Punjab Engineering College

(Deemed To Be University)



WEB TECHNOLOGIES

CSN 303

PROJECT SUMMARY

Submitted To:

Dr. Manish Kumar

Submitted By:

Srishti Arora (18103011) Bhavya Gulati (18103024)



Euphony is a **Music Recommendation web application**. Music recommender system learns from the users past listening history and recommends them songs which they would probably like to hear in future.

With the rise of digital content distribution, people now have access to music collections on an unprecedented scale. Commercial music libraries easily exceed 15 million songs, which vastly exceeds the listening capability of any single person. With millions of songs to choose from, people sometimes feel overwhelmed. Thus, an efficient music recommender system is necessary in the interest of both **music service providers and customers**.

Music Service Providers need an efficient way to manage songs and help their costumers to discover music by giving quality recommendation. Thus, there is a strong need of a good recommendation system.

Users will have no more pain to make decisions on what to listen while music companies can maintain their user group and attract new users by improving users' satisfaction.

Our web application is based on **Collaborative Filtering Algorithms** which predict the taste of a user by collecting **preferences** of the user. We used **Million Song Dataset** to find correlations between users and songs and to learn from the previous listening history of users to provide recommendations for songs which users would prefer to listen most.

Web Technologies Used

HTML

HTML is a markup language that is the backbone of any website development process, without which a web page does not exist. Hypertext means that text has links, termed hyperlinks, embedded in it.

We have used HTML to make the basic framework of our website. It provides the structure of our website so that web browsers know what to show.

CSS

CSS is a Cascading Style Sheet. It enables a web designers to change colors, fonts, animations, and transitions on the web. They make the web look good.

We have used CSS to give style to our website and add colors and fonts to make the website more attractive.

JavaScript

JavaScript is an event-based imperative programming language (as opposed to HTML's declarative language model) that is used to transform a static HTML page into a dynamic interface. It is the programming language of the web.

JavaScript is being used on the website to assign the functions to the various attributes of the website to make the website more interactive.

Bootstrap

Free and open-source CSS framework directed at responsive, mobile-first front-end web development.

Bootstrap is being used in the website to the website page more responsive to the user.

Django

Django is a python based free and open-source web framework that follows the Model-Template-View (MTV) architectural pattern. Django also provides an optional administrative create, read, delete, and update interface that is generated dynamically through introspection and configured via admin models.

We have used Django for the backend of our project because of its framework emphasizes reusability and "pluggability" of components, less code, low coupling, rapid development.

GitHub Repository Link:-

https://github.com/srishtiarora15/Euphony-Music_Recommender