

Mood-Based Song Classifier and Recommender System

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1 Motivation

We aim to leverage ML to predict users' moods based on previous songs and suggest appropriate songs. This enhances user experience, personalized music consumption, and offers insights into the emotional impact of music. The idea emerged from recognizing the powerful link between emotions and music preferences, driving us to build a practical system that enriches people's interactions with music on a daily basis.

2 Related Works

SVR-based music mood classification and context-based music recommendation by Seungmin Rho , Byeong-jun Han and Eenjun Hwang. Link

This paper focuses on context based music recommendation. The authors first classified the mood after converting it into a regression problem based on support vector regression (SVR). For music recommendation, they assess the user's mood and situation using both collaborative filtering and ontology technology.

An Emotional Recommender System for Music by Vincenzo Moscato, Antonio Picariello and Giancarlo Sperli. Link

In this paper, the authors describe a novel music recommendation technique based on the identification of personality traits, moods, and emotions of a single user. It embeds users' personality and mood with a

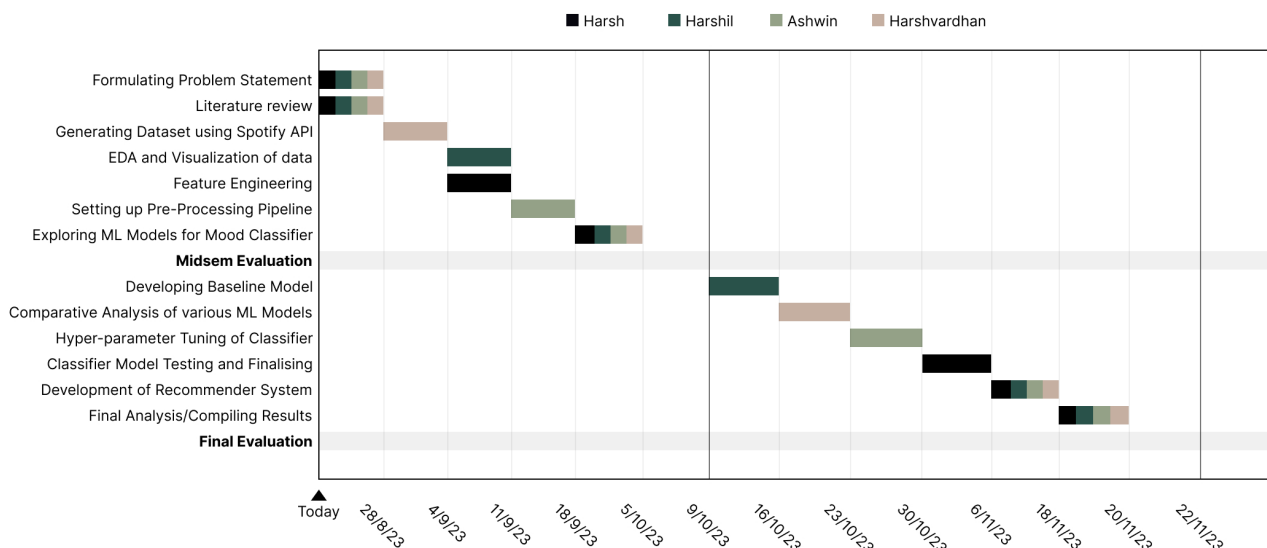
content-based filtering approach to obtain accurate and dynamic results.

Moodplay: Interactive Mood-based Music Discovery and Recommendation by Ivana Andjelkovic, Denis Parra, John O'Donovan. Link

MoodPlay is a hybrid recommender system music which integrates content and mood-based filtering in an interactive interface. MoodPlay allows the user to explore a music collection by latent affective dimensions, by integrating user input at recommendation time with predictions based on a pre-existing user profile.

3 Final Outcome

From this project, we expect to deliver a robust Mood-Based Song Classifier and Recommender System that seamlessly integrates with users' preferences and emotions. We aim to contribute a practical solution that enhances music discovery and engagement by accurately predicting and aligning with users' predicted mood (on the basis of recent songs listened to and other features). By incorporating machine learning techniques, we want to provide a platform that not only recommends relevant songs but also offers insights into the relationship between emotions and music choices. Ultimately, our goal is to create a user-friendly tool that enriches people's lives by making their music experience more personalized and emotionally resonant.



Timeline and Individual Contribution