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ABSTRACT

The report presents a comprehensive exploration of various music platforms, including Spotify, QQ Music, and 8tracks, as part of a research initiative for the development of a web-based music platform for the Final Year Project. The primary objectives of the envisioned music platform are to offer a user-friendly design, completely cost-free access and an interactive system featuring functionalities such as 'Like,' 'Dislike,' 'Comment,' and 'Add to Playlist.' A key focus of the platform is to support local artists, providing them with an avenue for promoting their music without incurring additional expenses. This approach not only fosters a sense of patriotism but also aims to contribute to the advancement of the Malaysian music industry. The whole idea of this project is to design a Malaysian song based music platform, any Malaysian artist can use our platform for free.

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Part I:

Introduction

1.1 Overview

Music platforms have become integral to the way people explore music. The market is dominated by a variety of platforms, each providing unique features and experiences. Some of the prominent players include Spotify, Apple Music, Amazon Music, YouTube Music, and more. These platforms operate on a subscription-based model, providing users with access to vast libraries of songs, albums, and playlists. Most platforms offer subscription services with tiered plans, providing users with options for ad-free listening, offline downloads, and higher audio quality. They have advanced algorithms analyzing user listening habits and preferences to generate personalized playlists and recommendations, enhancing the music discovery experience. Lastly, users can download songs for offline listening, addressing connectivity issues and catering to users in areas with limited internet access.

1.2 Project Objectives

- 1. Provide a website that users can easily access, find and listen to their favorite Malaysian songs.**

On the global music market, Malaysian songs are often overshadowed and neglected even though they are really good. Our goal is to bridge the gap by providing a website that curates Malaysian songs so they are easily accessible.

- 2. Prepare basic music website features like playlists, music player, like system so that users can have a seamless experience browsing through.**

The website should be outfitted with the basics of a music website including features such as making playlists, liking songs, playing songs on a music player and so on.

- 3. Give users a chance to interact with the website, submitting requests, creating an ecosystem of user curated Malaysian content.**

Create a space where users can submit song requests, to further curate the website with obscure good Malaysian songs. Therefore always updating the website constantly with new and upcoming songs.

1.3 Target Users

1. Malaysians

On most music websites it's hard to find Malaysian songs, Malaysians would find this website very convenient to find familiar songs, and new local artists.

2. People Interested In Malaysian Culture

The cornerstone of every culture is their music, this is also the fact for Malaysian culture. For foreign people looking to dive into our culture, this website provides a stepping stone into understanding us as a people.

3. Malaysian Artist

Malaysian artists are having a hard time getting their music on more globalized music websites due to the intense competition, thus not having any exposure to their great music. This website eliminates that and provides new and upcoming artists a good place to showcase their work.

1.4 Project Scope

For our project scope, we are trying to develop a web-based music platform that is user-friendly and simple to use for our users. We don't want anything very complicated but still able to let users enjoy music to the fullest. We are also targeting Malaysian artists to let them upload their music on our music platform. This will help them to gain more exposure compared to uploading to other platforms because our platform focuses only on the Malaysian music industry. We will be limiting our music platform to only let Malaysian artists to upload their music, we are not allowing overseas music to be listed in our music platform.

1.5 Gantt Chart 1

The Gantt chart must show the duration taken for selecting group members until delivering the Interim Report/Presentation of Part 1.

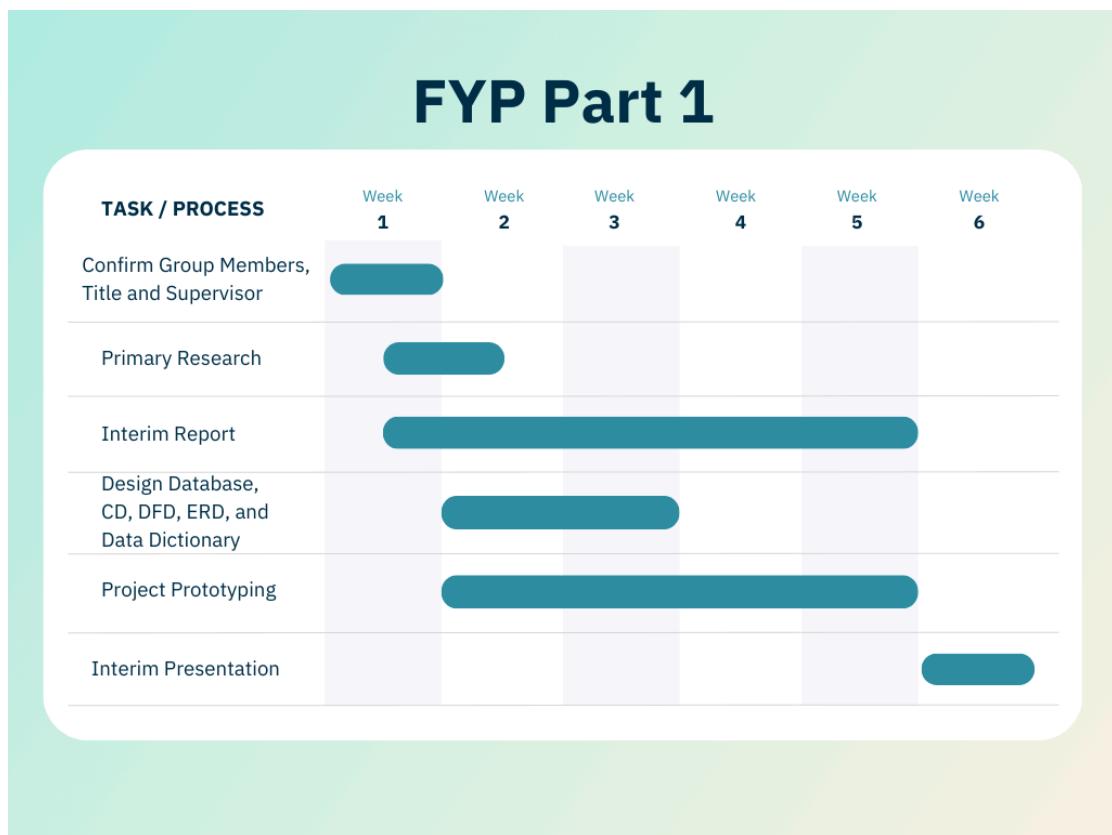


Figure 1.1 Gantt Chart 1

1.6 Gantt Chart 2

The Gantt chart must show the duration taken from Design phase until delivering the Final Report/Presentation for Part 2.

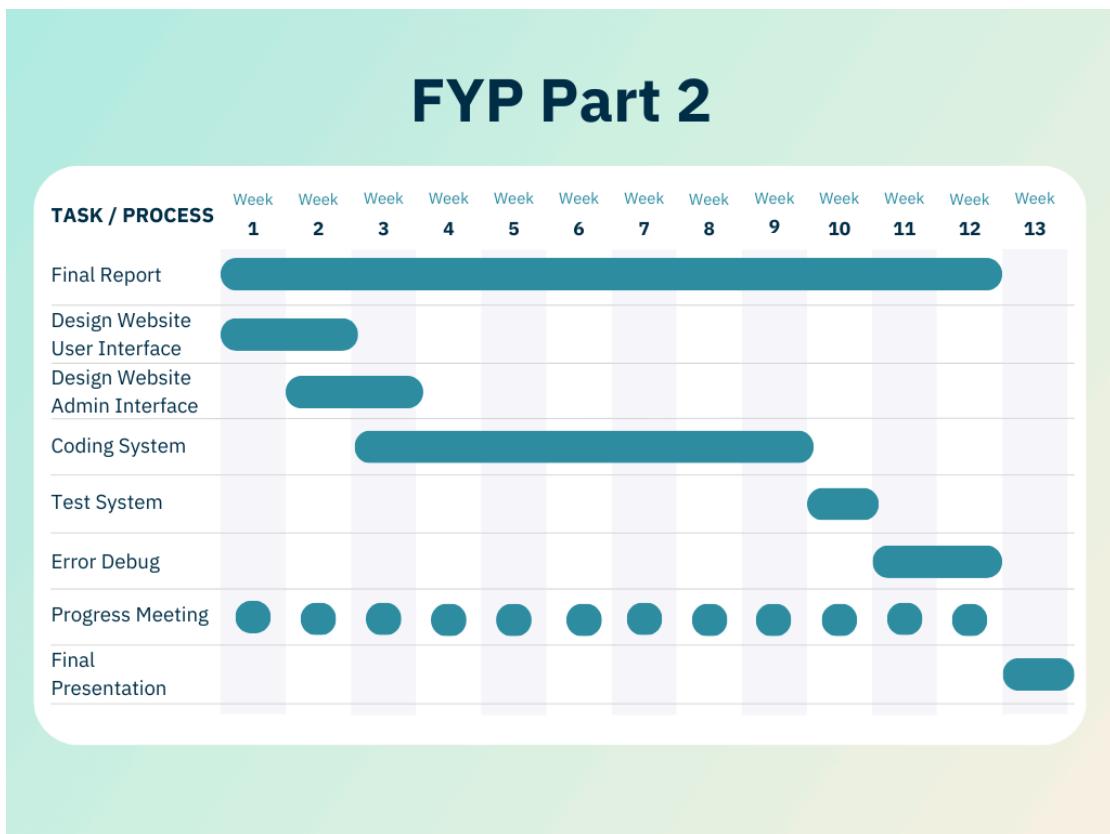


Figure 1.2 Gantt Chart 2

1.7 Division of Work

TASKS	STUDENTS		
	Bryan	Francis	Wong
Preparing project proposal	X		
Overview		X	X
Objectives		X	X
Target Users		X	X
Project Scope			X
Gantt chart	X		
Primary Study		X	X
Problem Statements		X	X
System Features		X	X
Hardware/Software Requirements	X		X
Data flow diagram & Context Diagram	X	X	
Entity relationship diagram	X	X	
Data dictionary	X	X	
S”][System Interface Design			X
System Coding	X		
System Testing	X	X	X
Compilation of Final Report	X	X	X
Presentation and Demo	X	X	X
Meeting Minutes	X	X	X

Table 1.1 Division of tasks

Part II:

Primary Study And

Literature Review

2.1 Primary Study

2.1.1 Spotify

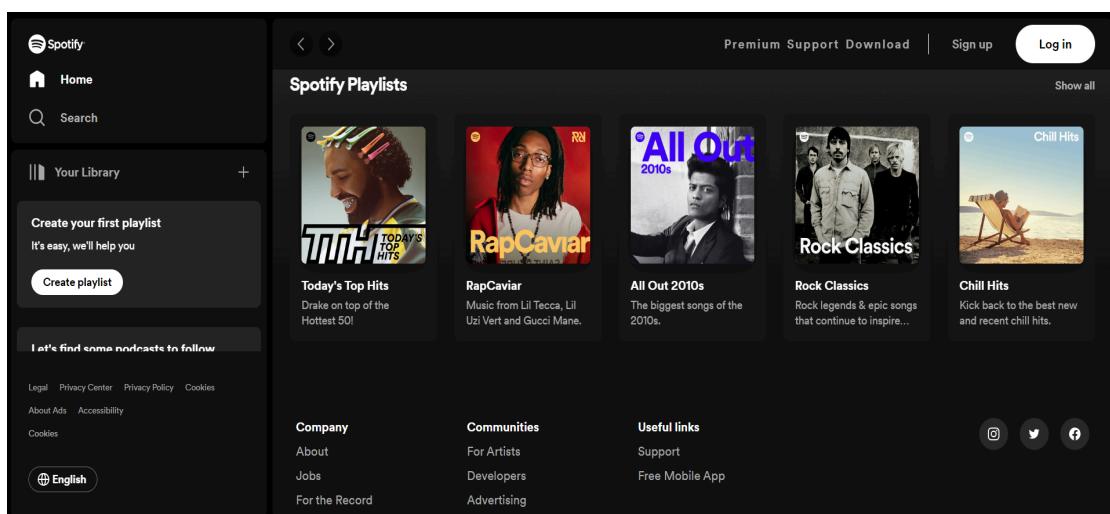


Figure 2.1.1 Spotify Home Page

The picture above is the homepage of Spotify. The features are listed at the left and bottom of the page, the features at the bottom of the page are the service and the information of Spotify. The middle of the page shows the playlist that Spotify created, the top right corner has login and sign up features, and it also shows its premium support download link.

