Music Recommendation System

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Abstract: Music plays a significant role in improving and elevating one's mood as it is one of the important source of entertainment and inspiration to move forward. Recent studies have shown that humans respond as well as react to music in a very positive manner and that music has a high impact on human's brain activity. Now a days, people often prefer to listen to music based on their moods and interests. This work focuses on a system that suggests songs to the users, based on their state of mind. In this system, computer vision components are used to determine the user's emotion through facial expressions. Once the emotion is recognized, the system suggests a song for that emotion, saving a lot of time for a user over selecting and playing songs manually. A user study is presented to evaluate the application. Results reveal good usability of the service and show that visualization and interaction in a music emotion space can improve acceptance of music recommendations.

I.   INTRODUCTION

Facial expressions are one of the natural means to communicate the emotions and these emotions can be used in entertainment and Human Machine Interface (HMI) fields In today's world, with the advancements in the areas of technology various music players are deployed with features like reversing the media, fast forwarding it, streaming playback with multicast streams.

Through reviewing the work of these predecessors, it can be seen that currently the common processes of research on emotion-aware music recommendation is to first reason user emotions and then recommend music with similar emotional states based on the obtained emotional cues. However, in the case of self-chosen music listening, people's emotional needs for music are not necessarily in line with their realtime emotional state. For example, when someone gets up in the morning and still feel sleepy, he may prefer to have some energetic songs playing instead of drowsy songs.

II.   LITERATURE SURVEY

1.   **Paper Name:**Research on Automatic Music Recommendation Algorithm Based on Facial Micro-expression Recognition

Author: Ziyang Yu1 , Mengda Zhao1 , Yilin Wu1 , Peizhuo Liu1 , Hexu Chen1

Abstract: In recent years, with the development and application of big data, deep learning has received more and more attention. As a deep learning neural network, convolutional neural network plays an extremely important role in face image recognition.

2.   **Paper Name:**Emotion aware Smart Music Recommender System using Two Level CNN.

Author: Krupa K S, Ambara G

Description: Music plays a significant role in improving and elevating one's mood as it is one of the important source of entertainment and inspiration to move forward. Recent studies have shown that humans respond as well as react to music in a very positive manner and that music has a high impact on human's brain activity

III. PROBLEM DEFINITION

To implement an application that provides evacuation route guidance and indoor navigation system by using Augmented Reality. This will help users to easily navigate through the buildings, companies, offices, college, etc. to reach their respective location by using the path provided by the application and also in case of indoor fire environment it will provide the safe path to the users to get out from that place. the application should be able to featch and play .mp3 and .Wav Files. The ability to support different type of service level music.

