

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**MUSIC APP USING DOUBLY LINKED LIST**

**Data Structures & Application**

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**Submitted by**

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**ABSTRACT**

The Music Player project is a sophisticated multimedia application that leverages doubly linked lists to efficiently organize and manage playlists, providing users with seamless navigation through their music collections. Built using Python, Pygame, and Tkinter, the application offers a user-friendly interface for creating, editing, and playing music playlists. By employing doubly linked lists, users can dynamically add, remove songs within playlists, enhancing their music listening experience. The project's focus on doubly linked lists enables users to easily traverse through playlists, facilitating operations such as playing the previous or next song. This data structure ensures efficient playlist management and enables advanced features like seamless transition between songs and precise playback control. The choice of Python as the primary programming language offers several advantages, including its simplicity, readability, and extensive libraries. Pygame provides robust multimedia capabilities, allowing for smooth audio playback and management. Tkinter complements Python by facilitating the creation of an intuitive graphical user interface, enhancing user interaction and satisfaction. The Music Player project showcases the power of doubly linked lists in organizing music playlists and provides a user-friendly interface for enhanced music playback experiences. Through the integration of Python, Pygame, and Tkinter, the project offers a versatile and efficient solution for managing and enjoying music collections.

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