

## **IMPLEMENTING WEB APPLICATION**

Team ID	PNT2022TMID04823
Project Name	CONTAINMENT ZONE ALERTING APPLICATION
Team Members:	KAVYA,KARTHIKRAJ ,KAVINKUMAR, KEERTHANA

## **CREATING API IN FLASK**

```
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 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.

(/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.
- \* **Flexible**