

PROJECT NAME : News Tracker Application

Team ID : PNT2022TMID21754

SPRINT-3

```
# Using flask to make an api

# 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.
@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

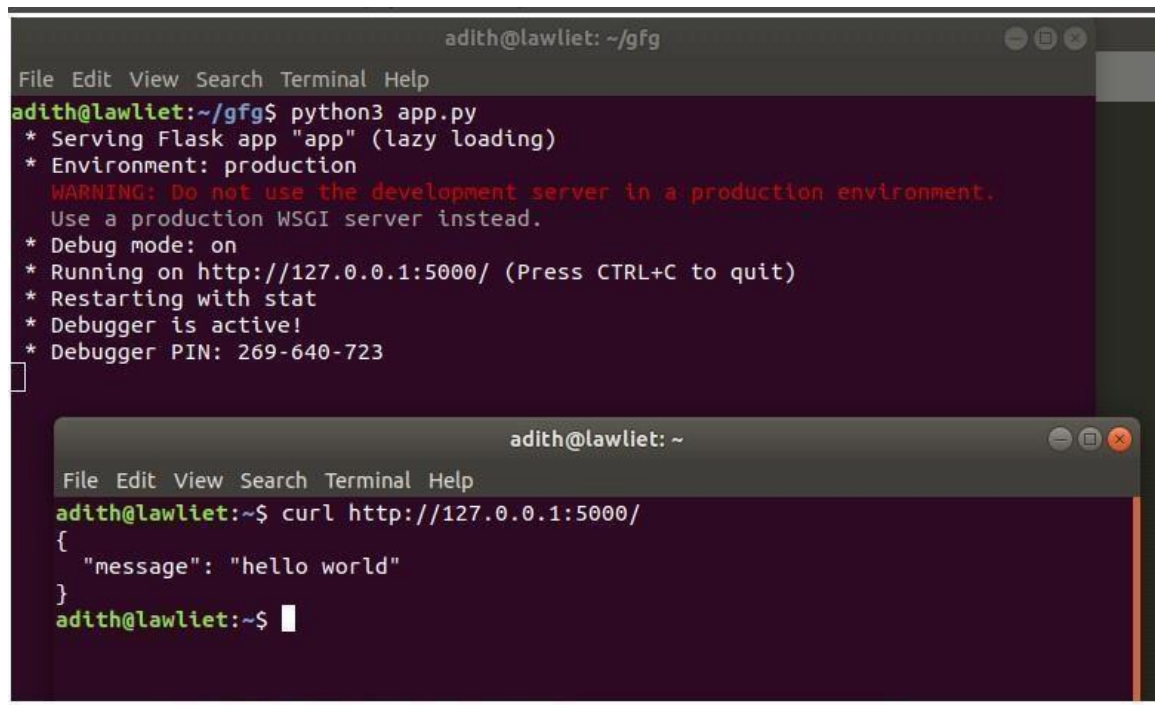

# creating a Flask app app
app = Flask(__name__)


# 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 is titled 'adith@lawliet: ~/gfg' and shows the command 'python3 app.py' being executed. The output includes: '* Serving Flask app "app" (lazy loading)', '* Environment: production', a red warning '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!', and '* Debugger PIN: 269-640-723'. The bottom window is titled 'adith@lawliet: ~' and shows the command 'curl http://127.0.0.1:5000/' being executed, which returns a JSON response: '{ "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:

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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:~$ █
```