



# NEXT GEN EMPLOYABILITY PROGRAM

Creating a future-ready workforce

Team Members

Student Name : Estelle Charles

Student ID : au311121104018

College Name

Loyola ICAM College of  
Engineering and Technology

# CAPSTONE PROJECT SHOWCASE

## Project Title

**Notes Sharing Web Application using Django Framework**

Abstract | Problem Statement | Project Overview | Proposed Solution |  
Technology Used | Modelling & Results | Conclusion



## Abstract

The music app project is a web-based platform developed using HTML, CSS, JavaScript, and Django. It provides users with features such as user authentication, music streaming, playlist management, and search functionality. The app is designed with a responsive layout for seamless access across devices. Users can interact with the app by liking, commenting, and sharing songs. Administrators have access to an admin dashboard for managing users and content. Overall, the app aims to enhance the music listening experience with its intuitive interface and robust features.

## Problem Statement

"In today's digital age, music lovers face challenges in discovering, accessing, and managing their favorite music content seamlessly across various devices. Existing music platforms may lack intuitive user interfaces, comprehensive features, or efficient management tools. Therefore, there is a need for a web-based music application that offers a user-friendly interface, robust music streaming capabilities, personalized playlist management, responsive design, and efficient administrative tools to enhance the overall music listening experience for users."

## Project Overview

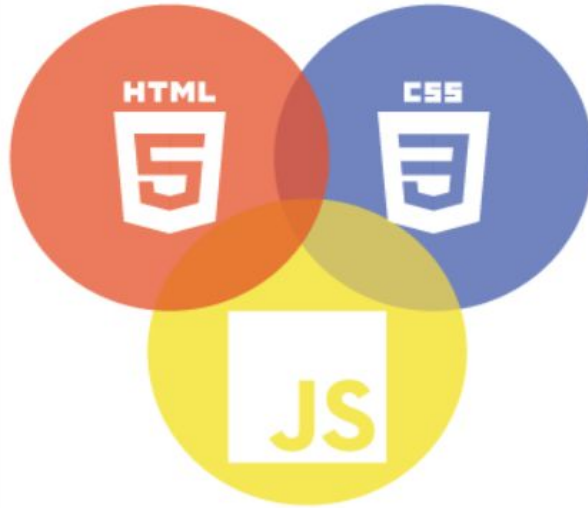
This project aims to develop a modern and user-friendly music streaming application using Django. The application will enable users to create personalized accounts, manage their music collections, and enjoy seamless streaming of their favorite tracks. Key features include user authentication, responsive design for various devices, secure file storage, and an intuitive music player interface. Leveraging Django's ORM and RESTful APIs, our goal is to deliver a reliable platform that enhances the music listening experience for all users.

## Proposed Solution

Our project entails developing a music streaming application using Django, featuring core functionalities such as user authentication, music upload, and management alongside a responsive music player. We'll prioritize secure file storage for user uploads and ensure cross-device compatibility through responsive design principles. Leveraging Django's ORM will optimize database management, while RESTful APIs will facilitate smooth frontend communication. Our objective is to deliver a seamless and user-friendly music streaming experience, focusing on simplicity and efficiency.

## Technology Used

Front-end



Back-end



## Modelling & Results

The project will involve designing a Django data model to represent users, music tracks, and playlists. Utilizing Django's ORM, we'll ensure efficient data storage and retrieval. User authentication will be implemented using Django's built-in authentication system. For the frontend, responsive templates will be created using HTML, CSS and JavaScript for seamless user interaction. The music streaming functionality will be achieved using Django's file handling capabilities and a custom music player interface.



## Homepage

MusicBeats Home All Songs

Search

Welcome Estelle\_Charles ▾

### Trending Songs



Pogadhe

Movie: Deepavali

Add to Playlist

Play now



Sahana Saral

Movie: Sivaji

Add to Playlist

Play now














Kurumugil

Movie: Sita Ramam

Add to Playlist

Play now

MusicBeats ☰ Welcome Estelle Charles

	<b>Say yes to heaven</b> Movie: Album <a href="#">Play now</a> <a href="#">Add to playlist</a>
	<b>Thunder</b> Movie: Album <a href="#">Play now</a> <a href="#">Add to playlist</a>
	<b>Oh Butterfly</b> Movie: Meera <a href="#">Play now</a> <a href="#">Add to playlist</a>
	<b>Mudhal Mazhai</b> Movie: Bhrama <a href="#">Play now</a> <a href="#">Add to playlist</a>
	<b>Night Changes</b> Movie: Album <a href="#">Play now</a> <a href="#">Add to playlist</a>
	<b>Only Time</b> Movie: Album <a href="#">Play now</a> <a href="#">Add to playlist</a>
	<b>Bella Ciao</b> Movie: Money Heist <a href="#">Play now</a> <a href="#">Add to playlist</a>
	<b>Anbenum</b> Movie: Leo <a href="#">Play now</a> <a href="#">Add to playlist</a>
	<b>Kurumugil</b> Movie: Sita Ramam <a href="#">Play now</a> <a href="#">Add to playlist</a>
	<b>Sahana Sarai</b> Movie: Singi <a href="#">Play now</a> <a href="#">Add to playlist</a>
	<b>Pogadhe</b> Movie: Deepavali <a href="#">Play now</a> <a href="#">Add to playlist</a>

## Songs List Page

## Backend Admin Page

Django administration

WELCOME, ESTELLE. [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

Home » Musicbeats » Songs

Start typing to filter...

AUTHENTICATION AND AUTHORIZATION

Groups + Add

Users + Add

MUSICBEATS

Channels + Add

Historys + Add

Songs + Add

Watchlaters + Add

✔ The song "Thunder" was changed successfully.

Select song to change

ADD SONG +

Action: ----- Go 0 of 10 selected

☐ SONG

☐ Thunder

☐ Oh Butterfly

☐ Mudhal Mazhai

☐ Night Changes

☐ Only Time

☐ Bella\_Ciao

☐ Anbenum

☐ Kurumugil

☐ Sahana Saral

☐ Pogadhe

## Audio Player Page

MusicBeats

Home

All Songs

Search

Welcome Estelle\_Charles ▾



### Title: Say yes to heaven

Category: Peace , Love

Movie: Album

Singer: Lana Del Rey

Watch video song: [Click here](#)

▶ 0:00 / 3:29



Add to Playlist

Download Song

## Music Upload Page

MusicBeats

Welcome Estelle\_Charles ▾

### Upload Your Music

Your Music Name

Singer Name

Tags (Separate by Commas)

Image Link: (Associated With Your Music)

Movie Name

Credit

Example file input

Choose File

No file chosen

Upload...

## History Page

MusicBeats Home All Songs

Welcome Estelle\_Charles ▾

## History



Say yes to heaven

Movie: Album



Thunder

Movie: Album

## **Future Enhancements:**

In the future, we could implement features such as personalized recommendations based on listening history, social sharing of playlists, integration with external music APIs for expanded content access, and support for offline playback. We could also enhance the user interface with more interactive elements. Continuous performance optimization and scalability improvements could also be done for growing user base.

## Conclusion

In conclusion, our Django-based music streaming application offers a scalable and feature-rich platform tailored for music enthusiasts. Through harnessing Django's robust framework, we've crafted a responsive and secure solution that places user experience at the forefront. Moving forward, we remain dedicated to enhancing this application to adapt to the evolving landscape of music streaming, ensuring a seamless and enjoyable experience for our users.



**Thank You!**