NEXT GEN EMPLOYABILITY PROGRAM

Creating a future-ready workforce

Team Members

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CAPSTONE PROJECT SHOWCASE

Project Title

Music Web Application using Django Framework

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

Abstract:

This project involves development of a music application using Django. This application will allow users to create accounts, manage music libraries and stream music. Key features include user authentication, a responsive user interface, secure file storage, and a dynamic music player interface. Additionally, the application will utilize Django's built-in ORM for database management and RESTful APIs for seamless integration with frontend technologies.

Source :

Problem Statement

Creation of Music Web Application using Django Framework

Source :

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.

Source :

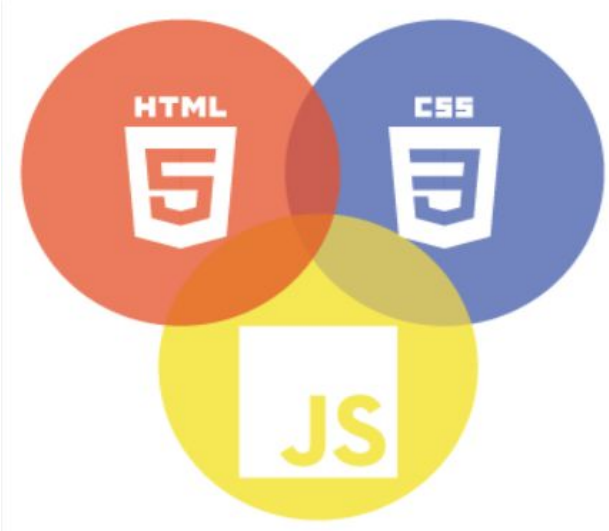
Proposed Solution

Our solution involves building a music streaming application using Django, integrating essential features like user authentication, music upload and management, and a responsive music player. We will implement secure file storage for user uploads and ensure compatibility across different devices through responsive design. The use of Django's ORM will facilitate efficient database management, while RESTful APIs will enable seamless communication with the frontend. Our aim is to create a streamlined and enjoyable music streaming experience for users, emphasizing simplicity and functionality.

Source :

Technology Used

Front-end



Back-end

Source :

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.

Source :

