Report: play random songs

CS22BTECH11006

Purpose:The purpose of this code is to play random audio songs from a specified directory using the pygame library.

Code Overview

The code can be divided into the following parts:

1. Importing required modules: The code starts by importing the necessary modules - os, random, and pygame. These modules are used for file operations, random selection, and audio playback respectively.

2. play random songs function: This function takes a directory path as input and plays random songs from that directory indefinitely. Here's a breakdown of the steps within the function: Get a list of all files in the specified directory using os.listdir. Filter the files to include only audio files with extensions .mp3 and .wav. Initialize the pygame mixer using pygame.mixer.init(). Enter an infinite loop to continuously play random songs: Randomly select a song from the audio files list using random.choice. Get the full path of the selected song file using os.path.join. Load and play the song using pygame.mixer.music.load and pygame.mixer.music.play. Print the currently playing song. Wait until the song finishes playing using pygame.mixer.music.get busy within a while loop.

3. Main code execution: Specify the directory containing the songs as songs directory. Call the play random songs function with songs directory as the argument to start playing random songs.

Usage

To use this code, follow these steps:

1. Ensure you have the necessary dependencies installed, particularly pygame.

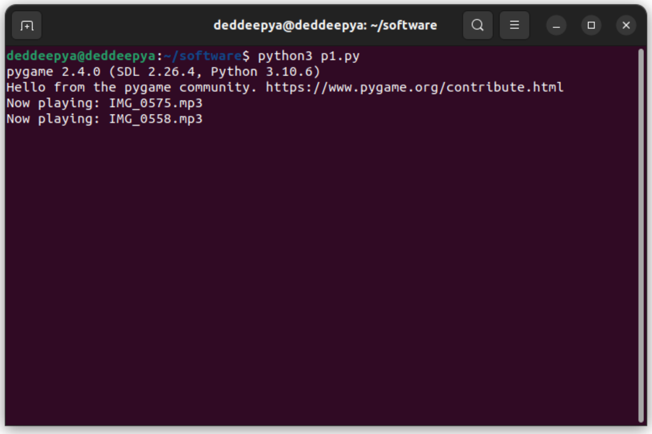
2. Create a directory containing your audio songs. The directory path should be passed as an argument when calling the play random songs function.

3.Customize the code as needed. For example, you can modify the supported audio file extensions or add additional functionality.

4. Execute the code, and it will start playing random songs from the specified directory indefinitely. The name of the currently playing song will be printed to the console.

Limitations and Possible Improvements The code assumes that the audio files in the specified directory are in the .mp3 or .wav format. 1.If you have songs with different file extensions, you may need to modify the code accordingly. There is no error handling or exception catching in the code. It would be beneficial to add error 2.handling to handle cases where the directory doesn't exist or there are no audio files. 3. The code can be enhanced to provide options for controlling the playback, such as skipping to the next song, pausing, or stopping the playback. 4.Adding a graphical user interface (GUI) could provide a better user experience, allowing users to interact with the application more easily.

Overall, this code serves as a basic foundation for playing random songs and can be extended and modified based on specific requirements.



```
deddeepya@deddeepya:~/software$ python3 p1.py
pygame 2.4.0 (SDL 2.26.4, Python 3.10.6)
Hello from the pygame community. https://www.pygame.org/contribute.html
Now playing: IMG_0575.mp3
Now playing: IMG_0558.mp3
```

Fig. 0. execution in terminal