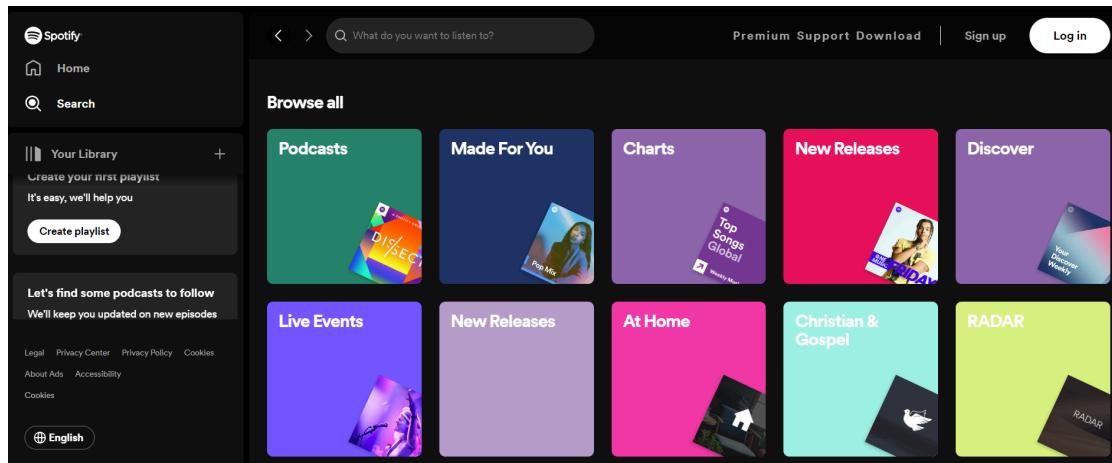


Figure 2.1.2 Spotify Search Section

Spotify has a search function to let users find the song they wanted to listen to. At the search page, it shows up all of the music categories that Spotify provides in order to let users find certain types of music, and users also can type the name of the music to find the music in the search box. After that, users can create playlists and follow podcasts for a better user experience.

The advantages of Spotify are:

1. Users can follow podcasts in order to find their song easily and notice the update of their new episodes.
2. Users can find the song information and artist information of the song they are listening to.
3. Spotify supports connecting to other devices to play the music.
4. Easy to save music by clicking on the save button.
5. Spotify has a lyrics feature to let users be able to sing together.

The disadvantages of Spotify are:

1. The music found on Spotify has a playlist that includes a lot of other music and the user can't remove them, although the user has created a playlist but it still has that music in the queue.
2. Although Spotify has a lyrics feature, it still doesn't work on a lot of the songs.

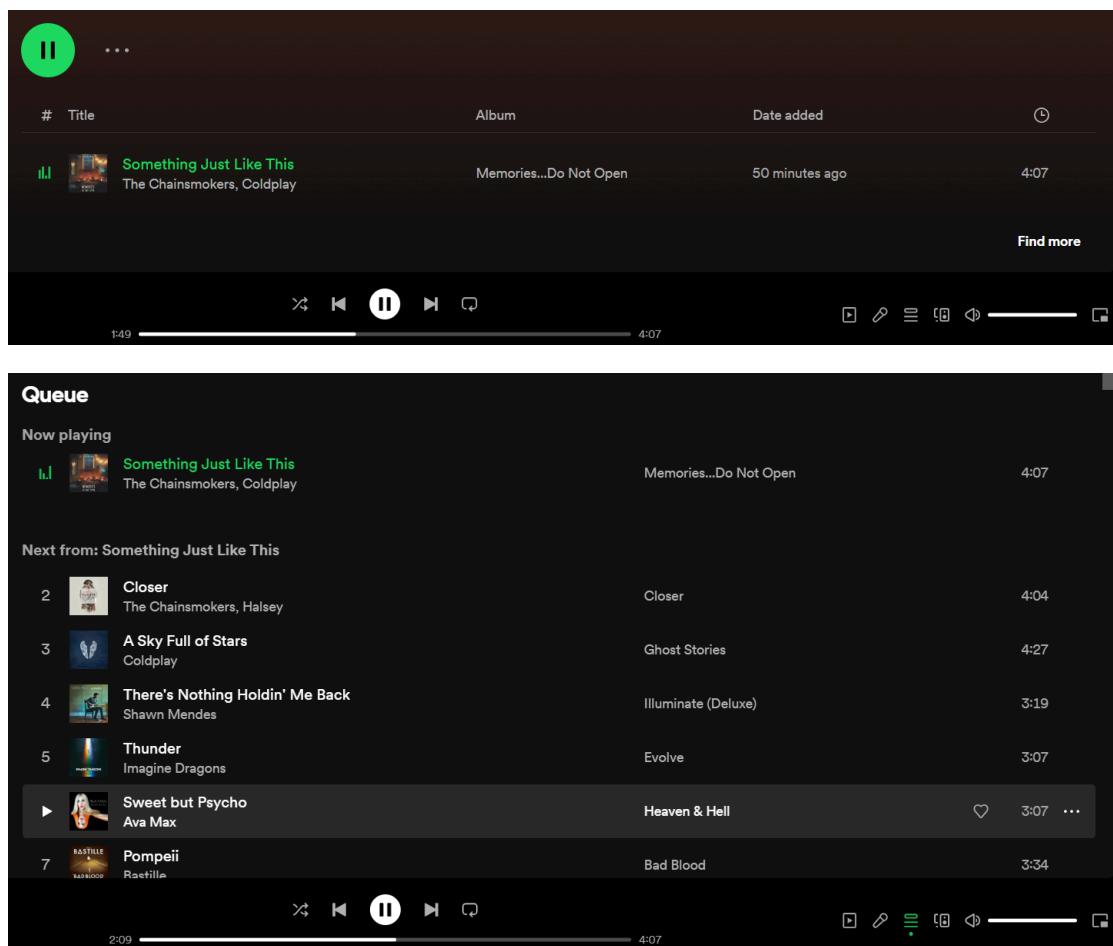


Figure 2.1.3 Spotify Playlist

The first example picture above shows the playlist has only one song. But when the user plays it, the second example picture shows it actually having few other songs in the queue. Since it can't be removed out of the queue, this will be frustrating for the user that doesn't want to listen to other songs.

2.1.2 QQ Music



Figure 2.2.1 QQ Music Home Page

This is the homepage of QQ Music. All of the features for users are stacked at the top of the page. at the bottom of the page will be all of the songs that the platform uploaded. In addition, there is a VIP section where users need to pay to get an exclusive song library since the platform is created in China. In China a lot of songs are not free to listen to and you will need to pay.



Figure 2.2.2 QQ Music Search Section

As usual, there will be a search engine to let users find their songs easily by using genre sorting, mood and activity. Users can only listen to songs that are free listed in the platform and can't download or save the song to the user's playlist. To do that, users will need to either pay or log in to the platform using another app.

The advantages of QQ Music :

- There is a feature that I think is very convenient which is called the songs ranking. It enables users to rate their favorite songs and new users are able to see which song is on trending now.

The disadvantages of QQ Music :

- The UI is very outdated with no new updates.
- There is no dark mode feature which is able to protect users' eyes.
- Some songs are not free, not all users are able to pay that certain amount of money to listen to music
- The UI is not user friendly due to the feature bar are all stack at the top of the website, when users scroll down, all the features are not able to see unless users scroll up again.

2.1.3 8tracks

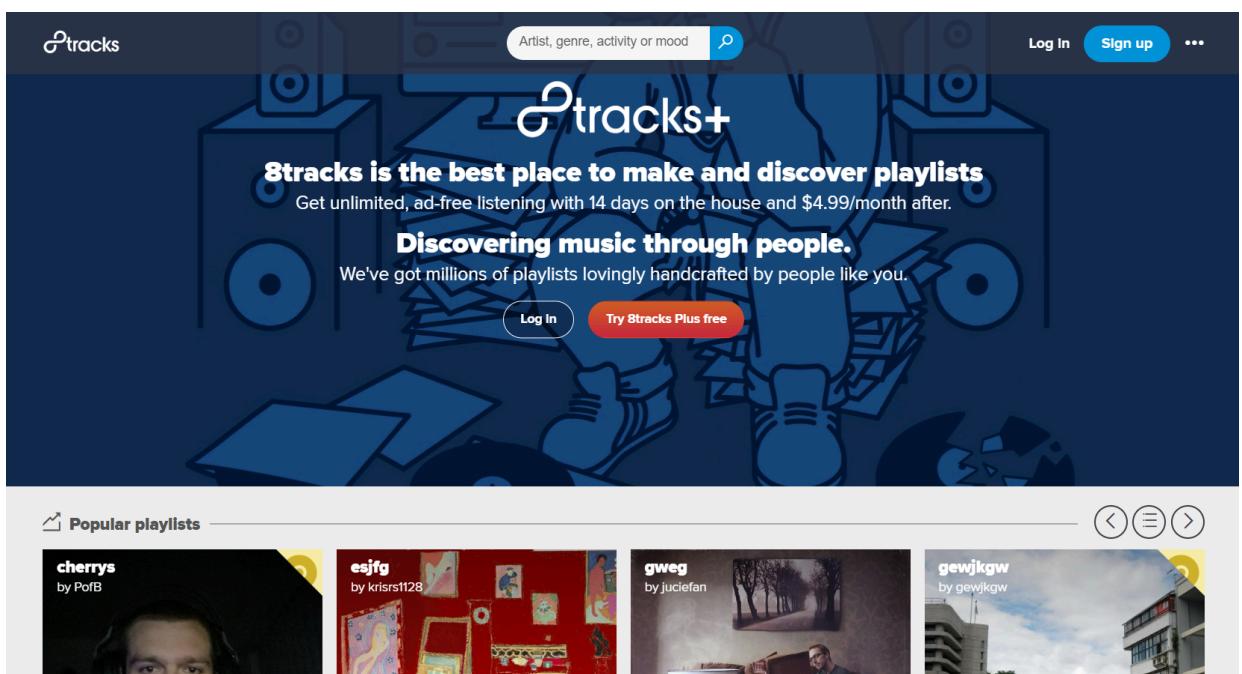


Figure 2.3.1 8tracks Home Page

The picture above is the homepage of 8tracks. It has a search function at the top of the page, log in or sign up and other features can be found at the top right corner. Homepage listing different kinds of playlists that it recommends. The other features like about and help features are listed inside the three dots at the top right corner.



Figure 2.3.2 8tracks Features Bar

The picture above shows where the other features of the website are at.