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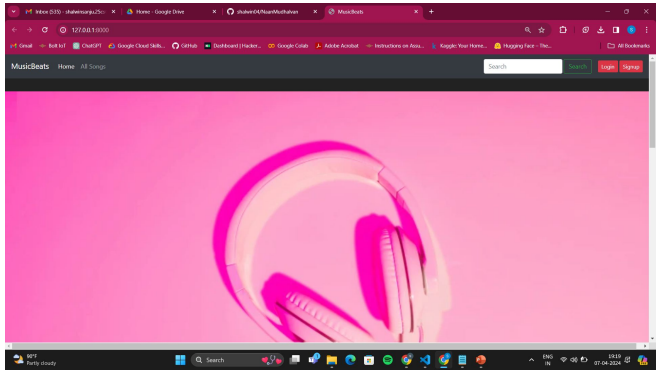
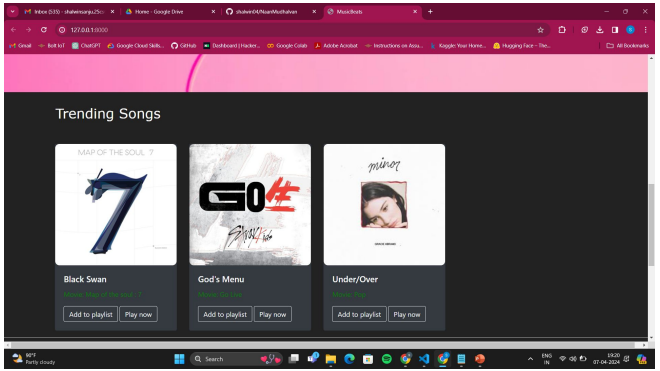
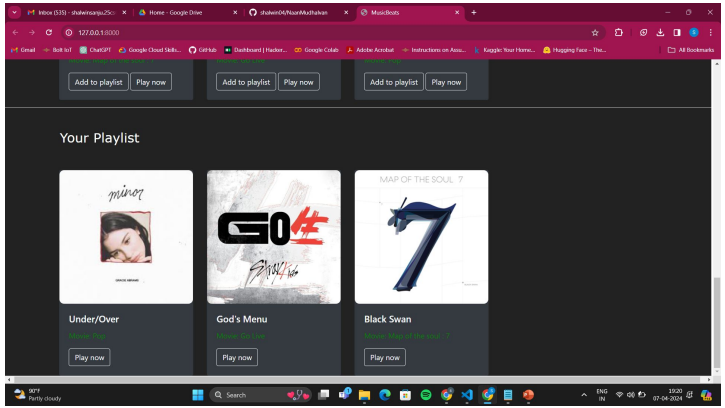
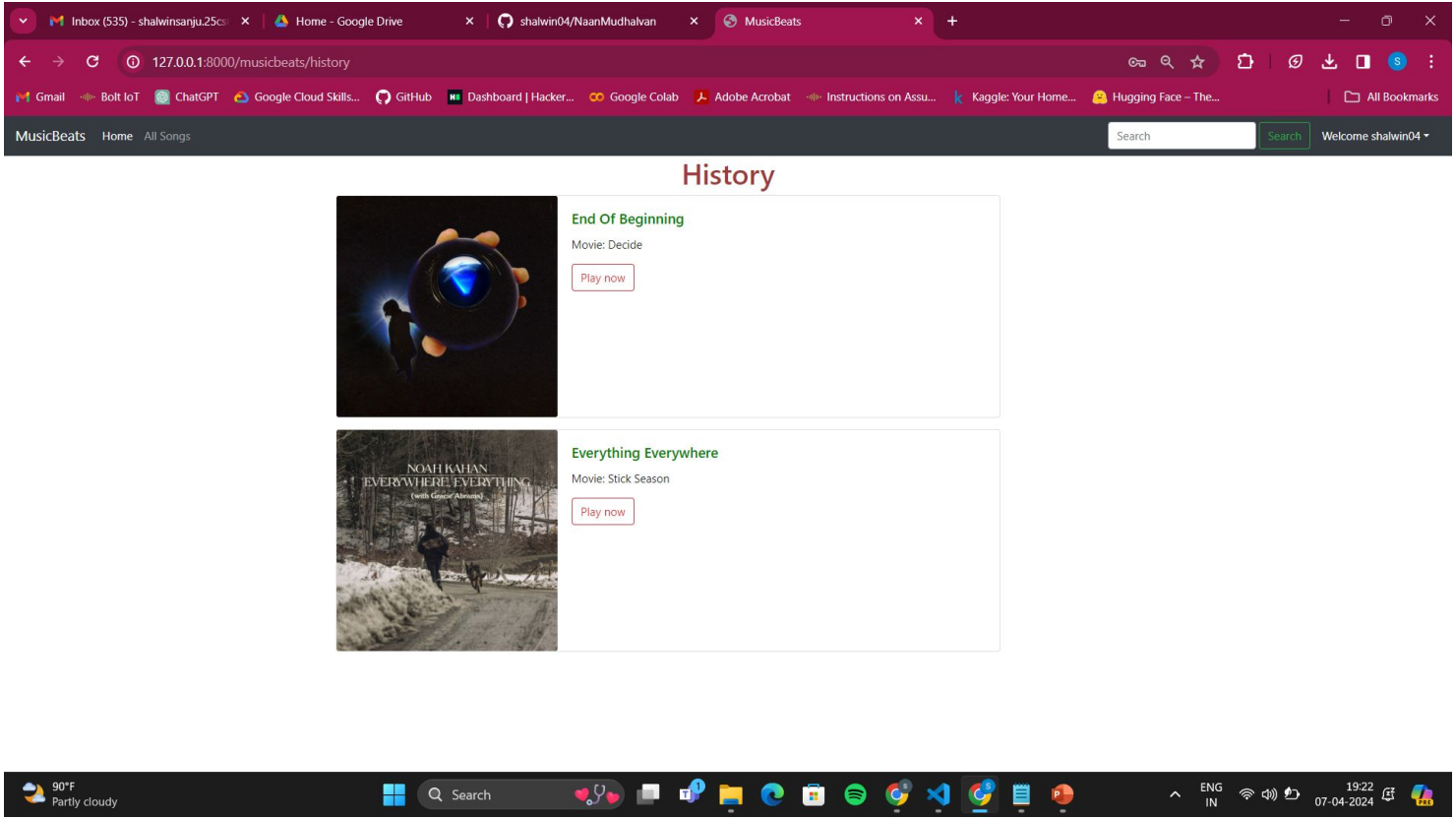
Homepage







