Build python **Code**

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| Date | 25 November 2022 |
| Team ID | PNT2022TMID43214 |
| Project Name | AI-powered Nutrition Analyzer for Fitness Enthusiasts |

# app.py

import requests

from flask import Flask, render\_template, request, url\_for, redirect from werkzeug.utils importsecure\_filename

from werkzeug.exceptions import HTTPException import os

import json

UPLOAD\_FOLDER = 'static/uploads/' app = Flask( name , static\_url\_path='/')

app.config['UPLOAD\_FOLDER'] =UPLOAD\_FOLDER

my\_secret = os.environ['apikey']

def demo\_cal(num):

if int(num)==1:

data\_load = "testdata2burger.json" else:

data\_load= "testdata.json"

with open(data\_load, "r") as f: data = json.load(f)

return data

def get\_cal(fname):

try:

img = f"static/uploads/{fname}" api\_user\_token = my\_secret

# 1

headers = {'Authorization': 'Bearer ' +

api\_user\_token} # Single/Several Dishes Detection

# 2

url = 'https://api.logmeal.es/v2/recognition/complete'

resp = requests.post(url,files={'image': open(img, 'rb')},headers=headers) print(resp.json())

#print("response21:\n")

# Nutritional information

url = 'https://api.logmeal.es/v2/recipe/nutritionalInfo'

resp = requests.post(url,json={'imageId': resp.json()['imageId']}, headers=headers) print(resp.json()) # display nutritional info

return resp.json() except:

return "Error"

@app.route('/') def index():

return render\_template("index.html")

@app.route("/api") def testdata():

data = demo\_cal(1) return data

@app.route("/demo/<num>") def demo(num):

data = demo\_cal(num) fname = "damplefood.jpg" if int(num)==1:

fname = "istockphoto-1125149183-612x612.jpg"

else:

#print(num)

fname = "depositphotos\_50523105-stock-photo-pizza-with-tomatoes.jpg"

return render\_template("demo.html",fname=fname, data=data)

@app.route('/result', methods = ['GET', 'POST']) def upload\_file():

if request.method == 'POST': f = request.files['file']

fname = secure\_filename(f.filename)

# 3

f.save(os.path.join(app.config['UPLOAD\_FOLDER'], fname)) data = get\_cal(fname)

if data=="Error":

return "Service has been exhausted please try after 24hrs!" an\_object = data["foodName"]

check\_list = isinstance(an\_object, list) if check\_list==True:

data["foodName"] = data["foodName"][0]

return render\_template("result.html",fname=fname, data=data)

#return redirect(url\_for('static', filename='uploads/' + fname), code=301)

@app.errorhandler(HTTPException) def handle\_exception(e):

"""Return JSON instead of HTML for HTTP errors."""

# start with the correct headers and status code from the error response = e.get\_response()

# replace the body with JSON response.data = json.dumps({ "code": e.code, "name": e.name,

"description": e.description,

})

response.content\_type = "application/json" return response

if name ==" main ":

**main.yml**

app.run(host="0.0.0.0", port=8000, debug=True)

# name: Build and deploy Python app to Azure Web App - food

on:

# push: branches:

- main workflow\_dispatch:

# jobs:

build:

# 4

runs-on: ubuntu-latest steps:

# uses: actions/checkout@v2

* name: Set up Python version

# uses: actions/setup-python@v1 with:

python-version: '3.8'

# name: Create and start virtual environment run: |

python -m venv venv source venv/bin/activate

# name: Install dependencies

run: pip install -r requirements.txt

# # Optional: Add step to run tests here (PyTest, Django test suites, etc.)

* name: Upload artifact for deployment jobs uses: actions/upload-artifact@v2

# with:

name: python-app path: |

# .

!venv/ deploy:

# runs-on: ubuntu-latest needs: build environment:

name: 'Production'

# url: ${{ steps.deploy-to-webapp.outputs.webapp-url }}

steps:

# name: Download artifact from build job uses: actions/download-artifact@v2 with:

name: python-app

# 5

path:

# .

* name: 'Deploy to Azure Web App'

# uses: azure/webapps-deploy@v2 id: deploy-to-webapp

with:

