



CSE370 : Database Systems
Project Report
Project Title : Music Streaming Service

Group No : 1
Lab Section : 5
Spring 2023

ID	Name	Back End Contribution	Front End Contribution
21101155	SIAM RAHMAN KARIP	Favorites	
21101298	ANIKA ISLAM	Login, Logout, Signup, User Control, Change Password	Login, Signup, User Control, Change Password, Favorites & Admin view
21101312	TAJWAR AL HAQUE ROBIN	Search Implementation	Search Bar
21141009	NUSRAT JAHAN NUHA	Admin View, User View, Songs Control	User View & Songs Control

Introduction

Our project is based on a music streaming system, which we named “Play Beats”. For our project, we have used tools such as HTML and CSS for the front end development, phpmyadmin for the back end development, and PHP for the connection between front end and back end.

Here, we would be uploading all the songs from the official pages so that the user does not need to face the trouble to search for the authentic songs from sources like YouTube.

Users have access to all the songs available in the database. They can make their own playlists by adding songs of their own. Here, users can change their password from the login page only. If there is any chance of the user’s account being hacked, they can change their password from the login page without even going into the homepage.

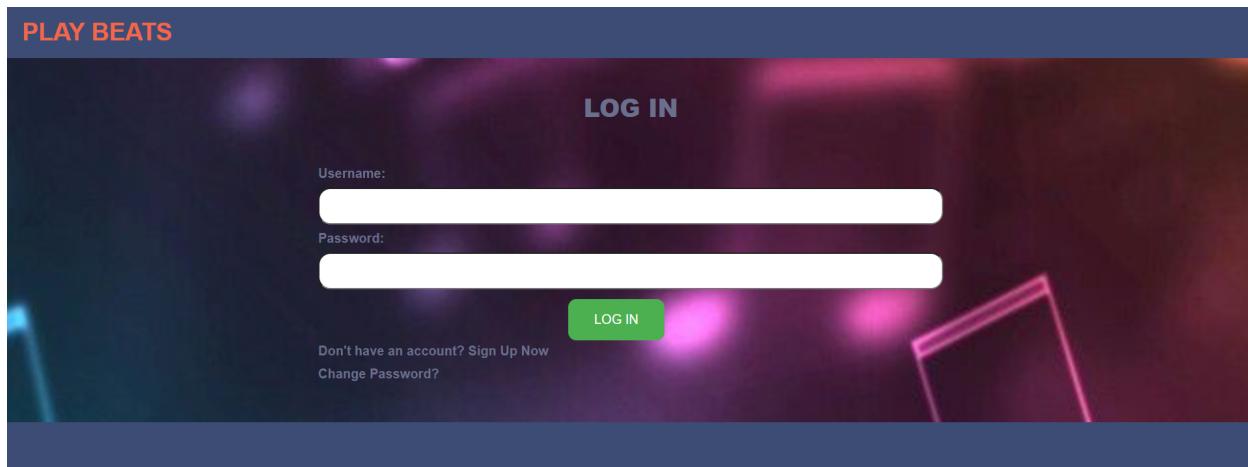
On the other hand, the admin holds the power to upload, update and delete songs into the database. Also, an admin holds the authority to deactivate any user’s account if they notice any unethical activities.

