

## IMPLEMENTING WEB APPLICATION

### CREATING API IN FLASK

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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
```

```

datetime import
requests import json
import flask import
boto3 import
psycpg2 from flask
import request

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

def connectToDb():
    conn =
    psycpg2.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.

