

PROJECT NAME :News Tracker Application

TEAM ID : PNT2022TMID43908

SPRINT-3

Using flask to make an api

import necessary libraries and functions from

flask import Flask, jsonify, request

creating a Flask app app

= Flask(__name__)

on the terminal type: curl http://127.0.0.1:5000/

returns hello world when we use GET.

returns the data that we send when we use POST.

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

home(): if(request.method == 'GET'):

data = "hello world" return

jsonify({'data': data})

A simple function to calculate the square of a number

the number to be squared is sent in the URL when we use GET

on the terminal type: curl http://127.0.0.1:5000 / home / 10

```
# this returns 100 (square of 10)

@app.route('/home/<int:num>', methods = ['GET'])
def disp(num):    return jsonify({'data': num**2})


# driver function if
__name__ == '__main__':

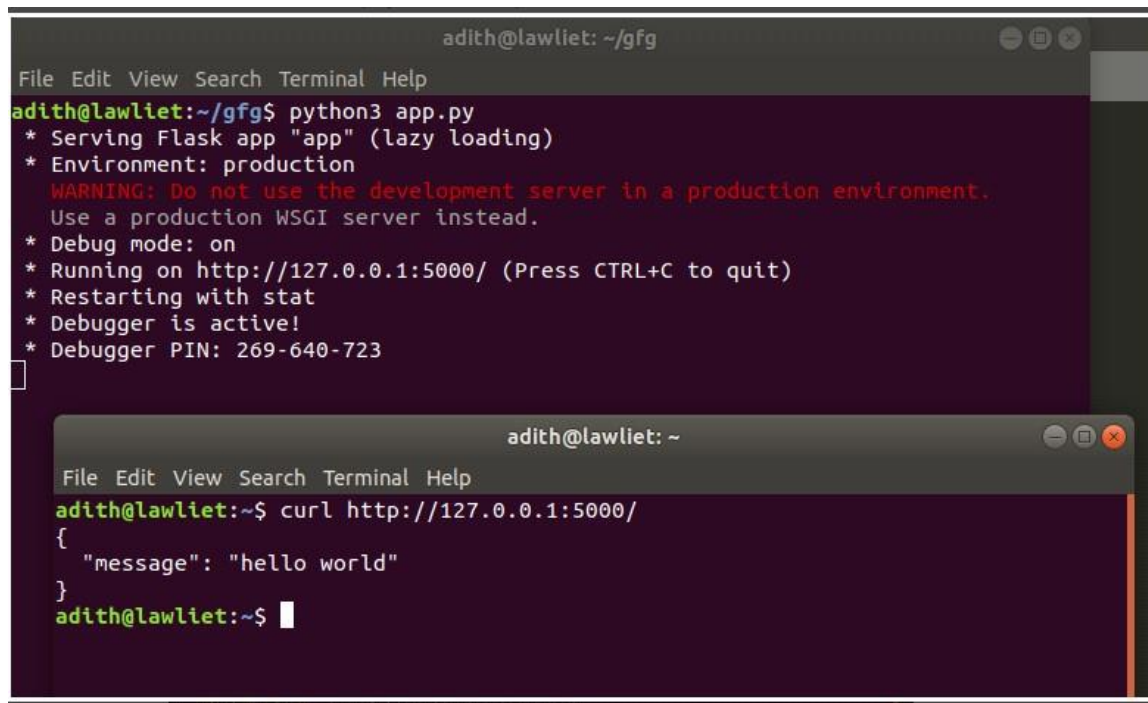
    app.run(debug = True# import necessary libraries and functions
from flask import Flask, jsonify, request


# creating a Flask app app
app = Flask(__name__)


# on the terminal type: curl http://127.0.0.1:5000/ #
returns hello world when we use GET.

# returns the data that we send when we use POST.
```

OUTPUT :



The image shows two terminal windows. The top window, titled 'adith@lawliet: ~/gfg', displays the output of running 'python3 app.py'. It shows the Flask application starting in production mode on http://127.0.0.1:5000/. The bottom window, titled 'adith@lawliet: ~', shows the output of a 'curl' command to the same address, returning a JSON object with the message 'hello world'.

```
adith@lawliet: ~/gfg
File Edit View Search Terminal Help
adith@lawliet:~/gfg$ python3 app.py
* Serving Flask app "app" (lazy loading)
* Environment: production
  WARNING: Do not use the development server in a production environment.
  Use a production WSGI server instead.
* Debug mode: on
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 269-640-723

adith@lawliet: ~
File Edit View Search Terminal Help
adith@lawliet:~$ curl http://127.0.0.1:5000/
{
  "message": "hello world"
}
adith@lawliet:~$
```

Method :

using flask_restful from flask import

Flask, jsonify, request from

flask_restful import Resource, Api

creating the flask app

app = Flask(__name__) #

creating an API object

api = Api(app)

making a class for a particular resource

the get, post methods correspond to get and post requests

they are automatically mapped by flask_restful.

other methods include put, delete, etc.

```

class Hello(Resource):

    # corresponds to the GET request.

    # this function is called whenever there is a
    GET request for this resource
    def get(self):
        return jsonify({'message': 'hello world'})

    # Corresponds to POST request
    def post(self):
        data = request.get_json() # status code
        return
        jsonify({'data': data}), 201

# another resource to calculate the square of a number class
Square(Resource):

    def get(self, num):

        return jsonify({'square': num**2})

# adding the defined resources along with their corresponding urls
api.add_resource(Hello,
'/')
api.add_resource(Square, '/square/<int:num>')

# driver function if
__name__ == '__main__':

    app.run(debug = True)

```

Output:

```
le adith@lawliet: ~/gfg
File Edit View Search Terminal Help
adith@lawliet:~/gfg$ python3 app.py
* Serving Flask app "app" (lazy loading)
* Environment: production
  WARNING: Do not use the development server in a production environment.
  Use a production WSGI server instead.
* Debug mode: on
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 269-640-723
127.0.0.1 - - [27/Jul/2019 23:37:43] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [27/Jul/2019 23:37:47] "GET /square/10 HTTP/1.1" 200 -
127.0.0.1 - - [27/Jul/2019 23:37:49] "GET /square/19 HTTP/1.1" 200 -
adith@lawliet: ~
File Edit View Search Terminal Help
adith@lawliet:~$ curl http://127.0.0.1:5000/
{
  "message": "hello world"
}
adith@lawliet:~$ curl http://127.0.0.1:5000/square/10
{
  "square": 100
}
adith@lawliet:~$ curl http://127.0.0.1:5000/square/19
{
  "square": 361
}
adith@lawliet:~$
```