# app-name: 'foood'

slot-name: 'Production' publish-profile: ${{

# secrets.AZUREAPPSERVICE\_PUBLISHPROFILE\_F6FCF510CE004208B6D1C454B08695A7 }}

**Test**

{

"foodName":"pizza",

"hasNutritionalInfo":true, "ids":168,

"imageId":1330495, "nutritional\_info":{

"calories":701.9,

"dailyIntakeReference":{ "CHOCDF":{

"label":"Carbs",

"level":"HIGH",

# 6

"percent":44.990981165671165

},

"ENERC\_KCAL":{

"label":"Energy",

"level":"NONE",

"percent":34.1011383088958 1 },

"FASAT":{

"label":"Saturated", "level":"HIGH",

"percent":31.16445387293823 5 },

"FAT":{

"label":"Fat",

"level":"HIGH",

"percent":38.02381377129821 5 },

"NA":{

"label":"Sodium",

"level":"HIGH", "percent":89.64

},

"PROCNT":{

"label":"Protein",

"level":"NONE",

"percent":14.44565482810232 6 },

"SUGAR":{

"label":"Sugars",

"level":"MEDIUM",

"percent":15.96800000000000 2 }

},

"totalNutrients":{ "CA":{

"label":"Calcium", "quantity":181.65, "unit":"mg"

},

"CHOCDF":{

"label":"Carbs",

"quantity":104.18, "unit":"g"

},

"CHOLE":{

"label":"Cholesterol", "quantity":22.4,

"unit":"mg"

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},

"ENERC\_KCAL":{

"label":"Energy", "quantity":701.9,

"unit":"kcal"

},

"FAMS":{

"label":"Monounsaturated fats", "quantity":12.05,

"unit":"g"

},

"FAPU":{

"label":"Polyunsaturated", "quantity":2.3,

"unit":"g"

},

"FASAT":{

"label":"Saturated", "quantity":5.88,

"unit":"g"

},

"FAT":{

"label":"Fat",

"quantity":21.74, "unit":"g"

},

"FATRN":{

"label":"Trans fat",

"quantity":0.0,

"unit":"g"

},

"FE":{

"label":"Iron",

"quantity":7.28,

"unit":"mg"

},

"FIBTG":{

"label":"Fiber",

"quantity":6.3,

"unit":"g"

},

"FOLAC":{

"label":"Folic acid", "quantity":192.5,

"unit":"µg"

},

"FOLDFE":{

"label":"Folate equivalent (total)",

# 8

"quantity":470.7, "unit":"µg"

},

"FOLFD":{

"label":"Folate (food)", "quantity":143.2,

"unit":"µg"

},

"K":{

"label":"Potassium", "quantity":559.05, "unit":"mg"

},

"MG":{

"label":"Magnesium", "quantity":54.04,

"unit":"mg"

},

"NA":{

"label":"Sodium", "quantity":1344.6, "unit":"mg"

},

"NIA":{

"label":"Niacin (B3)", "quantity":10.24,

"unit":"mg"

},

"P":{

"label":"Phosphorus", "quantity":294.19,

"unit":"mg"

},

"PROCNT":{

"label":"Protein",

"quantity":22.3,

"unit":"g"

},

"RIBF":{

"label":"Riboflavin (B2)", "quantity":0.94,

"unit":"mg"

},

"SUGAR":{

"label":"Sugars",

"quantity":4.99,

"unit":"g"

},

"SUGAR.added":{

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"label":"Sugars,

added", "quantity":0.0,

"unit":"g"

},

"THIA":{

"label":"Thiamin (B1)", "quantity":1.46,

"unit":"mg"

},

"TOCPHA":{

"label":"Vitamin E",

"quantity":3.83,

"unit":"mg"

},

"VITA\_RAE":{

"label":"Vitamin A", "quantity":79.02,

"unit":"µg"

},

"VITB12":{

"label":"Vitamin B12", "quantity":0.65,

"unit":"µg"

},

"VITB6A":{

"label":"Vitamin B6", "quantity":0.25,

"unit":"mg"

},

"VITC":{

"label":"Vitamin C",

"quantity":8.68,

"unit":"mg"

},

"VITD":{

"label":"Vitamin D",

"quantity":4.65,

"unit":"µg"

},

"VITK1":{

"label":"Vitamin K", "quantity":14.67,

"unit":"µg"

},

"ZN":{

"label":"Zinc",

"quantity":2.3,

"unit":"mg"

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}

}

},

"serving\_size":295.3

5 }

# 11