





NEXT GEN EMPLOYABILITY PROGRAM

Creating a future-ready workforce

Team Members

Student Name: Afrah Tabassum Student ID: au311121104003 College Name

Loyola-ICAM College of Engineering and Technology

CAPSTONE PROJECT SHOWCASE

Project Title

MUSIC WEB APPLICATION USING DJANGO FRAMEWORK

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





Abstract

- Melodi is a dynamic music platform designed to cater to individual tastes and preferences. With its innovative technology, Melodi offers personalized playlists and recommendations, ensuring every user enjoys a unique listening journey. By leveraging data analytics and machine learning, Melodi stays ahead of musical trends, introducing users to emerging artists and genres before they hit the mainstream.
- Melodi's intuitive interface makes music discovery effortless, allowing users to explore new sounds and create curated playlists with ease. Additionally, Melodi fosters a sense of community through social features, enabling users to connect with like-minded music enthusiasts and share their favorite tracks and discoveries.
- With Melodi, music lovers can break free from the confines of traditional streaming services and immerse themselves in a world of endless musical possibilities. Whether you're seeking to expand your musical horizons or simply enjoy your favorite tracks, Melodi is your ultimate companion on the journey of musical exploration.



Problem Statement

Existing music streaming platforms lack personalized recommendations and fail to keep users updated with emerging artists and genres, leading to a stagnant music discovery experience.

Current music streaming services often lack the ability for users to download their favorite songs for offline listening without a premium subscription, restricting access to music in areas with limited internet connectivity or data plans



Project Overview

The project aims to develop a music streaming platform called Melodi, designed to provide users with a seamless and personalized music listening experience.

Melodi will offer a vast library of songs across various genres, allowing users to discover new music, create playlists, and interact with a community of music enthusiasts.

Key features include personalized recommendations, real-time trend analysis, the ability to create and share playlists, and free song downloads.

The platform will be accessible via web and mobile applications, ensuring users can enjoy their favorite music anytime, anywhere.



Proposed Solution

Melodi is a free music streaming platform designed to revolutionize the way users discover and enjoy music.

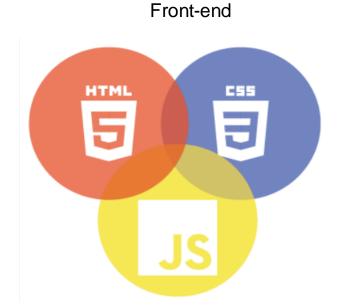
With personalized recommendations, customizable playlists, and social features, Melodi offers a seamless and engaging music experience for all users.

By providing both online streaming and offline listening options, Melodi ensures convenient access to music anytime, anywhere.

With a focus on user personalization and community engagement, Melodi aims to enhance the music streaming experience for everyone, free of charge.



Technology Used



Back-end



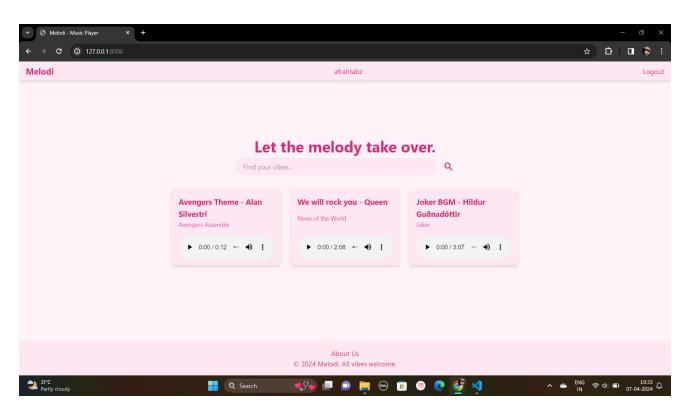


Modelling & Results

```
models.py X
player > @ models.py > ...
  1 v from django.db import models
       from django.contrib.auth.models import AbstractUser
  4 ∨ class User(AbstractUser):
          username = models.CharField(max_length=100, unique=True)
          email = models.EmailField(unique=True)
          password = models.CharField(max length=100)
  9 v class Song(models.Model):
          title = models.CharField(max length=255)
          artist = models.CharField(max length=255, blank=True)
          album = models.CharField(max length=255, blank=True)
          song file = models.CharField(max length=250, blank=True)
     v class WatchLater(models.Model):
          user = models.ForeignKey(User, on delete=models.CASCADE)
          song = models.ForeignKey(Song, on delete=models.CASCADE)
```