Project Features

FEATURES DEVELOPED BY : Anika Islam

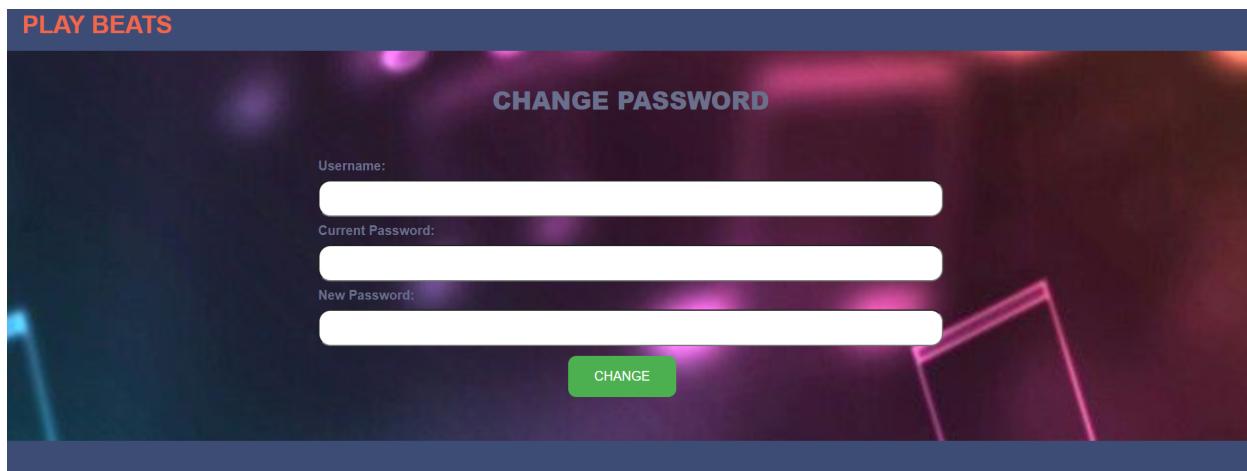
BACK END AND FRONT END CONTRIBUTION FOR :-

LOGIN :- In the front end (login.php), there are username and password inputs where both the user and admin can insert their usernames and passwords. If the given usernames and passwords match with the database, then the user is directed to the user view (user_view.php) and the admin (admin_view.php) is directed to the admin view by the back end conditions (login.php). Otherwise, the user or admin remains in the login page.



The screenshot shows a dark-themed login page for 'PLAY BEATS'. At the top, the word 'PLAY BEATS' is written in orange. Below it, the title 'LOG IN' is centered in white. There are two input fields: 'Username:' and 'Password:', both with white backgrounds and black borders. Below these fields is a green rectangular button with the text 'LOG IN' in white. At the bottom of the page, there are two small links: 'Don't have an account? Sign Up Now' and 'Change Password?'.

CHANGE PASSWORD :- If the user wants to change password, he/she can do so in the login page by clicking on 'change password'. This will direct them to a page (change_pass.php) where they have to correctly insert both their username and current password, which needs to be present in the database, to insert their new password. If all these are followed, then the new password will be updated in the database, and the user will be directed into the login page again. If both the username and current password is inserted and no new password is given, both the username and current password are incorrect, and current and new passwords are the same, then no change is done in the database and the user remains in that page.



The screenshot shows a dark-themed 'CHANGE PASSWORD' page for 'PLAY BEATS'. At the top, the title 'CHANGE PASSWORD' is centered in white. There are three input fields: 'Username:', 'Current Password:', and 'New Password:', all with white backgrounds and black borders. Below these fields is a green rectangular button with the text 'CHANGE' in white. The background of the page features a dark gradient with glowing blue and pink geometric shapes.

SIGN UP:- If a user is new to the website, then he/she can sign up by clicking on ‘sign up’ which will direct them to a page (signup.php) where they have to insert their email address, username and password. If the user inserts an username or an email address which are already in the database, then a new account will not be created and the user remains in the signup page. Otherwise, all the details of the new user will be inserted into the database by the back end (signup.php) and the user will be directed to the login page.

USER CONTROL :- The admin has the power to delete any user involved in any unethical activities (such as a user is trying to have access to another user’s account). Here, by clicking on the ‘User Control’ in the admin view (admin_view.php) , the admin is directed to a page (user_info.php) where all the users inserted in the database are visible in a table. By clicking on the ‘deactivate user account’ button, the user account can be deactivated permanently and the details of the user is deleted from the database (user_delete.php) . Also, the admin can add users by clicking on ‘Add new user’ which will direct to the sign up page (signup.php).

LOGOUT :- By clicking on the ‘Log out’ button , the user or admin are redirected to the login page. All their sessions in the website will be removed permanently. Neither can get into the website without logging in again.

