

SPRINT-1

Date	06-11-2022
Team ID	PNT2022TMID43039
Project Name	Developing a flight delay prediction

FLASK:

```
from flask import Flask ,request,render_template

import numpy as np

import pandas as pd

import pickle

import os

model=pickle.load(open('flight.pkl','rb'))

app=Flask(__name__)

@app.route('homepage.html')

def home():

    return render_template("index.html")

@app.route('/prediction',methods=['POST'])

def predict():

    name=request.form['name']

    month=request.form['month']

    dayofmonth = request .form['dayofmonth']

    dayofweek = request.form['origin']

    if(origin1=="msp"):

        origin1,origin2,origin3,origin4,origin5 = 0,0,0,0,1

    if(origin2 == "dtw"):

        origin1,origin2,origin3,origin4,origin5= 1,0,0,0,0
```

```
if(origin3== "jfk"):
    origin1,origin2,origin3,origin4,origin5 = 0,0,1,0,0
if(origin4 == "sea"):
    origin1,origin2,origin3,origin4,origin5 = 0,1,0,0,0
if(origin5 == "alt"):
    origin1,origin2,origin3,origin4,origin5 = 0,0,0,1,0
```

```
destination = request.form['destination']
```

```
if(destination == "msp"):
    destination1,destination2, destination3,destination4,destination5 =0,0,0,0,1
```

```
if(destination == "dtw"):
    destination1,destination2, destination3,destination4,destination5 = 1,0,0,0,0
```

```
if(destination == "jfk"):
    destination1,destination2, destination3,destination4,destination5 = 0,0,1,0,0
```

```
if(destination == "sea"):
    destination1,destination2, destination3,destination4,destination5 =0,1,0,0,0
```

```
if(destination == "alt"):
    destination1,destination2, destination3,destination4,destination5 =0,0,0,1,0
```

```
dept= request.form['dept']
```

```
arrtime = request.form['arrtime']
```

```
actdept = request.form['actdept']
```

```
dept15=int(dept)-int(actdept)
```

```
total=('Name,month,day of month,dayofweek,
origin1,origin2,origin3,origin4,origin5,destination1,destination2,
destination3,destination4,destination5')
```

```
y_pred = model.predict(total)
```

```
print(y_pred)
```

```
if (y_pred == [0.1]):
```

```
    ans="The Flight will be on time"
```

```
else:
```

```
    ans="The Flight will be delayed"
```

```
def index():
```

```
    return render_template('homepage.html'
```

```
)
```