History Page



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Audio Player Page

Title: Matilda

Category: R&B

Movie: Harry's House

Singer: Harry Styles

Watch video song: Click here

0:00 / 4:05

Add to Playlist | Download Song

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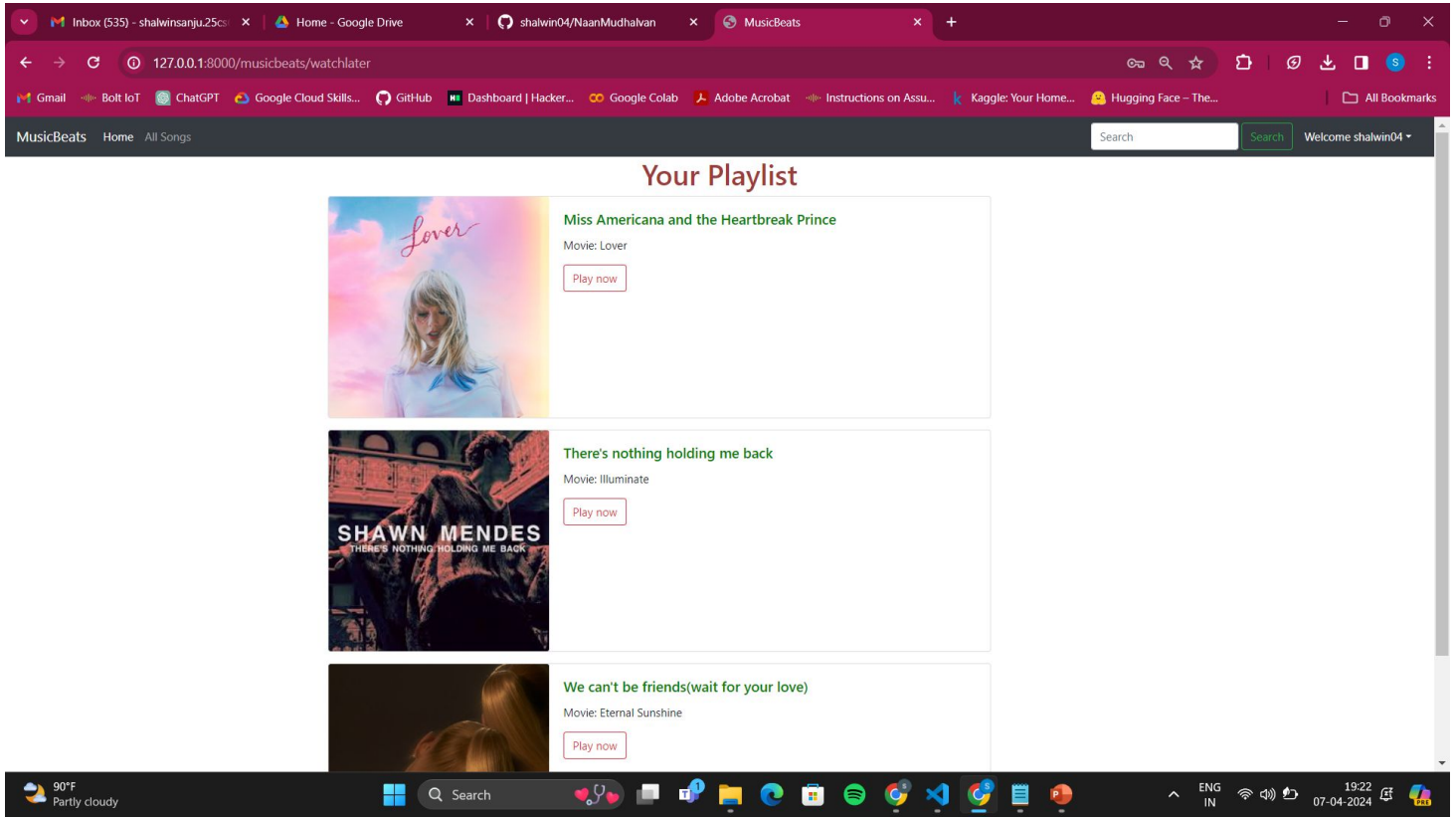
Playlist Page