FRONT END CONTRIBUTION (only) FOR :-

ADMIN VIEW (Upload Songs) :-

FAVORITES:-

Song Name	Artists	Album Name	Action
Apna Bana Le	Arijit Singh	Bhediya	[Play](#) [Delete](#)
Ghar Nahi Jaana	Tanishk,Armaan, Zahrah,Saima,Rashmi Virag	Gumraah	[Play](#) [Delete](#)

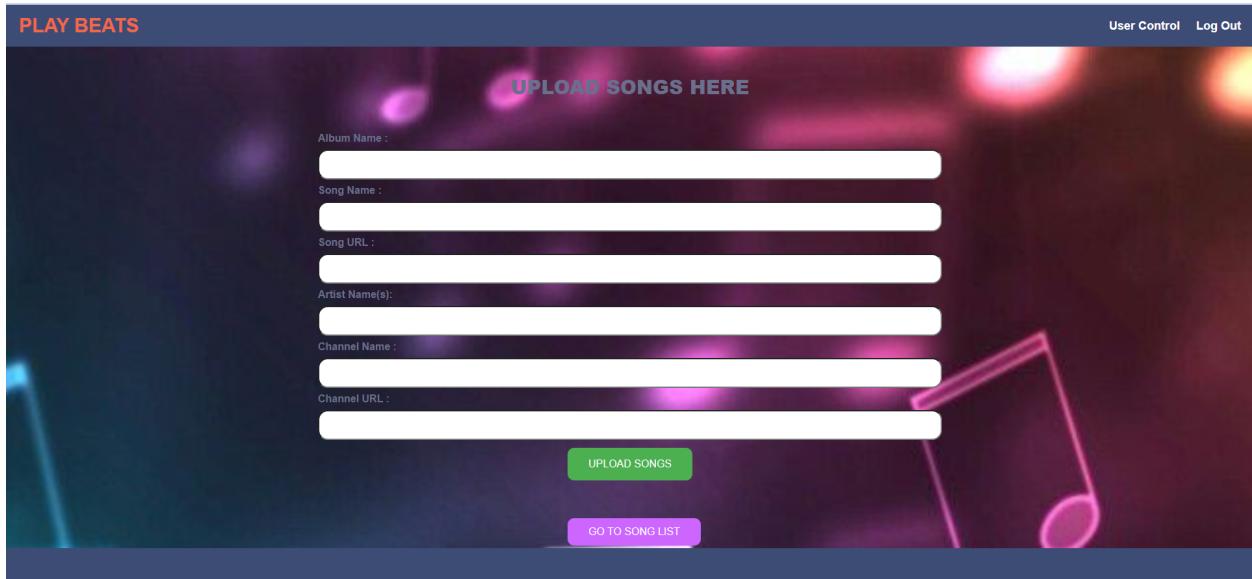
 There is a purple bar at the bottom of the table."/>

FUTURE PLAN :- For security purposes, there is no email feature. As a future plan, email implementation will be added. This is because an email is sent to the user whenever a password is tried to change by anyone else other than the user himself/herself. In this case, he/she can at least try to retrieve their account by changing their password immediately. Also, an email can be sent to the user before deleting its account from the database. A count function can be implemented so that after trying to insert a password during login beyond that count, an email can be sent to the user and also the admin to take the necessary steps.

FEATURES DEVELOPED BY : Nusrat Jahan Nuha

UPLOADING NEW SONGS:- The admin can upload new songs to the database from admin view.

(BACK END CONTRIBUTION)



PLAY BEATS

UPLOAD SONGS HERE

Album Name :

Song Name :

Song URL :

Artist Name(s):

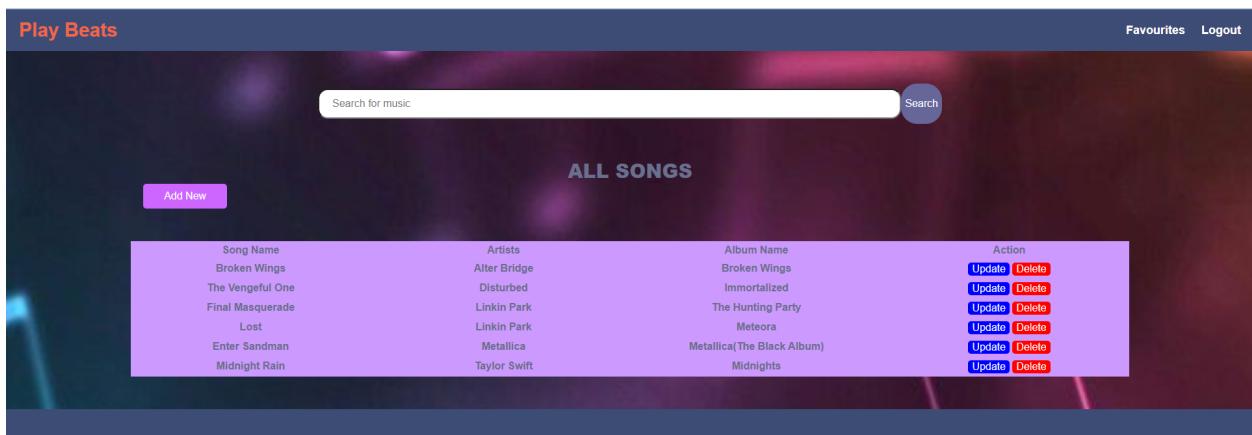
Channel Name :