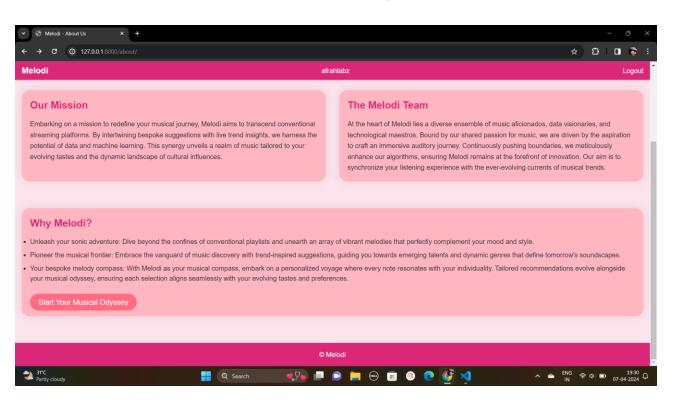


Homepage



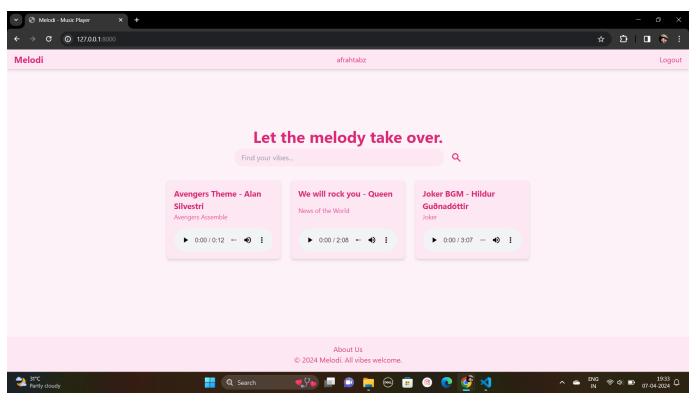


About-Us-Page



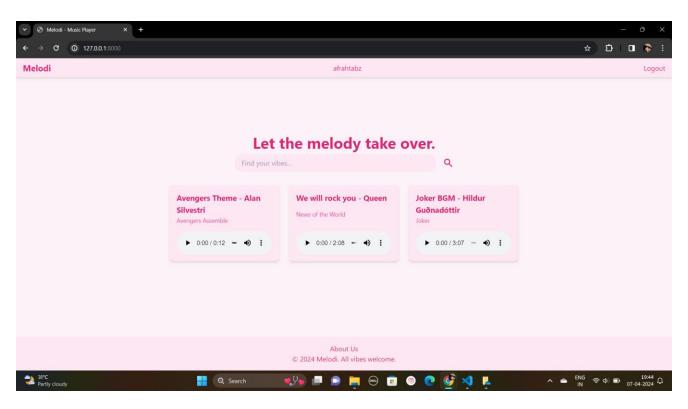


Home-Page



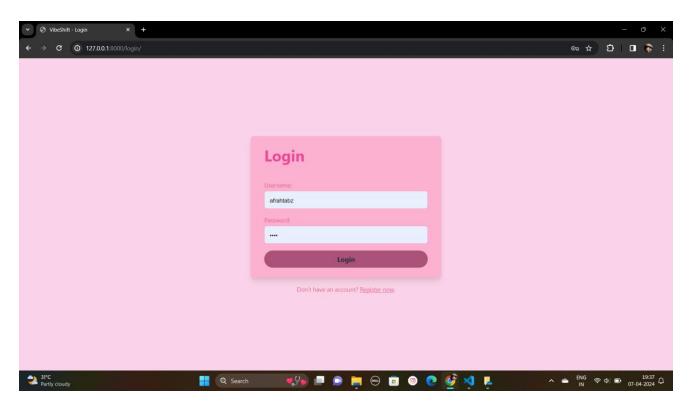


Search-Page





Login-Page





Future Enhancements:

- Lyrics Integration: Offer lyrics display for users to sing along and explore deeper meanings behind songs.
- Artist Spotlight: Showcase emerging artists with curated playlists and exclusive content.
- Improved Offline Mode: Enable bulk downloads for playlists and albums, with options for scheduled downloads.
- **Social Integration:** Introduce user profiles, friend recommendations, and collaborative playlists for community engagement.



Conclusion

In conclusion, Melodi offers a revolutionary platform for music enthusiasts to explore, discover, and enjoy their favorite tunes.

Addressing the need for a personalized and user-centric music streaming service, Melodi aims to redefine the way users engage with music.

With its free and accessible model, Melodi empowers users to embark on a journey of musical discovery without constraints.

Continuing to innovate and evolve, Melodi is committed to enhancing the user experience, providing an unparalleled audio journey that resonates with individual tastes and preferences. Users are invited to join Melodi on this melodic adventure and harmonize the world of music together.



Thank You!