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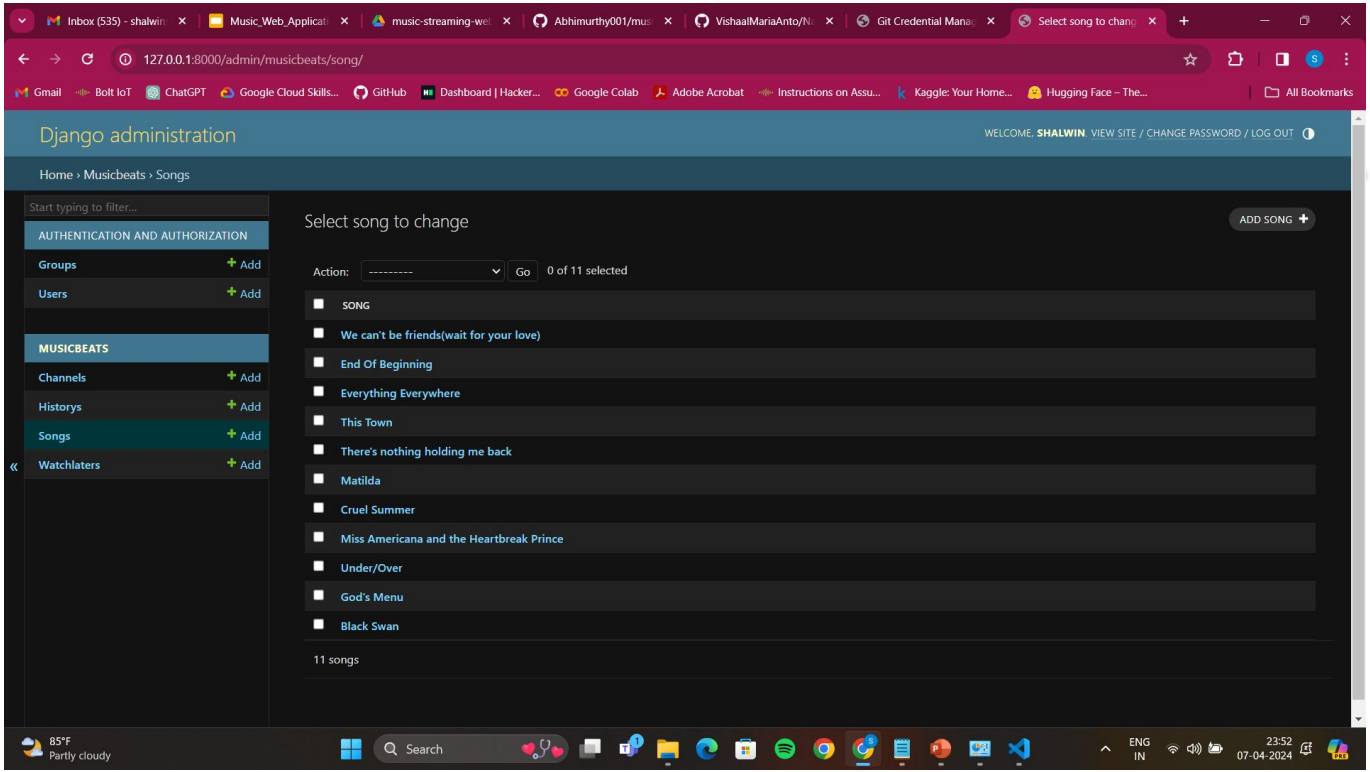
Backend Admin Page