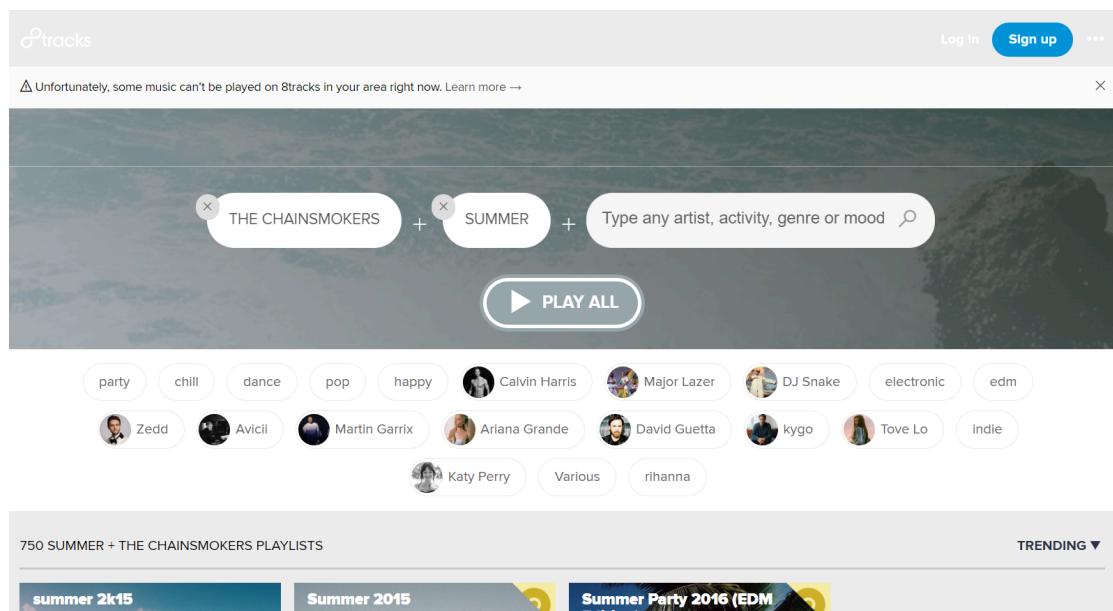


Figure 2.3.3 8tracks Search Section

The visitors can use the search feature to find the song by inserting the artist, genre, activity or mood. After that, it will show all the playlists that match for the themes. People can leave a comment under every playlist, and also follow the podcast for the newest update.

The advantages of 8tracks are:

1. Visitors can search for the songs or music by inserting the moods and themes, this feature is useful for the lazy music searchers.
2. All playlists on 8tracks are carefully curated by experts, meaning the songs inside the playlists are carefully chosen.

The disadvantages of 8tracks are:

1. Users can't create a playlist on its own.
2. The playlist on 8tracks can only be played via YouTube.
3. Visitors can't search for a certain song or music, all songs are inside a playlist.

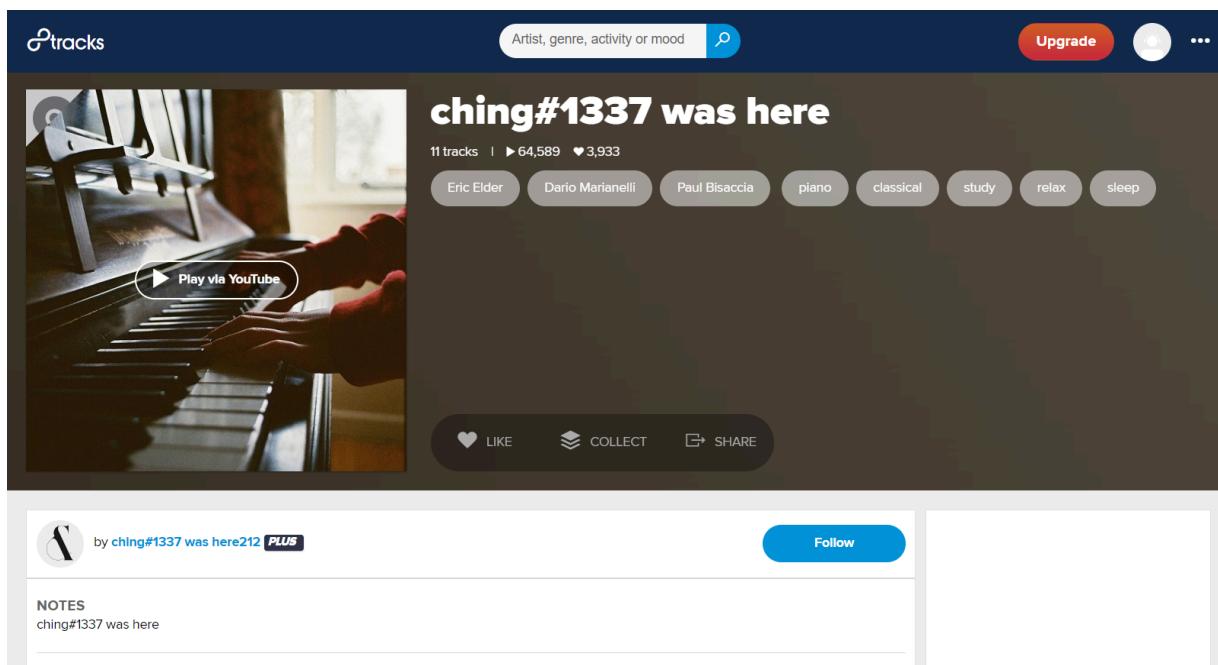


Figure 2.3.4 8tracks Song Page

The picture above shows the playlist is needed to play via YouTube, it has to connect to YouTube to display it, this might have a long loading problem while waiting for YouTube to respond. Why don't we just use YouTube then?

Summary

	Spotify	QQMusic	8tracks	MHz
Users can create and customize the playlist	✓	✓		✓
Users can listen to Free music	✓		✓	✓
Users are able to save the music	✓			✓
Users can send song request if they can't find the song they want				✓
Users can Update their profile	✓	✓		✓
Users can delete their account				✓

Table 2.1 Summary of Research

2.2 Problem Statement

Objective:

Providing a website that only allows Malaysian made music to make it easy for users to search for specific Malaysian songs or find new local songs.

Problem Statement:

On the global web, most popular music websites cater to the more western audience, which sidelines most Malaysian Artists and makes them unable to get exposure for their talent. It's both hard for Malaysian Artists to get recognition and for people in general to find Malaysian music.

Objective:

Make a system which allows users to submit song requests, curating the website to have both small and big artists.

Problem Statement:

Most popular music websites are run by corporations, which prioritize high budget songs from famous artists, mostly western songs, which make smaller creators unable to get exposure for their music.

Objective:

Make a website that can be a stepping stone for foreigners to find Malaysian music if they are interested in Malaysian culture.

Problem Statement:

Malaysia's culture is in general pretty unknown outside of itself, therefore our music has not much staying power in most foreign websites. If some foreigner was interested in Malaysian music and wanted to find it they would have a hard time getting a hold of most Malaysian music.

Part III:

System Design

3.1 System Features

- **Admin**
 - Can login.
 - Add / delete / update users.
 - Add / delete / update admins.
 - Accept / reject user requests.
 - Add/delete song.
 - Create / delete songs.
 - View all the song details and listen to them.

- **User**
 - Can register and log into the system.
 - Can search for songs on the website by name / artist.
 - Can play and listen to the songs.
 - Can like songs and view liked songs.
 - Can add songs to a personal playlist, and view / play them on a playlist page.
 - Can submit user song requests to the admins and view the status in their profile.
 - Can view information about the profile on the profile page.
 - Can update / delete my own account.

