

Music.py

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from flask import Flask, render_template, request
from yoloface import face_analysis
from event.pywsgi import WSGIServer
import numpy as np
import cv2
from deepface import DeepFace
import matplotlib.pyplot as plt
import webbrowser

app = Flask(__name__)
app.config['SEND_FILE_MAX_AGE_DEFAULT'] = 1

face = face_analysis()

@app.route('/')
def index():
    return render_template('index.html')

@app.route('/choose_singer', methods=["POST"])
def choose_singer():
    info = {}
    info['language'] = request.form['language']
    print(info)
    return render_template('choose_singer.html', data=info['language'])

@app.route('/emotion_detect', methods=["POST"])
def emotion_detect():
    info = {}
    info['singer'] = request.form['singer']
    found = False
    cap = cv2.VideoCapture(0)
    while not(found):
        _, frame = cap.read()

        _, box, conf = face.face_detection(frame_arr=frame, frame_status=True,
model='tiny')
        output_frame = face.show_output(frame, box, frame_status=True)
        cv2.imshow('OUTPUT', output_frame)

        gray = cv2.cvtColor(output_frame, cv2.COLOR_BGR2GRAY)
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for x, y, w, h in box:
    found = True
    roi = gray[y:y+w, x:x+h]
    cv2.imwrite("C:/Users/ADMIN/Desktop/8th sem project/emotion-based-music-ai-main/emotion-based-music-ai-main/static/face.jpg", roi)
    roi = cv2.resize(roi, (190, 190))
    roi = roi/200.0
    roi = np.reshape(roi, (1, 190, 190, 1))

    img_path = 'C:/Users/ADMIN/Desktop/8th sem project/emotion-based-music-ai-main/emotion-based-music-ai-main/static/face.jpg'
    img = cv2.imread(img_path)
    demo = DeepFace.analyze(img_path, enforce_detection=False)
    prediction = demo['dominant_emotion']

    print(prediction)

    cap.release()

    link =
    f"https://www.youtube.com/results?search_query={info['singer']}+{prediction}+{info['language']}+song"
    webbrowser.open(link)

return render_template("emotion_detect.html")

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