Channel URL :

UPLOAD SONGS

GO TO SONG LIST

SONGS CONTROL:- Admin can update any information of the existing songs by clicking the update button, and delete any existing songs by clicking the delete button.



Play Beats

Favourites Logout

Search for music

Search

Add New

ALL SONGS

Song Name	Artists	Album Name	Action
Broken Wings	Alter Bridge	Broken Wings	Update Delete
The Vengeful One	Disturbed	Immortalized	Update Delete
Final Masquerade	Linkin Park	The Hunting Party	Update Delete
Lost	Linkin Park	Meteora	Update Delete
Enter Sandman	Metallica	Metallica(The Black Album)	Update Delete
Midnight Rain	Taylor Swift	Midnights	Update Delete

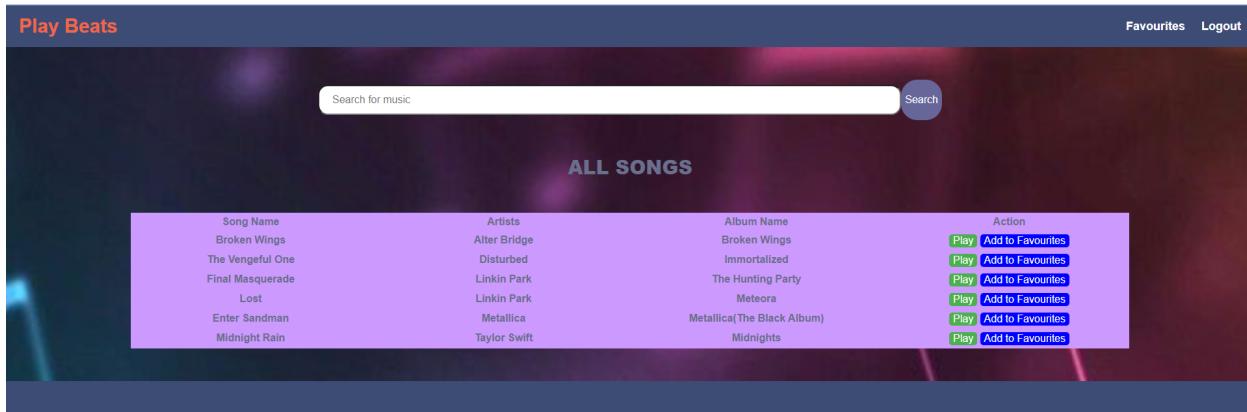
USER'S VIEW:- Users can view the lists of songs present in the database in their window. They can play any of their desired songs by clicking the “Play” button. It takes them to YouTube, where they can listen to the version of the song uploaded by the song artist’s official channel. They can also add their chosen or favorite songs to a playlist by clicking the “Add to Favourites” button.

Song Name	Artists	Album Name	Action
Broken Wings	Alter Bridge	Broken Wings	Play Add to Favourites
The Vengeful One	Disturbed	Immortalized	Play Add to Favourites
Final Masquerade	Linkin Park	The Hunting Party	Play Add to Favourites
Lost	Linkin Park	Meteora	Play Add to Favourites
Enter Sandman	Metallica	Metallica(The Black Album)	Play Add to Favourites
Midnight Rain	Taylor Swift	Midnights	Play Add to Favourites

FUTURE PLAN :- Right now the admin is manually checking whether or not the songs being uploaded are from verified YouTube channels. Hence a function will be implemented to check whether the channel url being uploaded belongs to a verified channel. If not, system will raise an error while uploading music to the database.