3.2 Hardware/Software Requirements

3.2.1 For Developer

- IDE - Vscode
- MYSQLI server

3.2.2 For User

- Computer / Phone
- Xampp

3.3 Context Diagram & Data Flow Diagram

3.3.1 Context Diagram

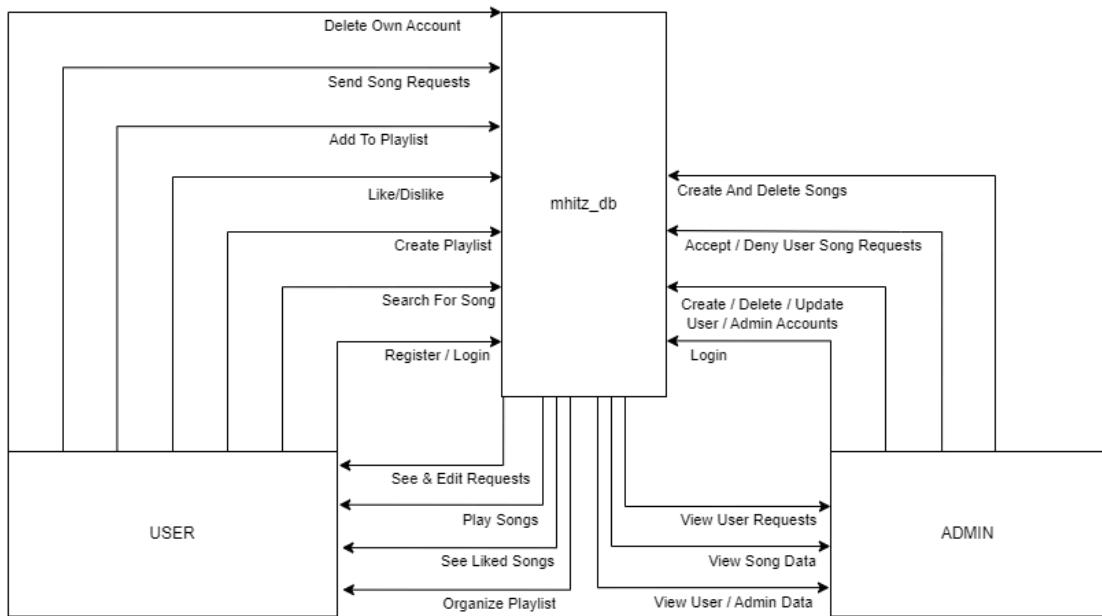


Figure 3.1 Context Diagram

3.3.2 Data Flow Diagram

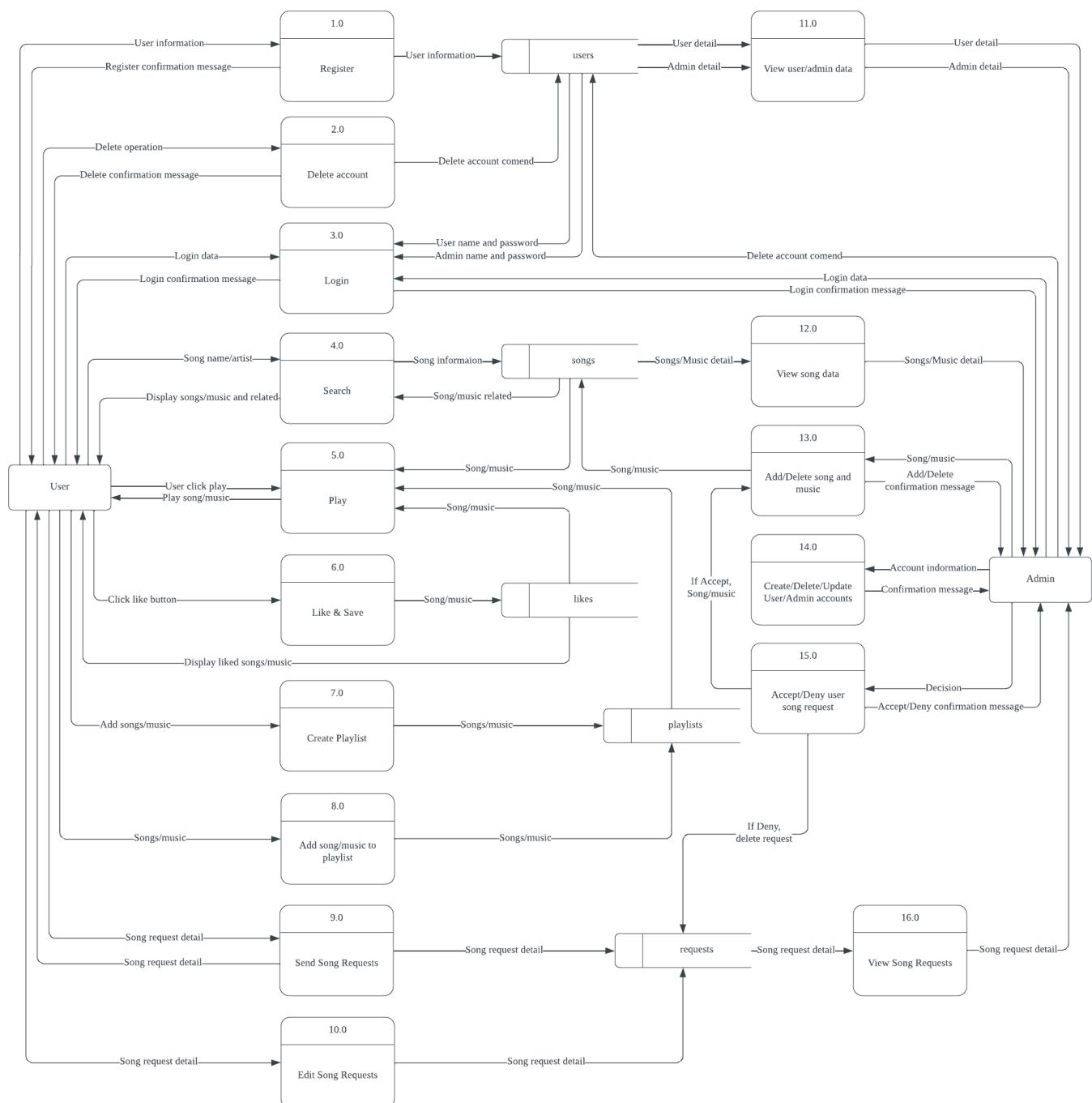


Figure 3.2 Data Flow Diagram

3.4 Entity Relationship Diagram

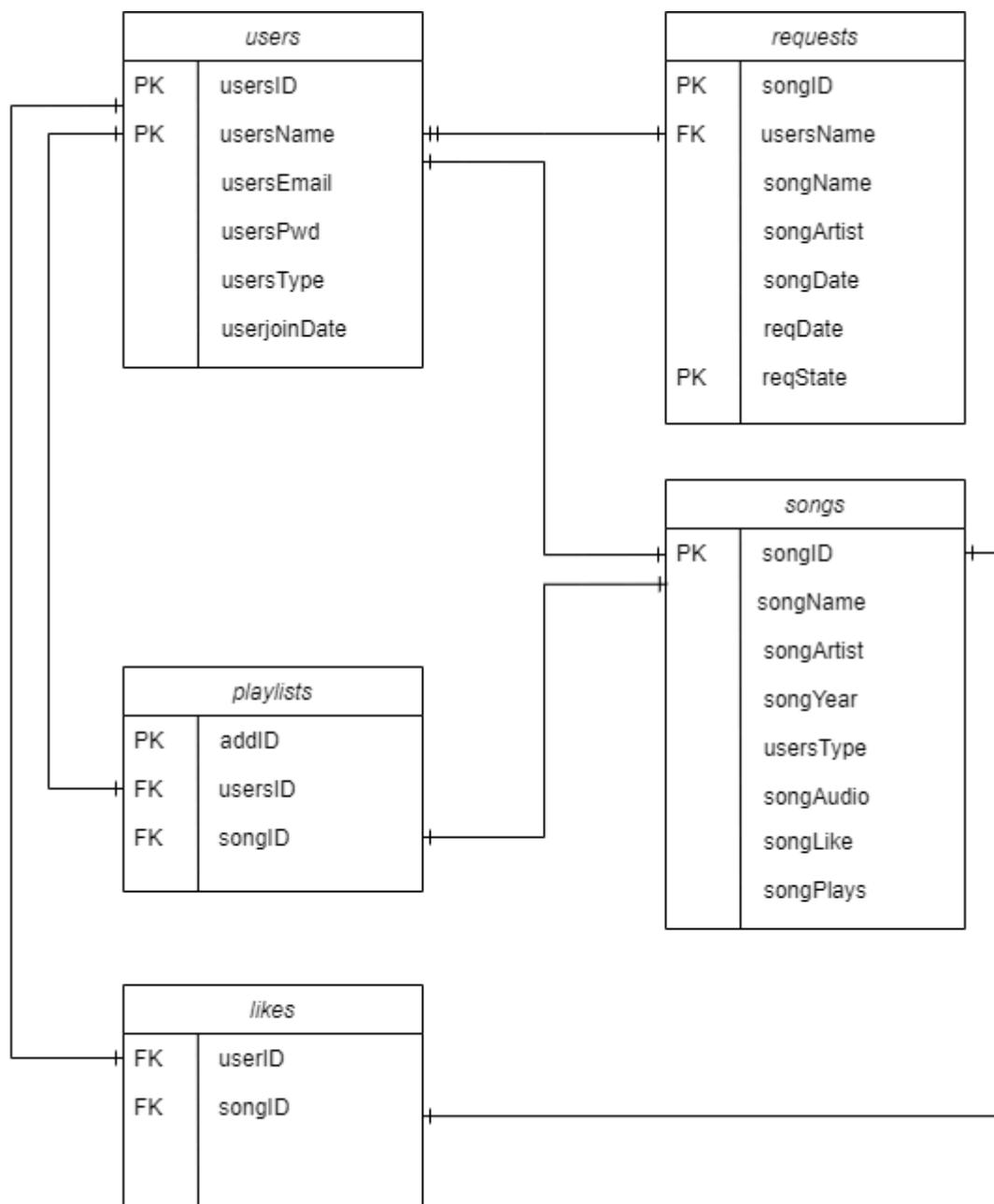


Figure 3.3 Entity Relationship Diagram

3.5 Data Dictionary

Table Name	Attribute Name	Content	Type	PK / FK
users	usersID usersName usersEmail usersPwd usersType userjoinDate	User ID User Name User Email Address User Login Password User Type User Join Date	Int(11) VChar(128) VChar(128) VChar(128) VChar(50) Date	PK PK
requests	songID usersName songName songArtist songDate reqDate reqState	Request ID User Name Song name Song Artist Song Date Request Date Request Status	Int(11) VChar(128) VChar(128) VChar(128) Year(4) Date Int(11)	PK FK
songs	songID songName songArtist songYear songImg songAudio songLike songPlays	Song ID Song Name Song Artist Song Year Song Image Song Audio Song Like Song Plays	Int(11) VChar(128) VChar(128) Year(4) Text Text Int(11) Int(11)	PK FK
playlist	addID usersID songID	Playlist ID Users Name Song ID	Int(11) VChar(80) Int(11)	PK FK FK
likes	userID songID	Users Name Song ID	VChar(80) Int(11)	FK FK

Table 3.1 Data Dictionary

Part IV:

System Previews

4.1 User Module

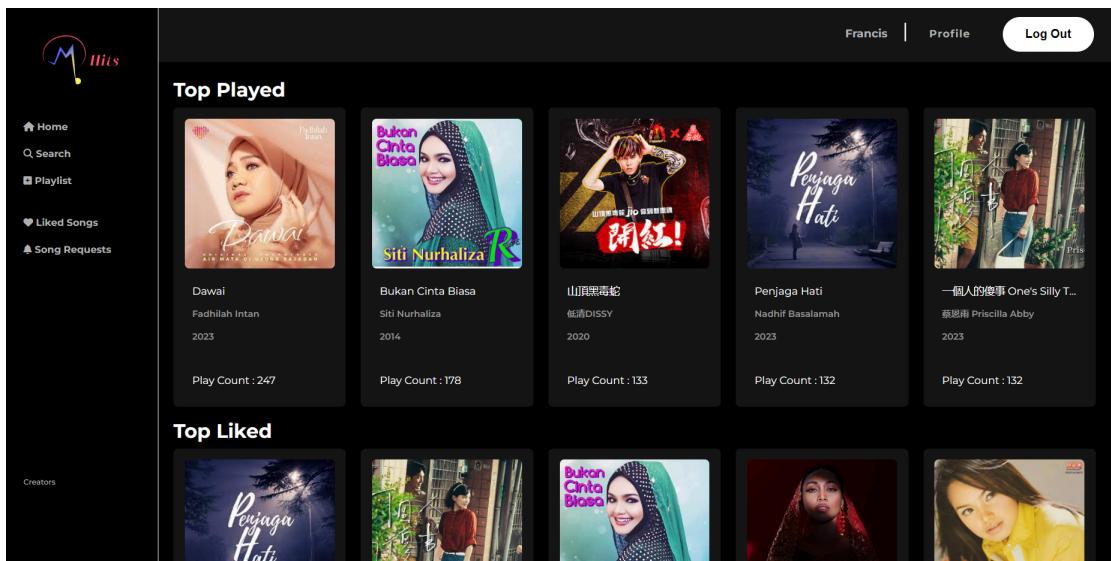


Figure 4.1 User Home Page

This is the home page for every user which shows the 5 most top played songs, and the 5 most liked songs. It will display if even the user is not logged in, but subsequent links that require session will prompt user to log in (eg: liking, playlist)

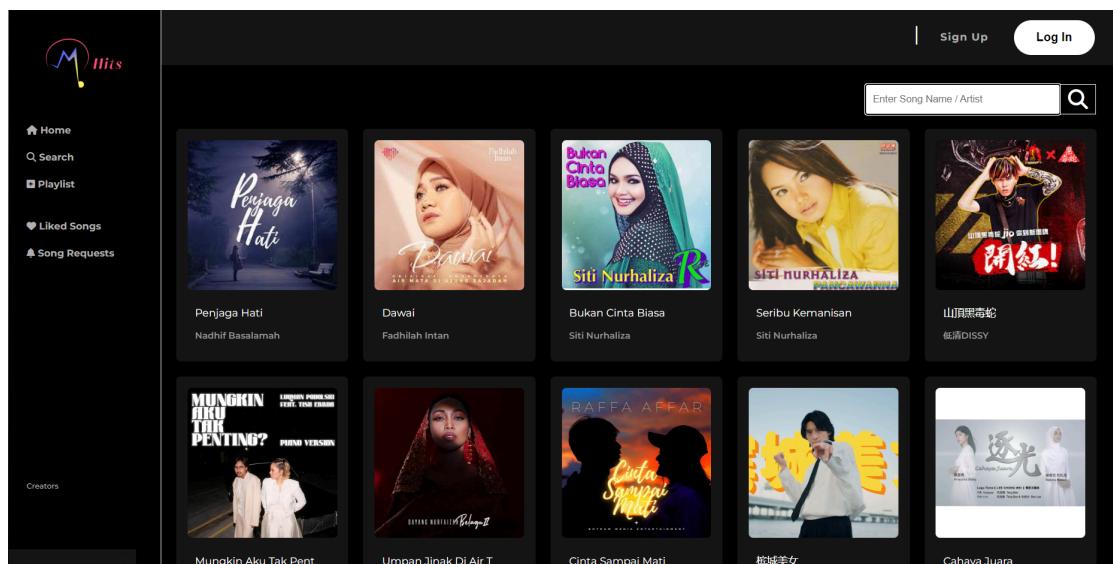


Figure 4.2.1 Search Page

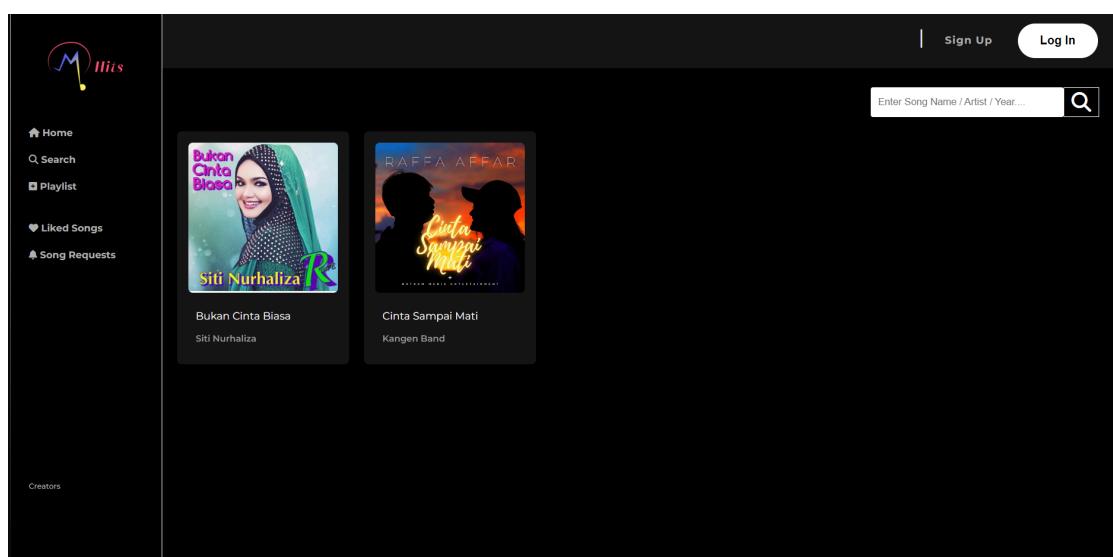


Figure 4.2.2 Search Page

This is the search page which allows users to filter and find songs based on song name / artist. (eg: 4.2.1 and 4.2.2 Before and After Searching “Cinta”)

