import os

from flask import Flask, redirect, render\_template, request

from PIL import Image

import torchvision.transforms.functional as TF

import CNN

import numpy as np

import torch

import pandas as pd

import torch.nn as nn

disease\_info = pd.read\_csv('disease\_info.csv' , encoding='cp1252')

supplement\_info = pd.read\_csv('supplement\_info.csv',encoding='cp1252')

model = CNN.CNN(39)

model = nn.DataParallel(model)

model.load\_state\_dict(torch.load(r"../Model/model.pth", map\_location=torch.device("cpu")))

model.eval()

def prediction(image\_path):

image = Image.open(image\_path)

image = image.resize((224, 224))

input\_data = TF.to\_tensor(image)

input\_data = input\_data.view((-1, 3, 224, 224))

output = model(input\_data)

output = output.detach().numpy()

index = np.argmax(output)

return index

app = Flask(\_name\_)

@app.route('/')

def home\_page():

return render\_template('home.html')

@app.route('/index')

def ai\_engine\_page():

return render\_template('index.html')

@app.route('/mobile-device')

def mobile\_device\_detected\_page():

return render\_template('mobile-device.html')

@app.route('/submit', methods=['GET', 'POST'])

def submit():

if request.method == 'POST':

image = request.files['image']

filename = image.filename

file\_path = os.path.join('static/uploads', filename)

image.save(file\_path)

print(file\_path)

pred = prediction(file\_path)

title = disease\_info['disease\_name'][pred]

description =disease\_info['description'][pred]

prevent = disease\_info['Possible Steps'][pred]

image\_url = disease\_info['image\_url'][pred]

supplement\_name = supplement\_info['supplement name'][pred]

supplement\_image\_url = supplement\_info['supplement image'][pred]

supplement\_buy\_link = supplement\_info['buy link'][pred]

return render\_template('submit.html' , title = title , desc = description , prevent = prevent ,

image\_url = image\_url , pred = pred ,sname = supplement\_name , simage = supplement\_image\_url , buy\_link = supplement\_buy\_link)

@app.route('/market', methods=['GET', 'POST'])

def market():

return render\_template('market.html', supplement\_image = list(supplement\_info['supplement image']),

supplement\_name = list(supplement\_info['supplement name']), disease = list(disease\_info['disease\_name']), buy = list(supplement\_info['buy link']))

if \_name\_ == '\_main\_':

app.run(debug=True)