IV. SYSTEM ARCHITECTURE
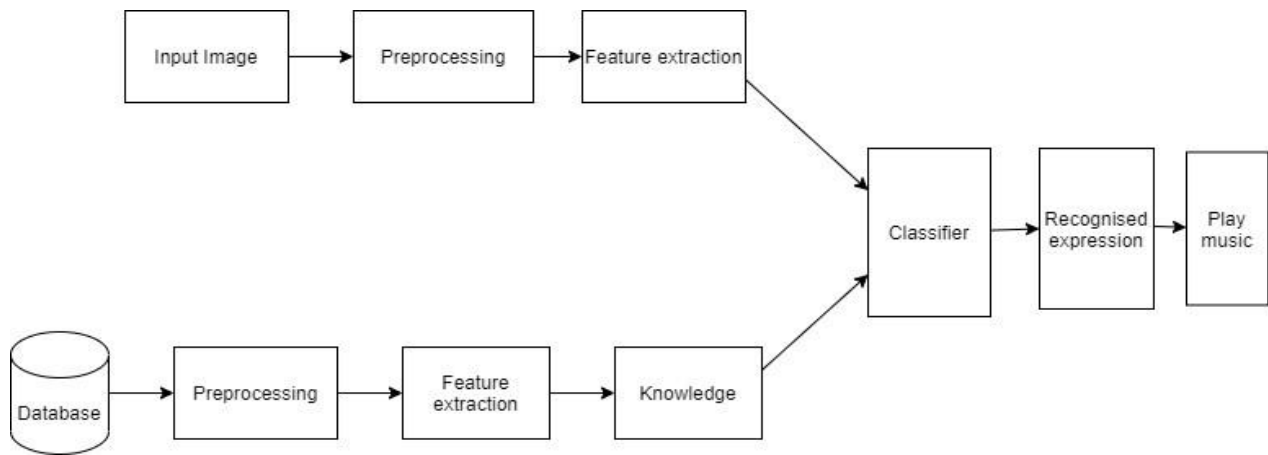
Explanation

Steps involved to design the system To design the system, training dataset and test images are considered for which the following procedures are applied to get the desired results. The training set is the raw data which has large amount of data stored in it and the test set is the input given for recognition purpose.
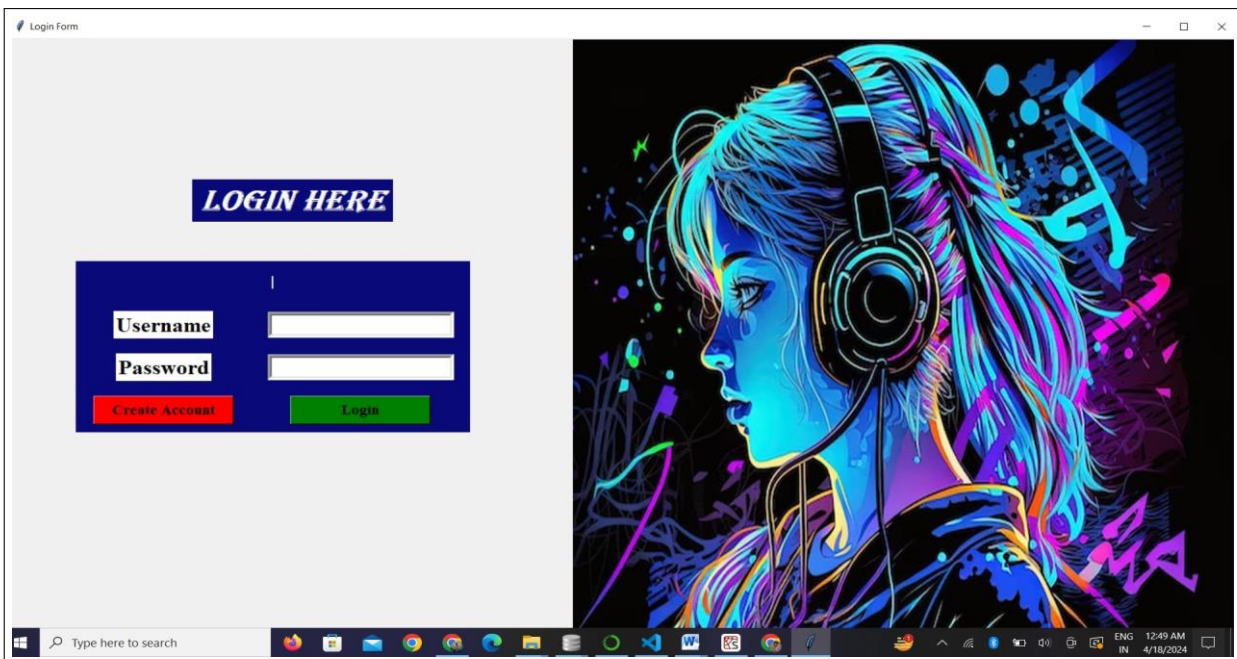
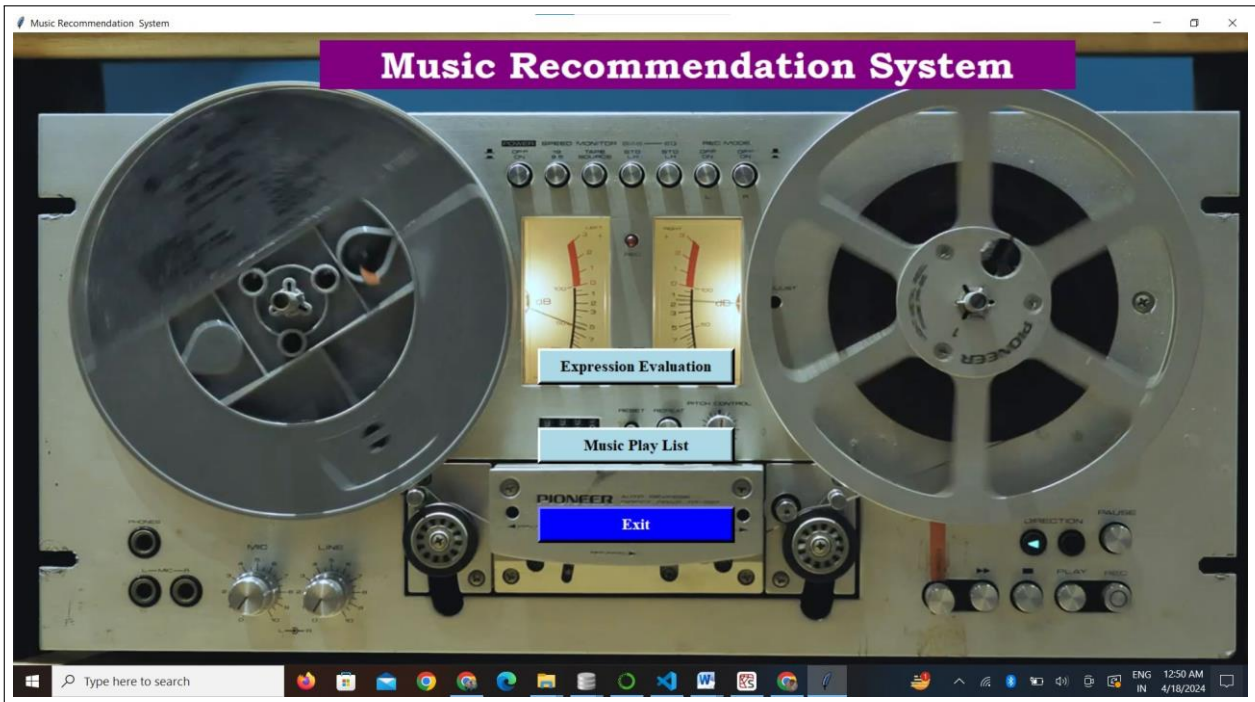## V. PRPOSED SYSTEM

