

FINAL CODE

PNT2022TMID33603

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import requests
from tensorflow.keras.preprocessing import image
from tensorflow.keras.models import load_model
import numpy as np
import pandas as pd
import tensorflow as tf
from flask import Flask, request, render_template, redirect, url_for
import os
from werkzeug.utils import secure_filename
from tensorflow.python.keras.backend import set_session

app = Flask(__name__)

#load both the vegetable and fruit models
model = load_model("E:\IBM\static-20221111T092050Z-001\fruit.h5")
model1=load_model("E:\IBM\static-20221111T092050Z-001\vegetable.h5")

#home page
@app.route('/')
def home():
    return render_template('home.html')

#prediction page
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@app.route('/prediction')
def prediction():
    return render_template('predict.html')

@app.route('/predict',methods=['POST'])
def predict():
    if request.method == 'POST':
        # Get the file from post request
        f = request.files['image']

        # Save the file to ./uploads
        basepath = os.path.dirname(__file__)
        file_path = os.path.join(
            basepath, 'uploads', secure_filename(f.filename))
        f.save(file_path)

        img = image.load_img(file_path, target_size=(128, 128))

        x = image.img_to_array(img)
        x = np.expand_dims(x, axis=0)

        plant=request.form['plant']
        print(plant)
        if(plant=="vegetable"):
            preds = model.predict(x)
            preds=np.argmax(preds)
            print(preds)

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df=pd.read_excel('precautions - veg.xlsx')
print(df.iloc[preds]['caution'])
else:
    preds = model1.predict(x)
    preds=np.argmax(preds)
    df=pd.read_excel('precautions - fruits.xlsx')
    print(df.iloc[preds]['caution'])

return df.iloc[preds]['caution']

if __name__ == "__main__":
    app.run(debug=False)
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