Users can only play songs from YouTube. In future, users will be able to play songs from other music streaming services like Spotify and Deezer. Users can choose the platform they wish to play the songs on.

FEATURES DEVELOPED BY : Siam Rahman Karip



The screenshot shows a music application interface. At the top, there is a dark header with the text 'Play Beats' on the left and 'Favourites' and 'Logout' on the right. Below the header is a search bar with the placeholder 'Search for music' and a 'Search' button. The main content area is titled 'ALL SONGS' in bold capital letters. It displays a table with four columns: 'Song Name', 'Artists', 'Album Name', and 'Action'. The 'Song Name' column lists songs like 'Broken Wings', 'The Vengeful One', 'Final Masquerade', 'Lost', 'Enter Sandman', and 'Midnight Rain'. The 'Artists' column lists artists like 'Alter Bridge', 'Disturbed', 'Linkin Park', 'Linkin Park', 'Metallica', and 'Taylor Swift'. The 'Album Name' column lists albums like 'Broken Wings', 'Immortalized', 'The Hunting Party', 'Meteora', 'Metallica(The Black Album)', and 'Midnights'. The 'Action' column contains two buttons for each song: a green 'Play' button and a blue 'Add to Favorites' button.

ADD SONGS FROM FAVORITES :

Users can add their favorite songs from the entire song collection to a customized playlist by using the "Add to Favorites" option. They can hear those songs by clicking the play button, which takes them to the song's YouTube URL.



The screenshot shows a music application interface. At the top, there is a dark header with the text 'Play Beats' on the left and 'Logout' on the right. Below the header is a search bar with the placeholder 'Search for music' and a 'Search' button. The main content area is titled 'MY FAVOURITES' in bold capital letters. It displays a table with four columns: 'Song Name', 'Artists', 'Album Name', and 'Action'. The 'Song Name' column lists songs like 'Apna Bana Le' and 'Ghar Nahi Jaana'. The 'Artists' column lists artists like 'Arijit Singh' and 'Tanishk Armaan, Zahrah, Salma, Rashmi, Virag'. The 'Album Name' column lists albums like 'Bhediya' and 'Gumraah'. The 'Action' column contains two buttons for each song: a green 'Play' button and a blue 'Delete' button.

DELETE SONGS FROM FAVORITES:

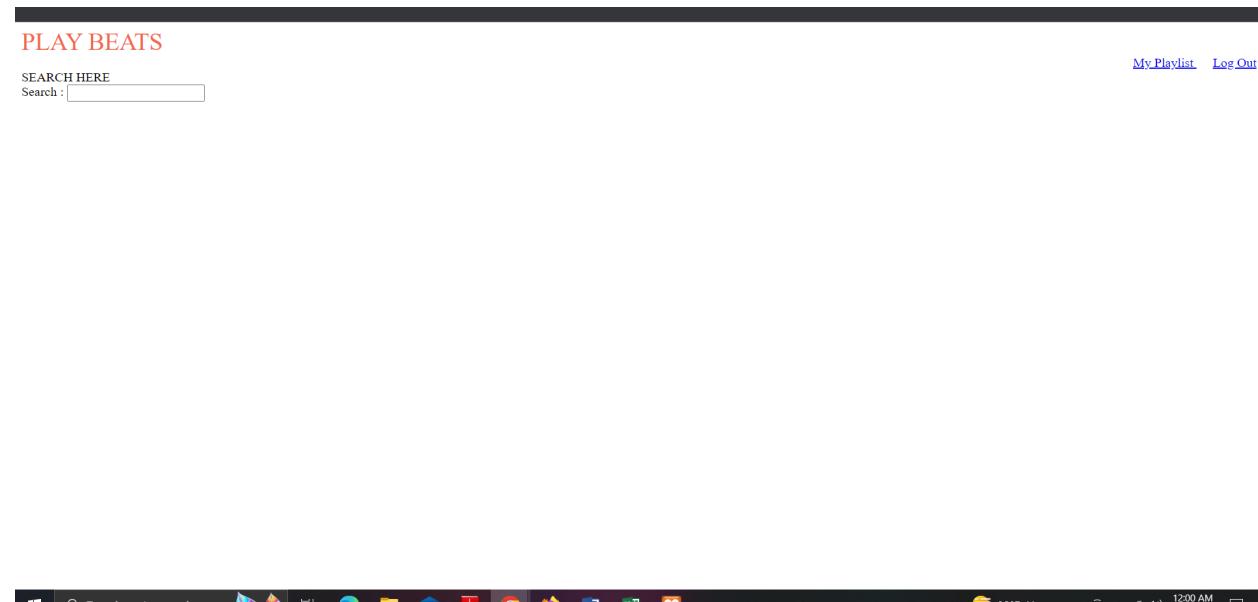
The users can also delete the songs from the 'Favourites' section by clicking the 'Delete' option beside the 'Play' button.

