IMPLEMENTING WEB APPLICATION

CREATING API IN FLASK

Team ID	PNT2022TMID35342
Project Name	Containment Zone Alerting Application

from flask import Flask, request, jsonify app

= Flask(_____name)

```
@app.route('/') def
hello_world():
    return 'This is my first API call!'

@app.route('/post',    methods=["POST"])    def
testpost():
    input_json   =   request.get_json(force=True)
    dictToReturn   =   {'text':input_json['text']}
    return jsonify(dictToReturn)
```

ALTER:
import os import time
import

```python
datetime import
requests import json
import flask import
boto3 import
psycopg2 from flask
import request


app = flask.Flask(____name )
app.config["DEBUG"] = True
db_cred = os.environ['DB_CRED']


def    connectToDb():      conn    =
    psycopg2.connect(db_cred) cur =
    conn.cursor() return conn, cur


def closeDbConnection(conn, cur):
    cur.close() conn.close()


#This function will be used to execute a query and return the result def
db_query(query): conn, cur = connectToDb() cur.execute(query) res =
cur.fetchall() closeDbConnection(conn, cur) return res


#This function will be used to insert a row or rows into the database def
db_insert(query, values):

    conn, cur = connectToDb()
    cur.execute(query,
```

values)   conn.commit()

close

Why use an API?

Decoupling: By using an API other components are only dependent on the API, not the internals of the component, which means you can make changes to the internals without breaking the dependents.

Language Independence: An API can be called from any programming language.

Isolation: By using an API, the components using the API are isolated from each other. One component can be replaced without affecting any other component that uses the API.

What is Flask?

Flask is a microframework for Python based on Werkzeug, Jinja 2 and good intentions.

![flask](/images/flask.png)
Why use Flask?
Light: Flask is one of the lightest frameworks available.

Easy to use: Flask is easy to use and it's well documented.