

EXECUTE AND TEST YOUR MODULE

Date	19 November 2022
Team ID	PNT2022TMID27643
Project Name	Flight Delay Prediction Using Machine Learning

SCREENSHOT:

EXECUTION:

The screenshot displays the Spyder Python IDE interface. The main editor window shows a Python script named `app.py` located at `C:\Users\HP\OneDrive\Pictures\Screenshots\code\app.py`. The script defines a Flask application with a `predict_api` endpoint. It uses the `requests` library to send a POST request to a cloud ML endpoint and the `model.predict` method for local predictions. The output is rendered as an HTML response. The right-hand pane contains the `Variable Explorer` and the `Python Console`. The console shows the output of the `runfile` command, indicating that the application is running on `http://127.0.0.1:5000/`.

```
37 final_features=[int(x) for x in farr]
38 print(final_features)
39 payload_scoring = {"input_data": [{"fields": [{"QUARTER", "MONTH", "DAY_OF_MONTH", "DAY_OF_WEEK", "FL_NUM", "ORIGIN", "DEST",
40
41
42 response_scoring = requests.post('https://us-south-1.cloud.ibm.com/ml/v4/deployments/g111103a-c6dc-4933-bc5a-5db8cc45c
43 print("Scoring response")
44 pred=response_scoring.json()
45 print(pred)
46 prediction=pred['predictions'][0]['values'][0][0]
47 prediction = model.predict([final_features])
48 print(prediction)
49
50 output =prediction
51
52 if output==0:
53     return render_template('mainpage.html', prediction_text='No delay will happen {}'.format(output))
54 elif output==1:
55     return render_template('mainpage.html', prediction_text='There is a chance to departure delay will happen {}'.forma
56 elif output==2:
57     return render_template('mainpage.html', prediction_text='here is a chance to both departure and arrival delay will
58 elif output==3:
59     return render_template('mainpage.html', prediction_text='here is a chance to flight will diverted {}'.format(outpu
60 elif output==4:
61     return render_template('mainpage.html', prediction_text='here is a chance to cancel the flight {}'.format(output))
62 else:
63     return render_template('mainpage.html', prediction_text='output {}'.format(output))
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```

Python 3.9.13 (main, Aug 25 2022, 23:51:50) [MSC v.1916 64 bit (AMD64)]
Type "copyright", "credits" or "license()" for more information.

IPython 7.31.1 -- An enhanced Interactive Python.
In [1]: runfile('C:/Users/HP/OneDrive/Pictures/Screenshots/code/
app_ibm.py', wdir='C:/Users/HP/OneDrive/Pictures/Screenshots/code')
* Serving Flask app "app_ibm" (lazy loading)
* Environment: development
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)

LOGIN PAGE:

Prediction of Flight Delay

Enter the flight number:	<input type="text"/>
Month:	<input type="text"/>
Day of Month:	<input type="text"/>
Day of Week:	<input type="text"/>
Origin:	<input type="text" value="ATL"/>
Destination:	<input type="text" value="ATL"/>
Scheduled Arrival Time:	<input type="text"/>
Scheduled Arrival Time:	<input type="text"/>
Scheduled Departure Time:	<input type="text"/>
Actual Departure Time:	<input type="text"/>

{{predict}}