

## INTEGRATE FLASK WITH SCORING END POINT

Date	18 November 2022
Team ID	PNT2022TMID29843
Project Name	Flight delay prediction model using machine learning

### FLASK :

#### Scoring\_end\_point.py:

```
import pickle

from flask import Flask, render_template, request

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

app=Flask(__name__,static_url_path='/static')

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

@app.route('/prediction',methods=["POST"])
def predict():
    if request.method=="POST":
        name=request.form["name"]
        month=request.form["month"]
        if(int(month)>12):
            ans="Please Enter the correct Month"
            return render_template("index.html",y=ans)

        dayofmonth=request.form["dayofmonth"]
        if(int(dayofmonth)>31):
            ans="Please Enter the correct Day of Month"
            return render_template("index.html",y=ans)

        dayofweek=request.form["dayofweek"]
        if(int(dayofweek)>7):
            ans="Please Enter the correct Day of Week"
            return render_template("index.html",y=ans)

        origin=request.form["origin"]
```

```

destination=request.form['destination']

if(origin==destination):
    ans="Origin airport and destination airport can't be same"
    return render_template("index.html",y=ans)

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


if(destination=="msp"):
    destination1,destination2,destination3,destination4,destination5=0,0,0,1,0
if(destination=="dtw"):
    destination1,destination2,destination3,destination4,destination5=0,1,0,0,0
if(destination=="jfk"):
    destination1,destination2,destination3,destination4,destination5=0,0,1,0,0
if(destination=="sea"):
    destination1,destination2,destination3,destination4,destination5=0,0,0,0,1
if(destination=="alt"):
    destination1,destination2,destination3,destination4,destination5=1,0,0,0,0


depthr=request.form['depthr']
deptmin=request.form['deptmin']
if(int(depthr)>23 or int(deptmin)>59):
    ans="Please enter the correct Departure time"
    return render_template("index.html",y=ans)
else:
    dept=depthr+deptmin


actdepthr=request.form['actdepthr']
actdeptmin=request.form['actdeptmin']
if(int(actdepthr)>23 or int(actdeptmin)>59):
    ans="Please enter the correct Actual Departure time"
    return render_template("index.html",y=ans)
else:
    actdept=actdepthr+actdeptmin

```

```
arrtimehr=request.form['arrtimehr']
arrtimemin=request.form['arrtimemin']
if(int(arrtimehr)>23 or int(arrtimemin)>59):
    ans="Please enter the correct Arrival time"
    return render_template("index.html" ,y=ans)
else:
    arrtime=arrtimehr+arrtimemin
```

```
if((int(actdept)-int(dept))<15):
    dept15=0
else:
    dept15=1
```

```
print(dept15)
```

```
total=[[month,dayofmonth,dayofweek,origin1,origin2,origin3,origin4,origin5,destination1,
destination2,destination3,destination4,destination5,dept,actdept,dept15,arrtime]]
```

```
value=model.predict(total)
print(value)
if value==0.0:
    ans="THE FLIGHT WILL BE ON TIME"
    print(value)
else:
    ans="THE FLIGHT WILL BE DELAYED"
    print(value)
```

```
return render_template("results.html" ,y=ans)
```

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