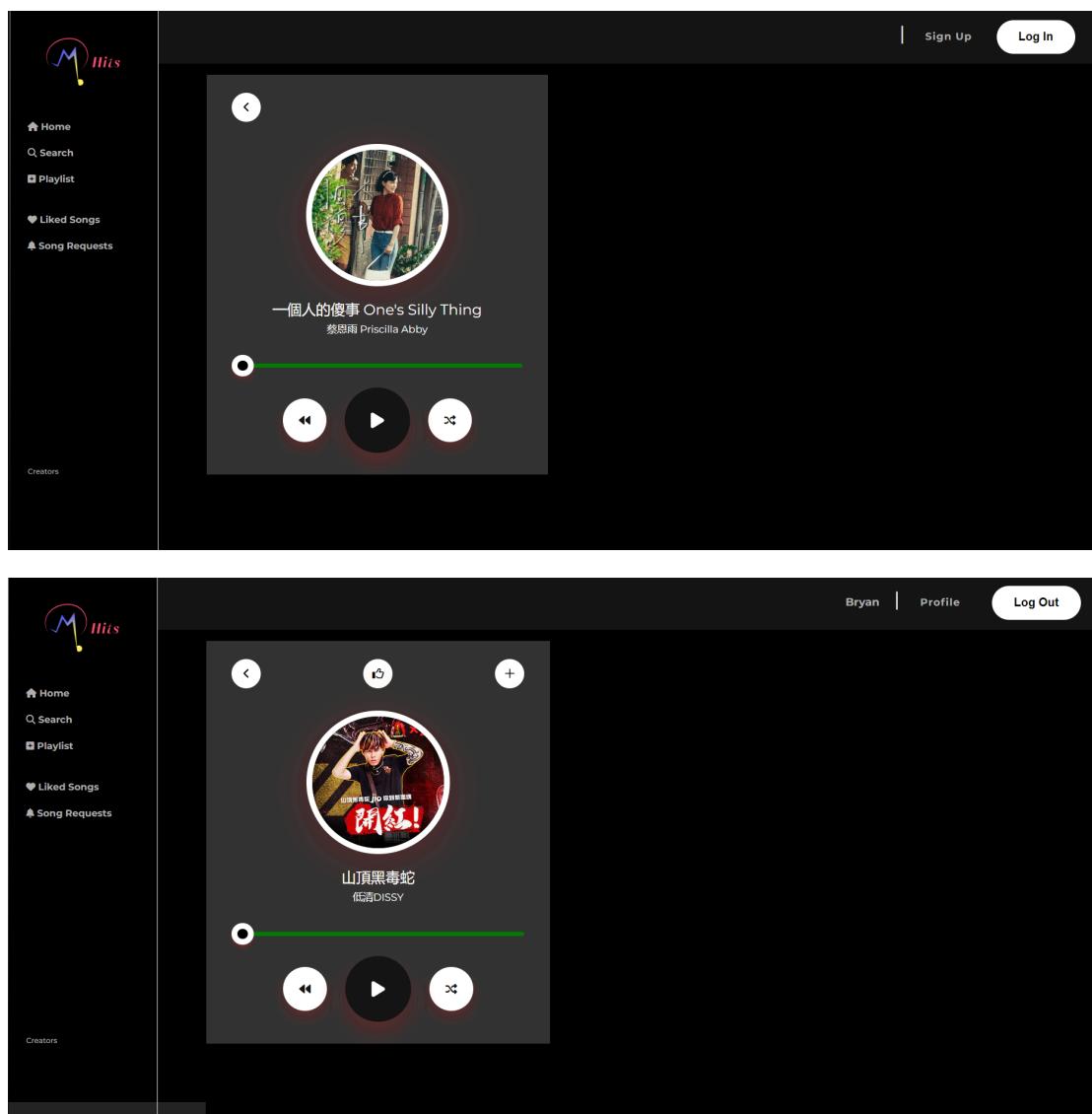


Figure 4.3 Song Display Page

This is the display page which will display and play the clicked songs, and based on if the user is signed in or not it will also display other functionalities. (eg: likes, add to playlist). The top buttons on the song display are back (send to previous page), like and add to playlist, the bottom row are previous song, play and shuffle (random song in database). (eg: not logged in , logged in).

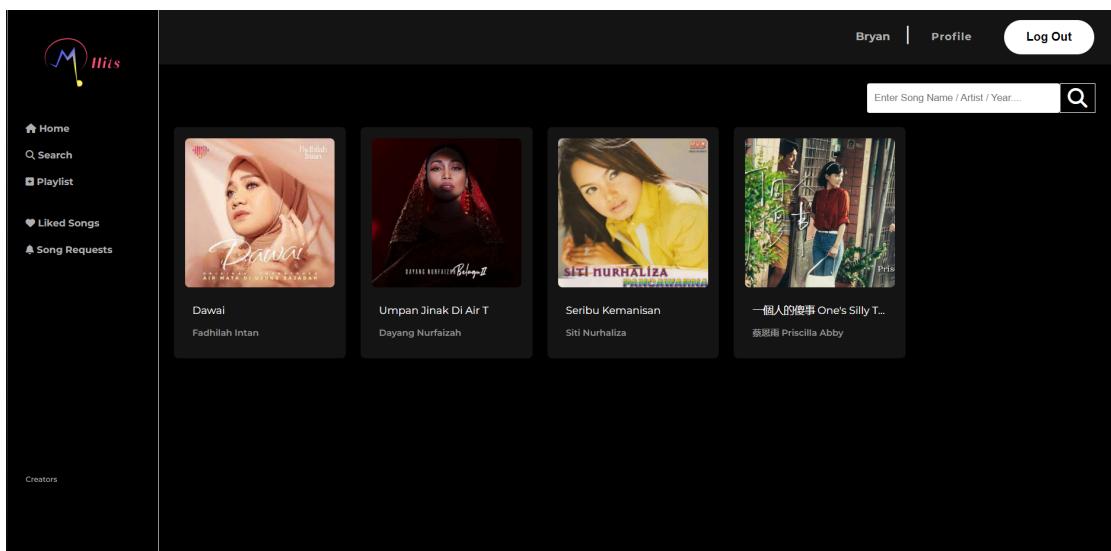


Figure 4.4.1 Display Liked Songs

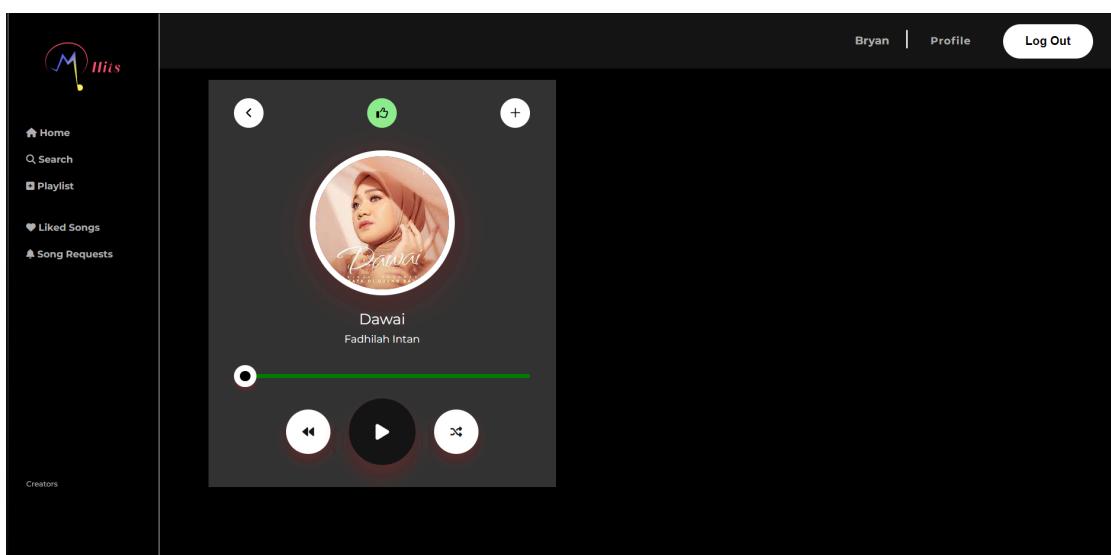


Figure 4.4.2 Display Liked Songs

If a user is logged in, this page will display all the songs they have liked , songs can be liked by users on the song display page and will become green if it is liked.
(eg: figure 4.4.2)