FUTURE PLAN:

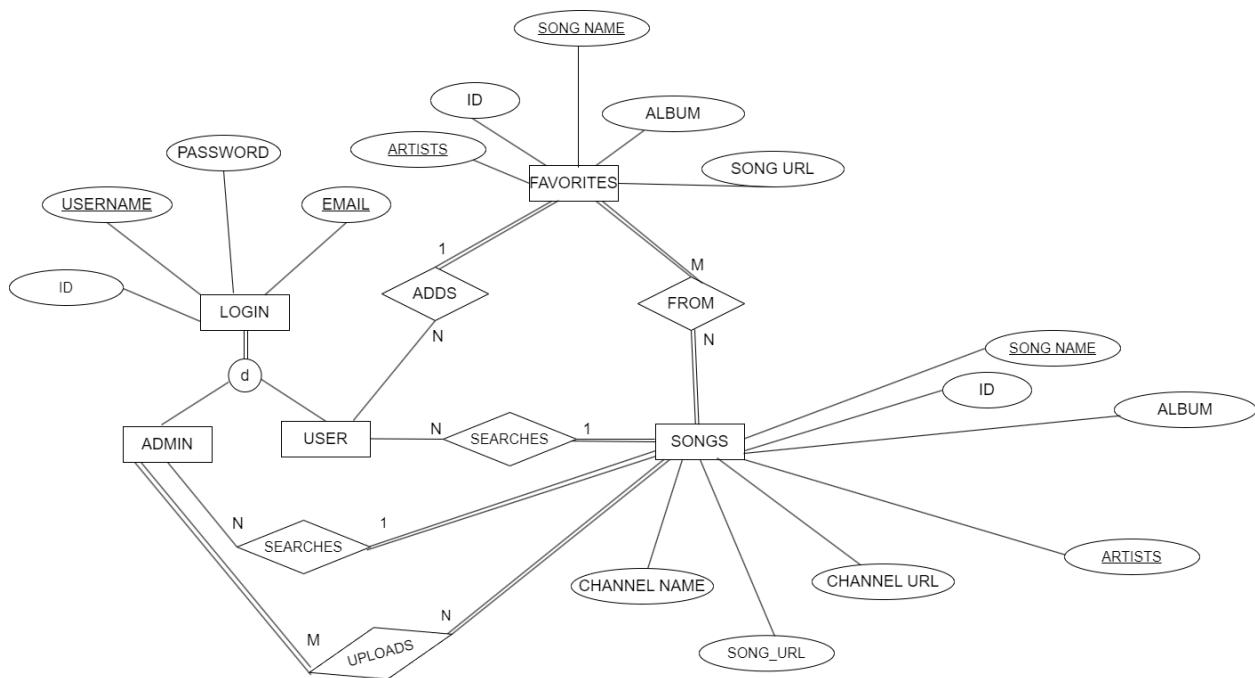
Currently, users may only add songs to a single favorites playlist, which might be annoying if they want to listen to different types of music at various times. A system with numerous playlists can be built to overcome this problem.

FEATURES DEVELOPED BY : Tajwar Al Haque Robin**SEARCH:**

The user can search for songs with the name as well as the artist's name of the desired song. Front end will show a search bar(using html and php) with playlists. Backend will demonstrate the searching algorithm which will allow users to search their desired songs or artists's name, another speciality is that song title, artist's name suggestions will be suggested when the user types a letter or more even if he does not enter the name of the full song.



EER Diagram



Schema Diagram

