## **Music Recommendation System**

## **Abstract:**

With the exponential growth of digital music, personalized recommendation systems have become essential for enhancing user experience. The project presents a Music Recommendation System developed using HTML, CSS, JavaScript, and Python, designed to provide users with tailored song suggestions based on their preferences.

The front-end, built with HTML, CSS, and JavaScript, ensures an interactive and user-friendly interface, while the back-end, powered by Python and Flask, processes user data and integrates Artificial Intelligence (AI) techniques for intelligent recommendations. The system employs machine learning algorithms, including collaborative filtering and content-based filtering, to analyze user listening patterns, song attributes, and behavioral data. Additionally, deep learning models enhance recommendations by understanding music features and user preferences through neural networks.

By leveraging AI, the system continuously improves its suggestions based on real-time feedback, making the recommendations more accurate over time. The integration of music streaming APIs enhances accessibility, delivering an engaging and efficient recommendation experience.