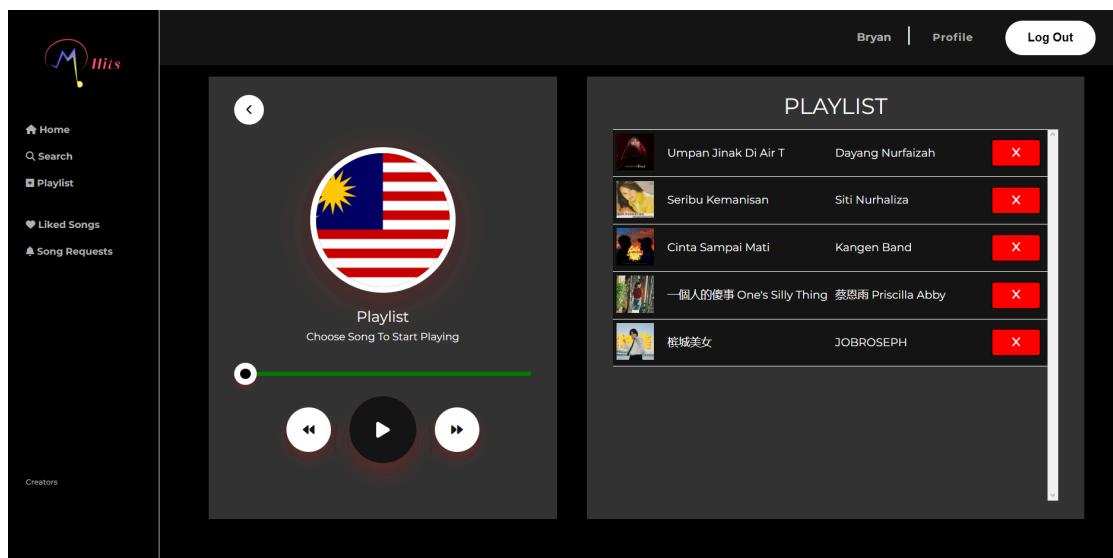


Figure 4.5.1 Display Songs In Playlist / Player

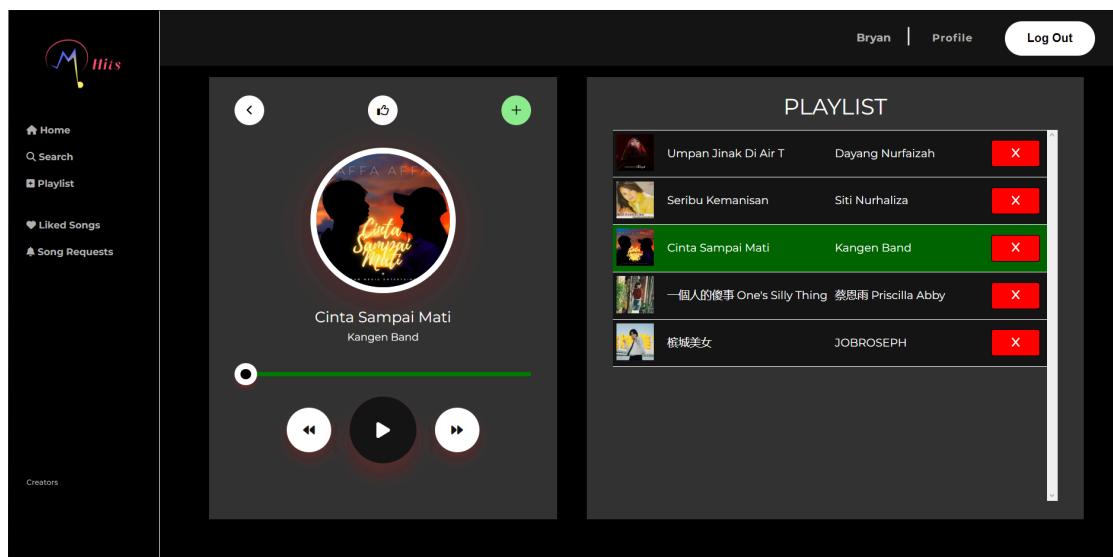


Figure 4.5.2 Display Songs In Playlist / Player

If a user is logged in, this page will display all the songs in their playlist, and users will be able to listen to them. The songs in playlists are determined by the + symbol turning green, the song currently playing is determined by the row on the playlist being green. (eg: figure 4.5.2)

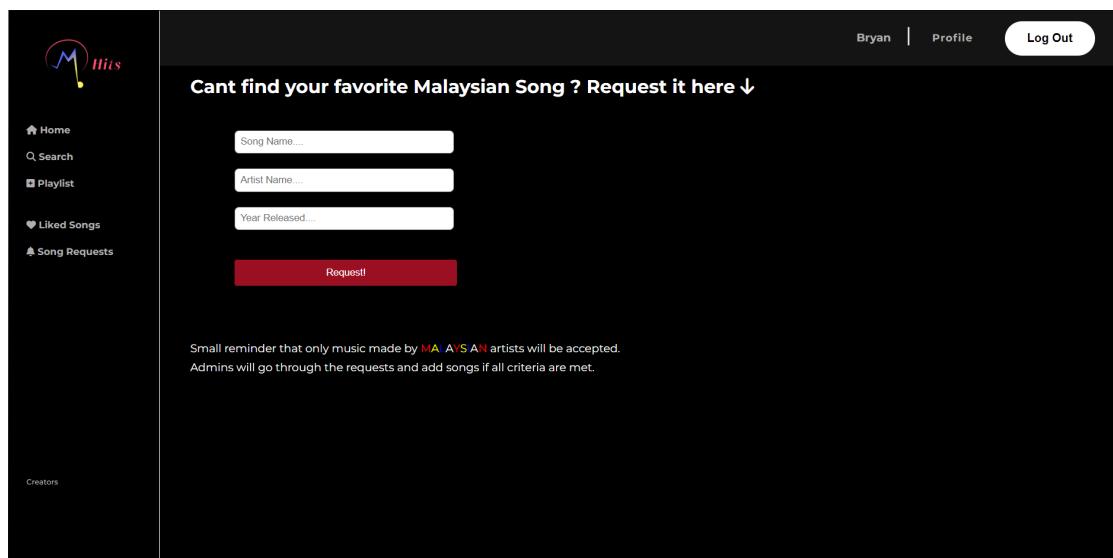


Figure 4.6 Song Request Page

This is the user request page where users can submit song requests for the admin to review, this page takes a song name, song artist and year 1940 to 2024.

Information

Username : Bryan
Email : bryan@gmail.com
Password : *****
Join Date : 2024-02-17

Requests

Green = Accepted, Red = Rejected, Black = Pending

1414	1414	2024-02-17	X
Negaraku	Malaysia	2024-02-17	X
Test	Tesst	2024-02-17	X

UPDATE INFORMATION

Figure 4.7 User Profile Page

This is the user profile page where users can view their information, and update them accordingly if they wish. This page also shows all the statuses of the user requests, and allows them to delete the requests. This page also allows users to delete their account if they so wish.

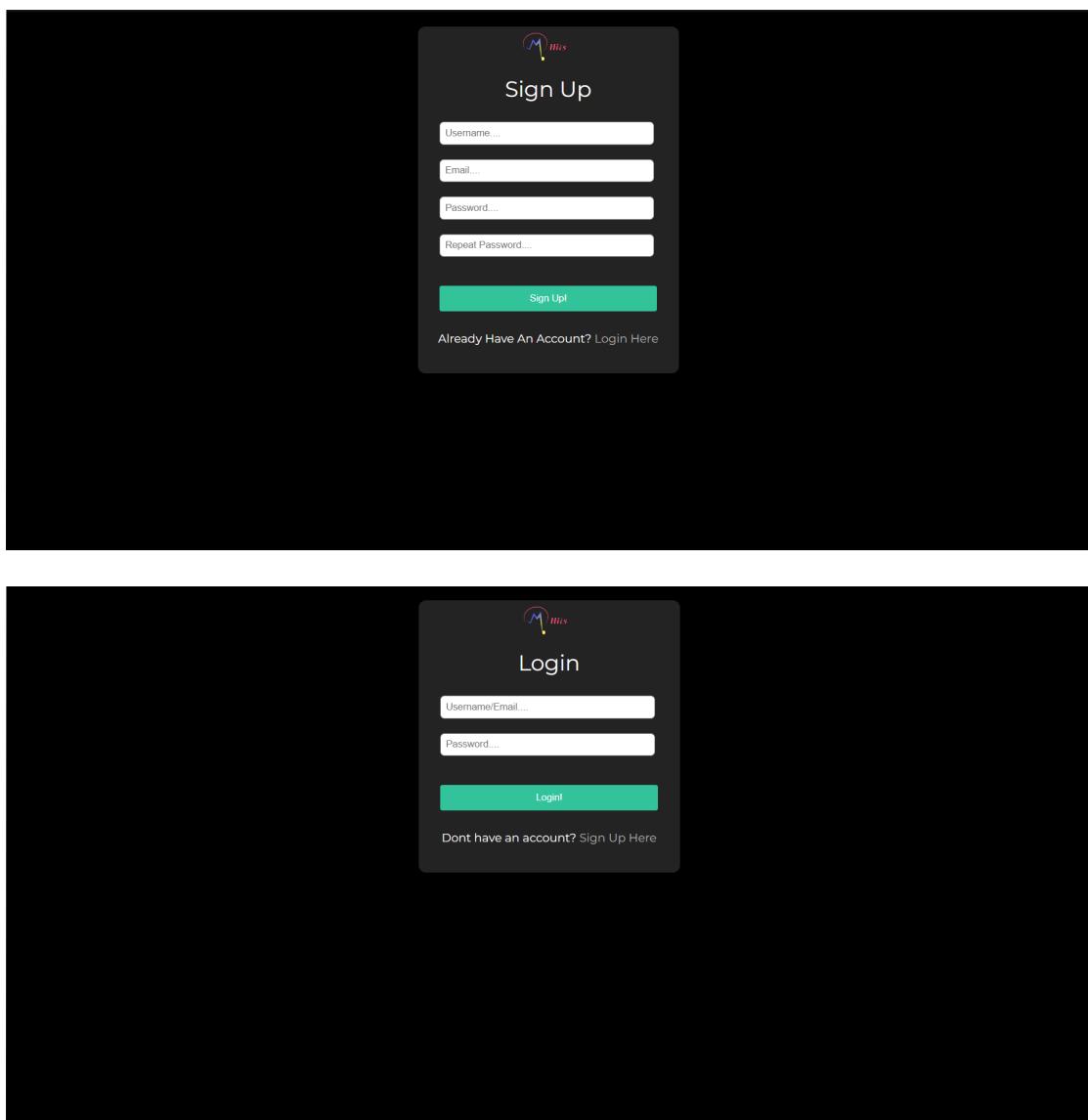


Figure 4.8 Login Page

This is the sign up and login pages for both admin and user, users can sign up a new account and login in, this page checks for input error if username taken / email taken / valid email / valid password.

4.2 Admin Module

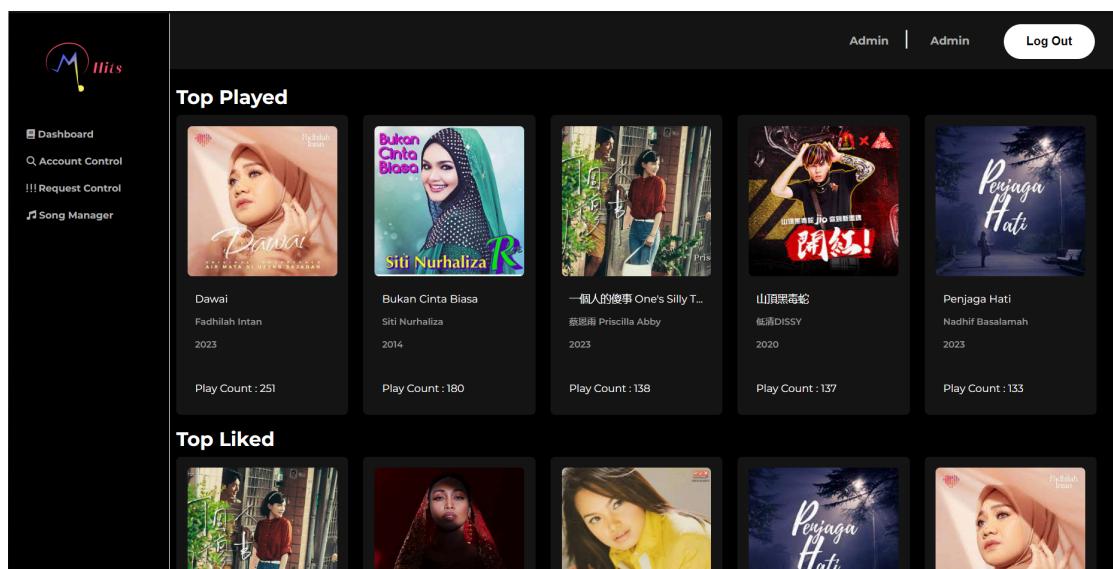


Figure 5.1 Admin Dashboard Page

Similar to the user page, this admin dashboard page shows the top 5 played songs, and the top 5 liked songs. Clicking on them will lead to the song manager page, where they can edit song info if needed.

ID	Username	Email	Role	Operations
1	Admin	admin@gmail.com	ADMIN+	
9	Bryan	bryan123@gmail.com	user	<button>Update</button> <button>Delete</button>
11	Francis1234	francis@gmail.com	user	<button>Update</button> <button>Delete</button>

Figure 5.2 Account Control Page

This is the admin account control page, where admins can update / delete users. It also contains info for ADMIN+ account which can never be deleted. This page also links to a page where admins can create users.

