

FLASK APP – STEP: 2

FLASK :

Flask is a python framework that makes it easy to create a fully-featured web application.

FLASK Configure app.py to fetch the URL from the UI, process the URL, get the input parameters from the URL and return the prediction.

Input the following commands:

```
13 #Redirects to the page to give the user input URL.
14 @app.route('/predict')
15 def predict():
16     return render_template('final.html')
17
18 #Fetches the URL given by the URL and passes to inputScript
19 @app.route('/y_predict',methods=['POST'])
20 def y_predict():
21     '''
22     For rendering results on HTML GUI
23     '''
24     url = request.form['URL']
25     checkprediction = inputScript.main(url)
26     prediction = model.predict(checkprediction)
27     print(prediction)
28     output=prediction[0]
29     if(output==1):
30         pred="Your are safe!! This is a Legitimate Website."
31
32     else:
33         pred="You are on the wrong site. Be cautious!"
34     return render_template('final.html', prediction_text='{}'.format(pred),url=url)
35
36 #Takes the input parameters fetched from the URL by inputScript and returns the predictions
37 @app.route('/predict_api',methods=['POST'])
38 def predict_api():
39     '''
40     For direct API calls through request
41     '''
42     data = request.get_json(force=True)
43     prediction = model.y_predict([np.array(list(data.values()))])
44
45     output = prediction[0]
46     return jsonify(output)
47
```

Run the app

Enter commands as shown below

```
51  
52 if __name__ == '__main__':  
53     app.run(host='0.0.0.0', debug=True)  
54
```

PROGRAM:

Importing flask module in the project is mandatory

An object of Flask class is our WSGI application.

from flask import Flask

Flask constructor takes the name of

current module (__name__) as argument.

app = Flask(__name__)

The route() function of the Flask class is a decorator,

which tells the application which URL should call

the associated function.

@app.route('/')

```
# '/' URL is bound with hello_world() function.
```

```
def hello_world():
```

```
    return 'Hello World'
```

```
# main driver function
```

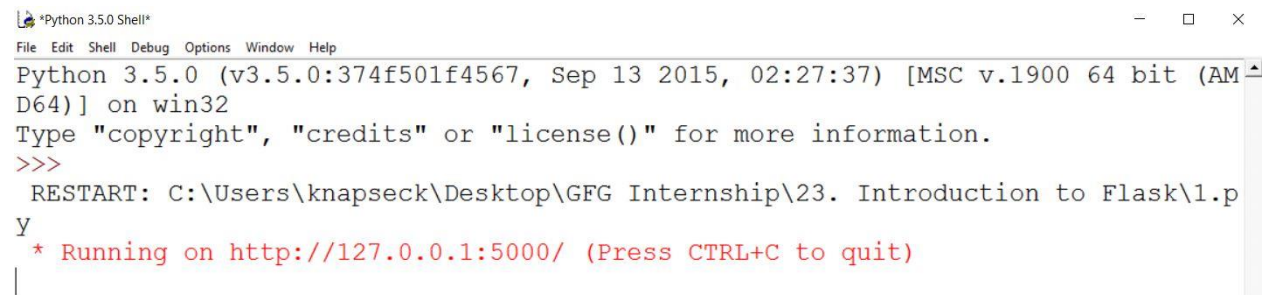
```
if __name__ == '__main__':
```

```
    # run() method of Flask class runs the application
```

```
    # on the local development server.
```

```
    app.run()
```

Save it in a file



```
Python 3.5.0 (v3.5.0:374f501f4567, Sep 13 2015, 02:27:37) [MSC v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\knapseck\Desktop\GFG Internship\23. Introduction to Flask\1.py
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

and then run the script we will be getting an output like this.

Digging further into the context, the **route()** decorator in Flask is used to bind a URL to a function. Now to extend this functionality our small web app is also equipped with another method **add_url_rule()** which is a function of an application object that is also available to bind a URL with a function as in the above example, `route()` is used.

Example:

```
def gfg():  
    return 'geeksforgeeks'  
app.add_url_rule('/', 'g2g', gfg)
```

Output:

geeksforgeeks