

IMPLEMENTING WEB APPLICATION

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Project Name	CONTAINMENT ZONE ALERTING APPLICATION
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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.

![[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.

****Flexible****