Update Account

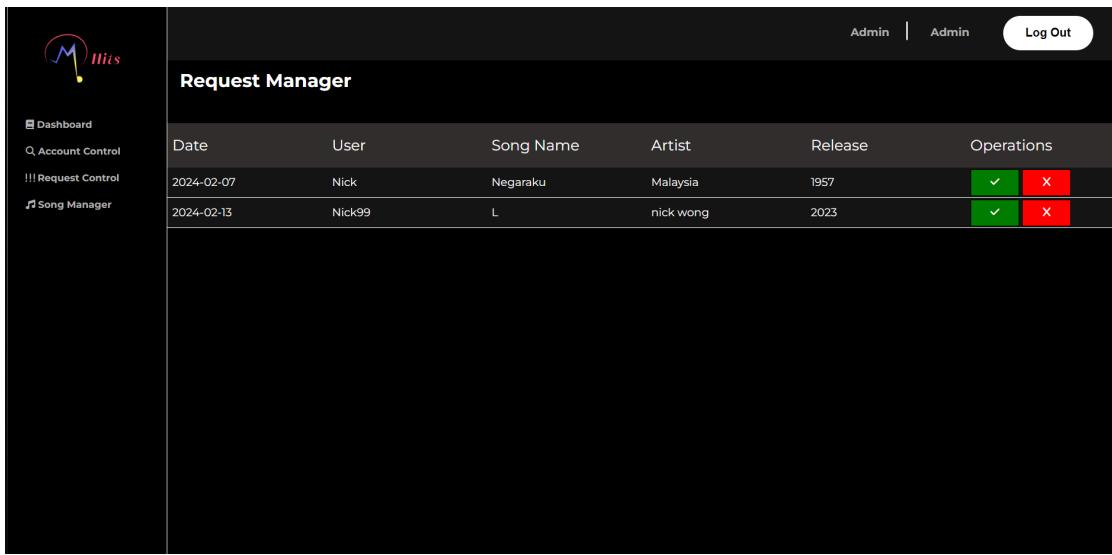
This page allows updating an existing account. It features input fields for Username (Bryan), Email (bryan123@gmail.com), and Password (Leave Empty To Keep Old Password...). A dropdown menu for 'Choose Usertype' is set to 'User'. A green 'Update' button is at the bottom.

Create New Account

This page allows creating a new account. It features input fields for Username, Email, Password, and Repeat Password. A dropdown menu for 'Choose Usertype' is set to 'User'. A green 'Create' button is at the bottom.

Figure 5.3 Update Account / Create Users

Admin can update already existing accounts with new information or create new user / admin accounts into the system, these pages are reached from the account control page.



The screenshot shows a dark-themed web application interface. On the left is a sidebar with a logo and navigation links: Dashboard, Account Control, Request Control, and Song Manager. The main area is titled "Request Manager". It displays a table with the following data:

Date	User	Song Name	Artist	Release	Operations
2024-02-07	Nick	Negaraku	Malaysia	1957	✓ X
2024-02-13	Nick99	L	nick wong	2023	✓ X

Figure 5.4 User Requests Manager Page

Admin can see all requests from users and choose to either accept or reject them. If a request is rejected it will be deleted, but if it is accepted admin will be redirected to the song creator page (see: figure 5.6) with information about the requests, and the request will finally be deleted after the song is created.

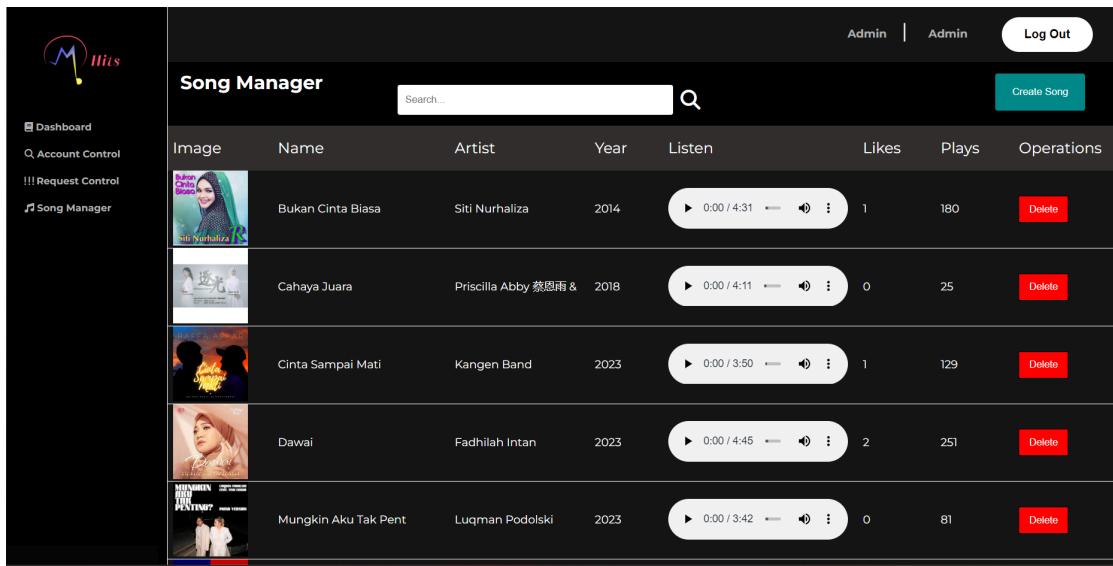


Image	Name	Artist	Year	Listen	Likes	Plays	Operations
	Bukan Cinta Biasa	Siti Nurhaliza	2014	0:00 / 4:31	1	180	<button>Delete</button>
	Cahaya Juara	Priscilla Abby 蔡恩雨 &	2018	0:00 / 4:11	0	25	<button>Delete</button>
	Cinta Sampai Mati	Kangen Band	2023	0:00 / 3:50	1	129	<button>Delete</button>
	Dawai	Fadhilah Intan	2023	0:00 / 4:45	2	251	<button>Delete</button>
	Mungkin Aku Tak Penting	Luqman Podolski	2023	0:00 / 3:42	0	81	<button>Delete</button>

Figure 5.5 Song Manager Page

Admin can view and search all songs in the database, all information about the songs are displayed on this page. Admins can choose to delete the songs from the database if needed, the top right create song button redirects to a song creation page.

Create Song

Song Name...
Artist Name...
Year Released...

Upload Image [png ,jpg ,jpeg]
[MUST BE SQUARE]
Choose File No file chosen

Upload Song [mp3]
Choose File No file chosen

Create Song!

Back To Song Control

Selected Request

ID : 23
User : Nick
Song Name : Negaraku
Artist : Malaysia
Year : 1957
Request Date : 2024-02-07

Figure 5.6 Song Creator Page

Admin can create songs and add them into the database, this page will display request information if reached while accepting a user request. This page takes a song name, artist name, year released, a **square** image and a valid song file.

Part V:

