

Assignment 10 : Mini project

TITLE:

NASA Music Player

GROUP DETAILS:

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INTRODUCTION TO THE PROJECT:

Our Project is the designing of Music Player which can play an audio file using JAVA.

1.Music Player Contains Following Functionalities:

- Play the wav music.
- Pause the music
- Resume the Music
- Stop the music.
- Liked Playlist of Songs
- Albums of Singer

2.Project Prerequisites:

- IDE Used: Eclipse ide
- OOPS Concept
- Data Structure
- Collection Framework (ArrayList)

3.Features of Music Player:

1. Import music from folders.

2. See details of music like Name of song, Duration, Singer and their Albums

3. Able to display the Playlist of Liked Songs

4. Various Singer's Album are created

5. Easy To run and Use

4. Pros of our Project:

Music is the most loved enjoyment and refreshment aid , It can even Cure the depressed ones. So, With the help of our Audio Player one can enjoy listening Music anytime , anywhere. For traveling, mp3 player is perfect for traveling, you can enjoy your favorite music during long travels to not get bored. Due to the light weight and small size of the mp3 player, the recording process is very easy now.

DATA STRUCTURES USED:

- DOUBLY LINKED LIST

Reason Behind Using LinkedList in Our Project was because :

- Dynamic data structure: Being a Dynamic data structure it can help in easy allocation and Deallocation of memory
- Insertion and Deletion in LinkedList (Singly and Doubly both) is comparatively easier than in array.
- Also Time Complexity Required is lesser than Array. I.e $O(n)$.
- Allows us to iterate in both directions.
- We can delete a node easily as we have access to its previous node.
- Reversing is easy.
- Can grow or shrink in size dynamically.
- Useful in implementing various other data structures.

These Features Of DoublyLinkedList Make it more preferable than all other Data Structures.