

# Software Assignment

## AI1110: Probability and Random Variables

### Indian Institute of Technology, Hyderabad

CS22BTECH11009

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#### 1 DESCRIPTION

I have developed a music player "MyMusic" using the Pygame library of Python. The music player allows users to do the following action within a given playlist:

- 1) Play: Clicking the Play button starts playing the songs
- 2) Pause: It pauses the currently playing song.
- 3) Next: It moves to the next song in the playlist
- 4) Previous: It goes to the previous song of the playlist

It also shows the name of Current Playing Song. This project also includes generating a random permutation of the given playlist.

#### 2 RANDOM PERMUTATION OF PLAYLIST

I have created a list having values from 0 to 19. And used `np.random.shuffle` function to generate the random permutation. In this way each of the  $20!$  permutations of the playlist are equally probable.

#### 3 CONCLUSION

The Python music player "MyMusic" project provides a graphic interface for playing songs. It allows users to control playback of Songs. The project includes functionalities of the Numpy library to shuffle the given playlist.

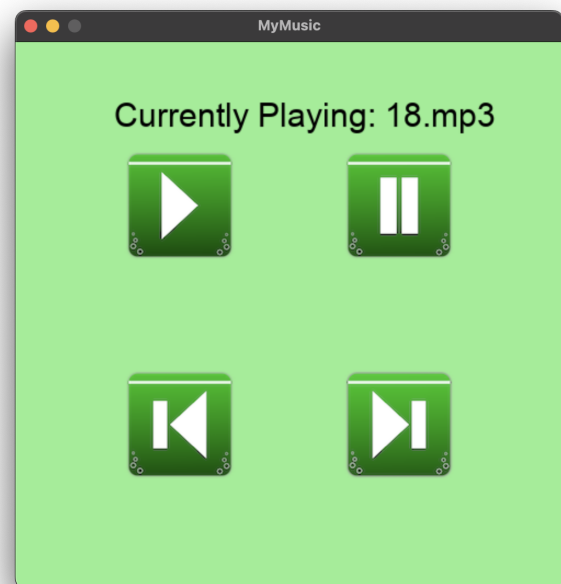


Fig. 1: MyMusic