**PROJECT NAME** : News Tracker Application

**TEAM ID** :PNT2022TMID40259

## **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 = Tru# 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.
```

## **OUTPUT:**

```
adith@lawliet:~/gfg
File Edit View Search Terminal Help
adith@lawliet:~/gfg$ python3 app.py

* Serving Flask app "app" (lazy loading)

* Environment: production
WARNING: bo 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):
                                          # status code
          data = request.get_json()
          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:**

```
000
File Edit View Search Terminal Help
adith@lawliet:~/gfg$ python3 app.py
 * Serving Flask app "app" (lazy loading)
  * Environment: production
    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:~$
```