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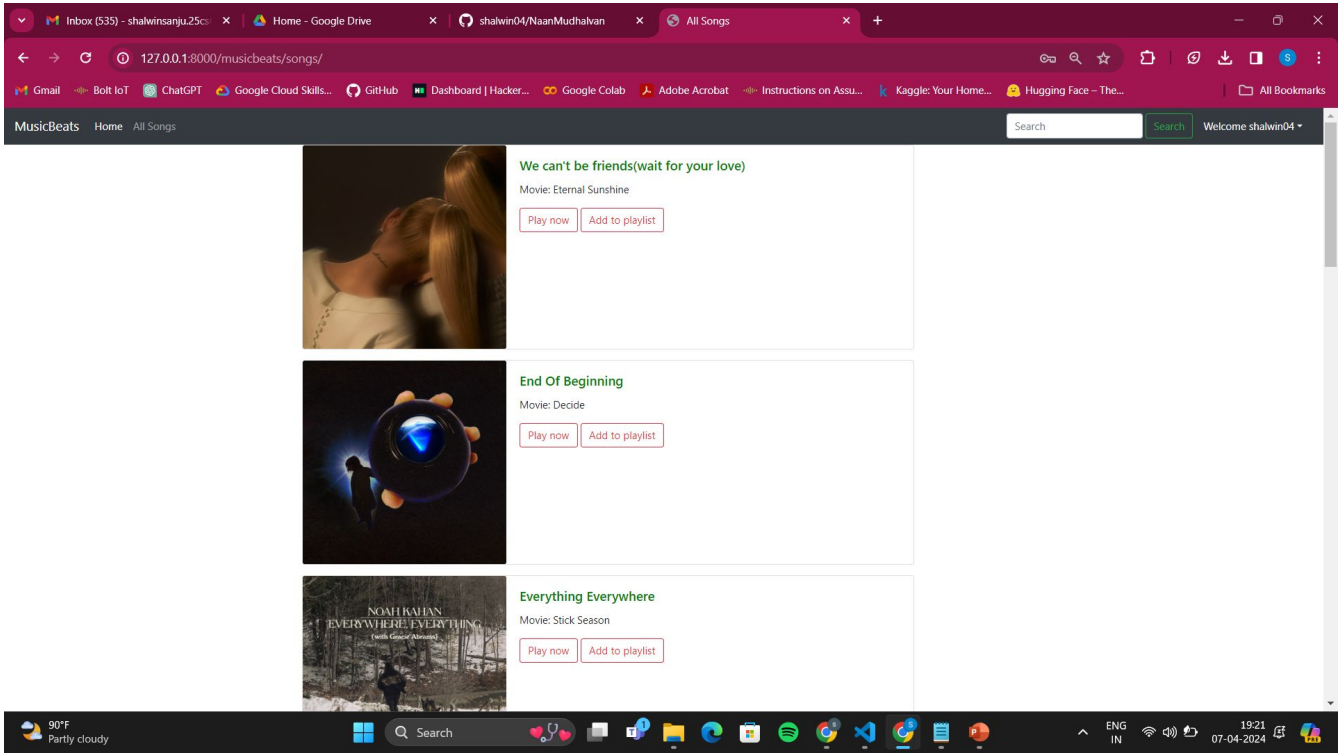
Songs List



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, this Django-based music streaming application presents a scalable and feature-rich platform for music enthusiasts. By leveraging Django's robust framework, I have developed a responsive and secure solution that prioritizes user experience. With planned future enhancements, we are committed to evolving this application to meet the dynamic demands of music streaming while maintaining a seamless and enjoyable experience for our users.

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Thank You!