System Testing

5.1 System Testing

Test ID	Test Case	Expected Result	Actual Result	Status
1	<u>Test Enter Username 1</u> Enter valid username (A-Z, 0-9) Click “Sign Up” button.	User should be able to sign up an account to the system. The system should display login page with the “Signup successful please log in!” notification. successful please log in!” notification.	User is able to sign up. Login page with the “Signup successful please log in!” notification is displayed.	Pass
2	<u>Test Enter Username 2</u> Enter invalid username (symbols, chinese char, space) Click “Sign Up” button.	User should not be able to sign up an account to the system. An “Invalid Username! [A-Z 0-9]” notification will display.	User is not able to sign up. “Invalid Username! [A-Z 0-9]” notification will display.	Pass
3	<u>Test Enter Username 3</u> Enter username exceeding 20 words. Click “Sign Up” button.	Users will not be able to set username exceeding 20 words.	Users are unable to set username exceeding 20 words.	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
4	<u>Test Enter Username 4</u> Enter username that already existed in the database. Click “Sign Up” button.	Users should not be able to sign up an account to the system. An “Username or Email Taken!” notification will display.	Users are not able to sign up an account to the system. An “Username or Email Taken!” notification will display.	Pass
5	<u>Test Enter Email 1</u> Enter a valid email. Click “Sign Up” button.	User should be able to sign up an account to the system. The system should display login page with the “Signup successful please log in!” notification.	User is able to sign up. Login page with the “Signup successful please log in!” notification is displayed.	Pass
6	<u>Test Enter Email 2</u> Enter an invalid email. Click “Sign Up” button.	Users should not be able to sign up an account to the system. An “Invalid Email!” notification will display.	Users are not able to sign up an account to the system. An “Invalid Email!” notification will display.	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
7	<p><u>Test Enter Email 3</u></p> <p>Enter an email exceeding 50 words.</p> <p>Click “Sign Up” button.</p>	<p>Users will not be able to set email exceeding 50 words.</p>	<p>Users are unable to set email exceeding 50 words.</p>	Pass
8	<p><u>Test Enter Email 4</u></p> <p>Enter an email that already existed in the database.</p> <p>Click “Sign Up” button.</p>	<p>Users should not be able to sign up an account to the system.</p> <p>An “Username or Email Taken!” notification will display.</p>	<p>Users are not able to sign up an account to the system. An “Username or Email Taken!” notification will display.</p>	Pass
9	<p><u>Test Enter Password 1</u></p> <p>Enter a password.</p> <p>Click “Sign Up” button.</p>	<p>User should be able to sign up an account to the system. The system should display login page with the “Signup successful please log in!” notification.</p>	<p>User is able to sign up. Login page with the “Signup successful please log in!” notification is displayed.</p>	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
10	<p><u>Test Enter Password 2</u></p> <p>Enter a password and enter a different password in “Repeat Password”.</p> <p>Click “Sign Up” button.</p>	<p>User should not be able to sign up an account to the system.</p> <p>An “Passwords don't match!” notification will display.</p>	<p>Users are not able to sign up an account to the system. An “Passwords don't match!” notification will display.</p>	Pass
11	<p><u>Test Enter Password 3</u></p> <p>Enter a password exceeding 20 words or symbols.</p> <p>Click “Sign Up” button.</p>	<p>Users will not be able to set passwords exceeding 20 words.</p>	<p>Users are unable to set passwords exceeding 20 words.</p>	Pass
12	<p><u>Test Sign Up Empty Input</u></p> <p>User left blank in any Log In input.</p> <p>Click “Sign Up” button.</p>	<p>User should not be able to sign up an account to the system.</p> <p>An “Required input is missing!” notification will display.</p>	<p>Users are not able to sign up an account to the system. An “Required input is missing!” notification will display.</p>	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
13	<p><u>Test Log In 1</u></p> <p>Enter a valid username/email and password.</p> <p>Click “Login” button.</p>	Users will be able to login to their account and will lead them to the main page.	Users are able to login to their account and will lead them to the main page.	Pass
14	<p><u>Test Log In 2</u></p> <p>Enter an invalid username/email or password.</p> <p>Click “Login” button.</p>	<p>Users will not be able to login to their account and will lead them to the main page. A “Username/Email or passwords don’t match!” notification will prompt.</p>	<p>Users are not able to login to their account and will lead them to the main page. A “Username/Email or passwords don’t match!” notification will prompt.</p>	Pass
15	<p><u>Test Search Feature</u></p> <p>Click on the search bar to search songs based on either song name or artist.</p>	Users will be able to search the designated songs that were input in the search bar.	Users are able to search the designated songs that were input in the search bar.	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
16	<u>Test Play Feature</u> Click on the “Play” button.	Users will be able to play and listen to the music.	Users are able to play and listen to the music.	Pass
17	<u>Test Like Feature</u> Click on the “Like” button.	Users will be able to like the songs and automatically save them in the “Liked Song” page.	Users are able to like the songs and automatically save them in the “Liked Song” page.	Pass
18	<u>Test Add to Playlist Feature</u> Click on the “Add to Playlist” button.	Users will be able to add the songs to their playlist in the “Playlist” page.	Users are able to add the songs to their playlist in the “Playlist” page.	Pass
19	<u>Test Song Requests Feature 1</u> Enter valid song name, artist name and year released. Click on the “Request” button.	Users will be able to request songs. A “Request Sent! Wait for an admin to approve/deny your request. You can check your requests on your profile page” notification will prompt.	Users are able to request songs. A “Request Sent! Wait for an admin to approve/deny your request. You can check your requests on your profile page” notification will prompt.	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
20	<u>Test Song Requests Feature 2</u> Enter song name and artist name exceeding 30 words.	Users will not be able to enter song name and artist name exceeding 30 words.	Users are able to enter song names and artist names exceeding 30 words.	Pass
21	<u>Test Song Request Feature 3</u> “Year Released” input will not set the year less than 1940 and not more than 2024	Users will not be able to set the year released option less than 1940 or more than 2024.	Users are able to set the year released option less than 1940 or more than 2024.	Pass
22	<u>Test Profile Feature 1</u> Update username, email and passwords. Click the “Update” button.	Users will be able to change and update their username, email and passwords. A “Data Updated, Please Login!” notification will prompt and will lead you to the login page.	Users are able to change and update their username, email and passwords. A “Data Updated, Please Login!” notification will prompt and will lead you to the login page.	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
23	<u>Test Profile Feature 2</u> Click the “X” button to delete the song request.	Users will be able to delete the song request. A “Are you sure you want to delete request?” notification will prompt. Click on “OK”, song requests will be deleted.	Users are able to delete the song request. A “Are you sure you want to delete request?” notification will prompt. Song requests will be deleted.	Pass
23	<u>Test Profile Feature 3</u> Click “Delete” button to delete the user account.	Users will be able to delete the account. A “Are you sure you want to delete account?” notification will prompt. Click on “OK”, account deleted.	Users are able to delete the account. A “Are you sure you want to delete account?” notification will prompt. Click on “OK”, account deleted.	Pass
24	<u>Test Log Out Feature</u> Click “Log Out” button to logout of the user account.	Users will be able to logout and will lead to the default page.	Users are able to logout and will lead to the default page.	Pass
25	<u>Test Home Page</u> Click on the Home page.	Users will be led to the Home Page.	Users are led to the Home Page.	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
26	<u>Test Search Page</u> Click on the Search page.	Users will be led to the Search Page.	Users are led to the Search Page.	Pass
27	<u>Test Playlist Page 1</u> Click on the Playlist page.	Users will be led to the Playlist Page.	Users are led to the Playlist Page.	Pass
28	<u>Test Playlist Page 2</u> Click “Play” button to play songs in the Playlist page.	Users will be able to play and listen to songs in the Playlist page.	Users are able to play and listen to songs in the Playlist page.	Pass
29	<u>Test Playlist Page 3</u> Click “Previous” or “Next” button to listen to the previous or next song.	Users will be able to revert back to the previous song or skip to the next song.	Users are able to revert back to the previous song or skip to the next song.	Pass
30	<u>Test Playlist Page 4</u> Click “X” button or click the “Add to Playlist ” button again to remove songs from the playlist.	Users will be able to remove songs from the playlist when the button is clicked. Song is removed	Users are able to remove songs from the playlist when the button is clicked. Song is removed	Pass
31	<u>Test Liked Song Page</u> Click on the Liked Songs page	Users will be led to the Liked Songs page.	Users are led to the Liked Songs page.	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
32	<u>Test Access Page Without Login</u> Trying to bypass login to access pages that require login , eg: Playlist , Profile , Likes.	Users will be redirected to the index page, and logged out.	Users are redirected and they cannot access the pages without permission	Pass
33	<u>Test Admin Dashboard Page</u> Click on the “Dashboard” page.	Admin will be led to the dashboard.	Admin are led to the dashboard.	Pass
34	<u>Test Admin Account Control Page 1</u> Click on the “Account Control” page.	Admin will be led to the “Account Control” page.	Admin are led to the “Account Control” page.	Pass
35	<u>Test Admin Account Control Page 2</u> Click “Add User” button to add either a user or an admin.	Admin will be able to create another user or admin. “User Successfully Created” or “Admin Successfully Created” notification will prompt.	Admin are able to create another user or admin. “User Successfully Created” or “Admin Successfully Created” notification will prompt.	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
36	<u>Test Admin Account Control</u> <u>Page 3</u> Click “Update” button.	Admin will be able to edit the users or other admins’ information and privilege. A “User Updated Successfully” notification will prompt.	Admin are able to update the users or other admins’ information and privilege. A “User Updated Successfully” notification will prompt.	Pass
37	<u>Test Admin Account Control</u> <u>Page 4</u> Click “Delete” button.	Admins will be able to delete users or admins. A “Are you sure you want to delete user?” notification will prompt. Click “OK” and the user or admin is deleted.	Admins are able to delete users or admins. A “Are you sure you want to delete user?” notification will prompt. Click “OK” and the user or admin is deleted.	Pass
38	<u>Test Request Control Page 1</u> Click on the “Request Control” page.	Admins will be led to the “Request Control” page.	Admins are led to the “Request Control” page.	Pass
39	<u>Test Request Control Page 2</u> Click on the “Accept” button.	Admins will be led to the “Create Song” page to create songs that the users requested.	Admin are led to the “Create Song” page to create songs that the users requested.	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
40	<u>Test Request Control Page 3</u> Click on the “Reject” button.	Admins will be able to reject the users request. A “Are you sure you want to delete request?” notification will prompt. Click “OK”, requested is removed.	Admins are able to reject the users request. A “Are you sure you want to delete request?” notification will prompt. Click “OK”, requested is removed.	Pass
41	<u>Test Song Manager Page 1</u> Click on the “Song Manager” page.	Admins will be led to the “Song Manager” page.	Admins are led to the “Song Manager” page.	Pass
42	<u>Test Song Manager Page 2</u> Click on the “Create Song” button.	Admins will be led to the “Create Song” page and able to create new songs.	Admins are led to the “Create Song” page and able to create new songs.	Pass
43	<u>Test Song Manager Page 3</u> Click on the “Delete” button.	Admins will be able to delete the designated songs. A “Are you sure you want to delete song?” notification will prompt. Click “OK” and the song will be deleted.	Admins are able to delete the designated songs. A “Are you sure you want to delete song?” notification will prompt. Click “OK” and the song will be deleted.	Pass

Test ID	Test Case	Expected Result	Actual Result	Status
44	<u>Test Song Manager Page 4</u> Click on the “Play” button.	Admins will be able to play and listen to the music.	Admins are able to play and listen to the music.	Pass
45	<u>Test Song Manager Page 5</u> Scroll on the Music Length Bar.	Admins will be able to fast forward or backward of the songs.	Admins are able to fast forward or backward of the songs.	Pass
46	<u>Test Song Manager Page 6</u> Click on the “Volume Editor” button.	Admins will be able to edit the volume of the songs.	Admins are able to edit the volume of the songs.	Pass
47	<u>Test Deleting Head Admin</u> Trying to bypass the delete function by sending the id = 1 as a delete id to delete the head admin.	Website will check if sent ID is the head admin and reject the request	Webpage will return with the message “Nice try, but you can’t delete head admin”	Pass
48	<u>Test Access Any Admin Page Without Admin Credentials</u> Trying to access any admin page while not logged in to an admin account.	Website will deny access and redirect them to the index page.	Website redirects non-admins from accessing admin pages and logs them out / redirects them to index.	Pass

Table 4.1 System Testing

We have tested all the functions in our website and almost all of the functions work with our expectation. All necessary functions work smoothly on the website.

Part VI:

Conclusion

6.1 Conclusion

For our conclusion, what we have learned from part 1 was all about doing research on other music platforms that are available. By comparing the other music platforms, we are able to notice the pros and cons of them and with all this information, we started our prototype for part 2 named “M Hits”. We wanted our music platform more focused in the Malaysian market and also help out Malaysian artists to get acknowledgement easier in Malaysia. The whole idea of our music platform is to let all users get not only free access and also support our local artists. This will not only be able to support local businesses and also be able to lessen the extra expenses of the users since our platform is completely free.

6.2 Future Enhancements

- Users can create multiple playlists.
- Artist feature to let artists upload their songs by themselves.
- Autoplay even when the device or screen is turned off.
- Shuffle autoplay in playlist feature.
- Repeat feature so that users are able to repeat the same song.
- Comment feature to let artists get feedback from users.
- Lyrics feature for every song.
- Cropping system for admin before adding song
- Adding download system for user
- Enhancing music player

Part VII:

References

List of URL addresses, reference books or bibliography entries

- Spotify - <https://open.spotify.com/>
- Youtube Music - <https://music.youtube.com/>

Part VIII:

Appendix

Appendix A: Meeting minutes

1. Duration 16 minute, 29 November 2023
2. Duration 33 minute, 6 December 2023
3. Duration 26 minute, 13 December 2023
4. Duration 38 minute, 20 December 2023
5. Duration 18 minute, 27 December 2023
6. Duration 31 minute, 3 January 2024
7. Duration 24 minute, 10 January 2024
8. Duration 15 minute, 17 January 2024
9. Duration 28 minute, 24 January 2024
10. Duration 37 minute, 2 February 2024
11. Duration 49 minute, 7 February 2024
12. Duration 28 minute, 16 February 2024

Appendix B: Website Samples/Questionnaire/Forms

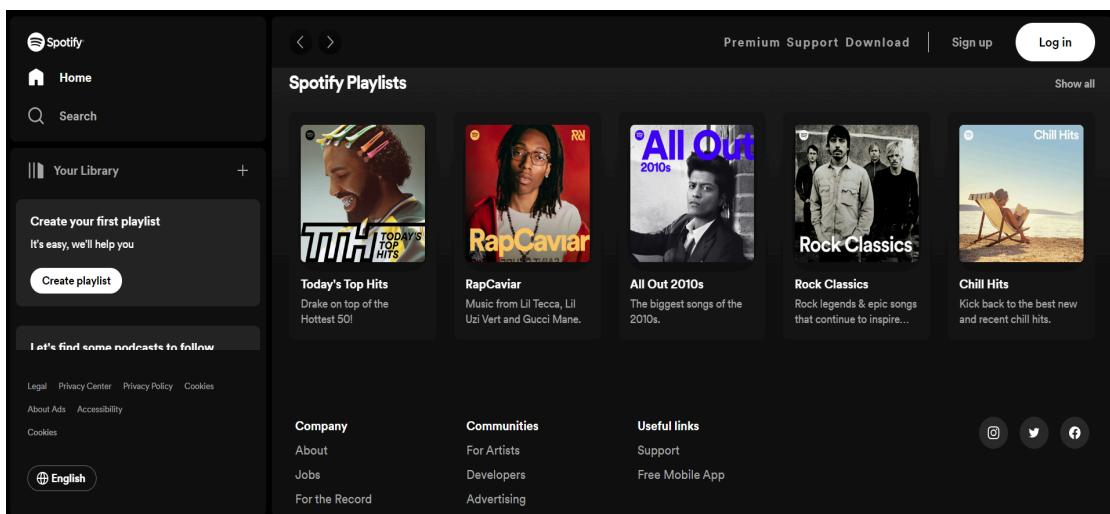


Figure 6.1: Spotify Home Page

Appendix C: Client/Server Setup Guide

This section should provide the user manual for user and administrator in terms of:

- Hardware configuration or setup
 - Computer
- System Integration Manual
 - Open xampp control panel
 - Start Apache and MySQL module
 - Type localhost/Project-MHitz/index.php in Google Search Bar
- Installation Procedure
 - Download xampp on Google
 - Extract xampp zip file
 - Extract Project-MHitz zip file into htdocs folder inside xampp folder
 - Extract COPYING zip file into mysql folder inside xampp folder

Appendix D: CD (Soft Copy of Report and System)

<https://github.com/Bryan-Chin-Yew-Chung/Project-MHitz>