

Software Assignment Report

CS22BTECH11046

P.Yasaswini

1 INTRODUCTION

The program written in Python allows users to play a random selection of songs from a specified playlist and provides basic music playback controls using Pygame library.

2 CODE OVERVIEW

The code begins by importing the necessary modules, including `pygame`, `random`, and `os`. It defines a function called `play_random_song` which takes a playlist as input and plays the songs in a random order.

2.1 Shuffling the Playlist

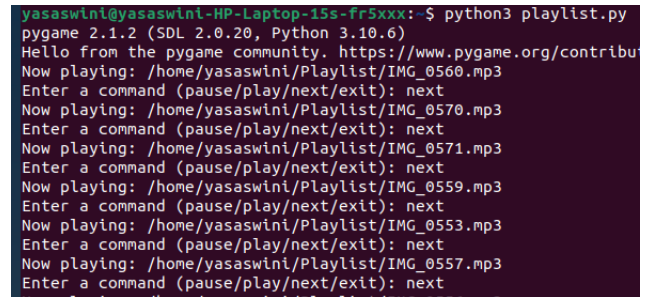
The code first shuffles the playlist using the `random.shuffle()` function. This rearranges the order of the songs randomly, creating a randomized playlist for playback. Next, the code initializes the Pygame mixer module using `pygame.mixer.init()`. This step is necessary to handle music playback.

2.2 Playing Songs

The code iterates over each song in the shuffled playlist. For each song, it performs the following steps:

- 1) Prints the current song being played.
- 2) Loads the song using `pygame.mixer.music.load()`.
- 3) Plays the loaded song using `pygame.mixer.music.play()`.

While a song is playing, the program prompts the user to enter a command via the `input()` function. The available commands are "pause," "unpause," "next," and "exit." The program responds accordingly to each command, pausing, resuming, skipping to the next song, or exiting the program.



```

yasaswini@yasaswini-HP-Laptop-15s-fr5xxx:~$ python3 playlist.py
pygame 2.1.2 (SDL 2.0.20, Python 3.10.6)
Hello from the pygame community. https://www.pygame.org/contributing
Now playing: /home/yasaswini/Playlist/IMG_0560.mp3
Enter a command (pause/play/next/exit): next
Now playing: /home/yasaswini/Playlist/IMG_0570.mp3
Enter a command (pause/play/next/exit): next
Now playing: /home/yasaswini/Playlist/IMG_0571.mp3
Enter a command (pause/play/next/exit): next
Now playing: /home/yasaswini/Playlist/IMG_0559.mp3
Enter a command (pause/play/next/exit): next
Now playing: /home/yasaswini/Playlist/IMG_0553.mp3
Enter a command (pause/play/next/exit): next
Now playing: /home/yasaswini/Playlist/IMG_0557.mp3
Enter a command (pause/play/next/exit): next

```

Fig. 3: Output

3 CONCLUSION

The provided code presents a functional implementation of a randomized music player using the Pygame library in Python. It allows users to play a random selection of songs from a playlist and provides basic music playback controls. The program can be further extended and customized based on specific requirements or additional features desired.