



SDL PROJECT REPORT

Soul Train - A Spotify Playlist Curator

(Group No. 11)

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**ABSTRACT**

Soul Train, A Music Curator Website has been created with the purpose of simplifying your music listening experience. With various applications available on the internet there is confusion among the users on which application to use. Furthermore these applications offer little to none personalized listening experience. With Soul Train we are offering you an unmatched personalized playlist algorithm to uplift your music listening experience.

Before working on this project we had limited ideas about how web development works. With this project we were able to gain knowledge about various different frameworks and latest backend technologies available.

Our main focus is to provide the users with a competitive music streaming service which offers a lot more personalization than the applications currently available to the users.

**Problem Statement**

With so many users having different streaming platforms available to them,each of which has its own set of features, users are left with a great ordeal where they have to find what suits their music tastes on their own. Often these streaming services provide the users with playlists that are showcased to pertain to their liking, however, these playlists are, to an extent, quite generic. This is where our platform comes in, Soul Train uses different machine learning models to curate playlists for the user specifically based on their likings and after analyzing the type of music they listen to.

On top of the personalized playlists, Soul Train also offers you a unique feature marketed as the “Mood Gradient” where the user can generate a playlist that seamlessly transitions from one specific mood to the other. Hence the problems of personalized music or playlists lacking any character by majority of the streaming services are tackled by Soul train in an effective manner.

**Motivation**

While using applications like Spotify, most of our time goes in the making of the playlist. This has always been a problem for the young generation who have little or no time in hand. With Soul Train we have aimed to eradicate this problem and created a complex algorithm which uses the users listening activity curates a personalized playlists that will be similar to the ones the user will create for themselves or might want to indulge in.This henceforth, gives the user the opportunity to not only get curated playlists that also reflect their own personality but also discover new songs, which are classified into different moods and genres using our machine learning models.

**Method**

STAGE 1: IDEATION AND PROTOTYPING

- Discussions and meeting where held to decide on what features to be

added for the platform and how to implement it

STAGE 2: WORKING ON FRONTEND

- For frontend, after designing our website on wix, we started with the

development. The site is structured using the well known HTML.

We have used css to beautify our website and javascript to add animations.

STAGE 3: DEVELOPING BACKEND

- For the backend, we have used python scripts to develop our machine learning models.There are two machine learning models which have been implemented in PlayTwist and Mood Gradient. We have connected our frontend to the backend using Flask.

STAGE 4: DEBUGGING, CHECKS, AND DEPLOYING

- Before every Presentation our team would go through the progress, look for breakpoints and fix them.

STAGE 5: REVIEW

-Following the presentations that we had given to the course faculty we now have better idea and view of our project.

1. Landing Page - This gets you introduced with our project’s idea and motive. Designed gracefully with captivating graphics and visuals we guide the user through the given set of features that we have developed.
2. About us - This page is an overview giving us the background of the group members and also briefly describing the main idea of the project.
3. Feature Page - Here the user interacts with the different feature set that they are provided with, Mood Gradient, Playtwist, and Genre Based.

Future Scope

1.We plan to provide a global rating system for songs, artists and playlists.

2.We also plan to make more algorithms for blending two users' music listening taste and generating a playlist that caters to a mix of both the users

3.Addition of more moods in the Mood gradient feature.

4.Adding more genres in the Genre based playlist for a more diverse listening experience.