6 MB)
    |████████████████████| 8.6 MB 1.7 MB/s
Collecting certifi>=2017.4.17
  Using cached certifi-2022.6.15-py3-none-any.whl (160 kB)
Collecting urllib3<1.27,>=1.21.1
  Using cached urllib3-1.26.11-py2.py3-none-any.whl (139 kB)
Collecting charset-normalizer<3,>=2
  Downloading charset_normalizer-2.1.0-py3-none-any.whl (39 kB)
Collecting idna<4,>=2.5
  Using cached idna-3.3-py3-none-any.whl (61 kB)
Collecting importlib-metadata>=3.6.0; python_version < "3.10"
  Using cached importlib_metadata-4.12.0-py3-none-any.whl (21 kB)
Collecting Werkzeug>=2.2.0
```

## Stage 3: Model.py

```
This model predicts the salary of the employ based on experience using simple linear regression model.
'''
'''

# Importing the libraries
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
import pickle
import requests
import json

# Importing the dataset
dataset = pd.read_csv('Salary_Data.csv')
X = dataset.iloc[:, :-1].values
y = dataset.iloc[:, 1].values

# Splitting the dataset into the Training set and Test set
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=1/3, random_state=0)

# Fitting Simple Linear Regression to the Training set
from sklearn.linear_model import LinearRegression
regressor = LinearRegression()
regressor.fit(X_train, y_train)

# Predicting the Test set results
y_pred = regressor.predict(X_test)

# Saving model using pickle
pickle.dump(regressor, open('model.pkl_x', 'wb'))

# Loading model to compare the results
model = pickle.load(open('model.pkl_x', 'rb'))
print(model.predict([[1.8]]))

'''
'''

This model was forked from https://github.com/vyashemang/flask-salary-predictor/
```

## Stage 4 app.y

```
ME.md x index.html x app.py x pyvenv.cfg x model.py x
import numpy as np
from flask import Flask, request, jsonify, render_template
import pickle

app = Flask(__name__)
model = pickle.load(open('model.pkl', 'rb'))

@app.route('/')
def home():
    return render_template('index.html')

@app.route('/salary', methods=['POST'])
def salary():
    '''
    For rendering results on HTML GUI
    '''
    features = [int(x) for x in request.form.values()]
    final_features = [np.array(features)]
    prediction = model.predict(final_features)

    output = round(prediction[0], 2)

    return render_template('index.html', prediction_text='Salary is {}'.format(output))

if __name__ == "__main__":
    app.run(debug=True)
```

## Stage 5: Export FLASK\_APP as app.py

```
env — flask run — 98x29
python3 -m pip install --upgrade pip' command.
(env) aliyunasir@Aliyus-MacBook-Pro env % export FLASK_APP=app.py
(env) aliyunasir@Aliyus-MacBook-Pro env % flask run
Traceback (most recent call last):
  File "/Users/aliyunasir/git-repo/flask-salary-predictor/env/bin/flask", line 8, in <module>
    sys.exit(main())
  File "/Users/aliyunasir/git-repo/flask-salary-predictor/env/lib/python3.8/site-packages/flask/cli.py", line 1054, in main
    cli.main()
```

## Stage 6: Deploy App

```
(env) aliyunasir@Aliyus-MacBook-Pro env % flask run
WARNING: This is a development server. Do not use it in a production deployment. Use a production
WSGI server instead.
* Serving Flask app 'app.py'
* Debug mode: off
* Running on http://127.0.0.1:5000 (Press CTRL+C to quit)
127.0.0.1 - - [07/Aug/2022 13:56:30] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [07/Aug/2022 13:56:30] "GET /static/style.css HTTP/1.1" 304 -
127.0.0.1 - - [07/Aug/2022 13:56:30] "GET /static/bootstrap.min.css HTTP/1.1" 304 -
127.0.0.1 - - [07/Aug/2022 13:56:35] "POST /salary HTTP/1.1" 200 -
127.0.0.1 - - [07/Aug/2022 13:56:35] "GET /static/style.css HTTP/1.1" 304 -
127.0.0.1 - - [07/Aug/2022 13:56:35] "GET /static/bootstrap.min.css HTTP/1.1" 304 -
```