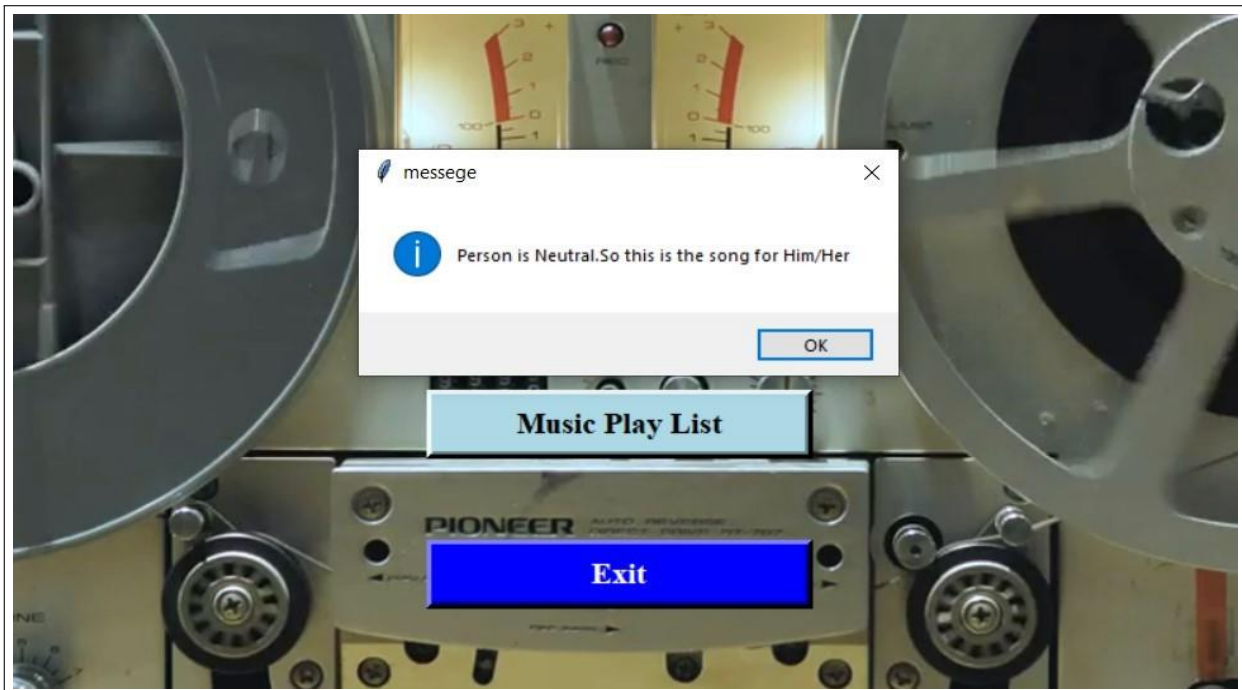**Figure 1.** LoginPage

Figure 2 GuiMasterPage

Figure 3 MSG page

Figure 4 OutPutPage

VI. CONCLUSION

The proposed work presents facial expression recognition system to play a song according to the expression detected and also classify music Type. It uses CNN approach to extract features, and Euclidean distance classifier classifies these expressions. In this work, real images i.e. user dependent images are captured utilizing the in-built camera.

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