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Address: 590 Cach Mang Thang 8, District 3, Ho Chi Minh City, Viet Nam.



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PROJECT DOCUMENTATION SEM 2

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Batch.	T1.1907.M0	
Group.	3	
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01 June 2020



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This is to certify that

Mr. / Mrs. :

Ngô Thị Đoan Dung

Hoàng Minh Tâm

Lương Trúc Quỳnh

Võ Minh Thư

Has successfully designed & developed:

Project Sem 2 :
Protify Music Streaming WebApp

Submitted by:

Hoàng Minh Tâm

Date of issue:

May 27th 2020

Authorised Signature:

Hoàng Minh Tâm



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REVIEW 1



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Acknowledgement

Nowadays, people always need entertainment in a busy life. For this reason, the Protify project has appeared with our passion and enthusiasm. With our Protify website, we believe that this website will become a good choice for listening to music.

In the PROTIFY website, the clients will receive great satisfaction with the amazing music web for them. First of all, we would like to express heartfelt thanks to Mrs. Le Mong Thuy- the instructor accompanies us during the project. When we had any problems with that, she always supports us at any time.

Especially, Mrs. Thuy put all her faith in the PROTIFY website, therefore, we have more and more self-confidence to complete the project. During the process to carry out this project, we had a good opportunity that learns more about the knowledge of information technology. This is the perfect begin in our future enterprise.

Finally, we hope that the PROTIFY website is always received their love as belief in the future. Thanks to that, we will always try our best to bring the most pleased users.



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Problem Definition

I. Introduction

The PROTIFY is an application website where users can listen to music or update the detailed news of famous artists, even they can create their special playlist on the PROTIFY website.

It's is the best choice for lover music who want to listen to many kinds of music product, and enjoy the magic of music. After selecting a website, the user can choose any song that they like by touching the list of songs, made their own playlist where they want to set up their favorite songs in one catalog.

Finally, the theme on our music website is customized based on the inclination of the listener.

II. Existing Scenario

The PROTIFY website is an illustrated piece of the miniature music world with high quality of sound, HD resolution in the theme. Although lots of music website has appeared on the monopoly market nowadays.

However, the PROTIFY web is a unique project that brings new experiences as a breakthrough both in inland and international technology. When the art music industry is growing, music is the best remedy that heals all wound in mentally. People enjoy music as a way to unwind after such a long day with hard work.

There are many genres of art music, however, information technology is developing, we do not need to go to the show or music store but still can listen and appreciate any kind of music with just a touch in screen or a mouse click.

Our PROTIFY website was created for saving the cost, time, and still enjoy music with the best quality.



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Requirement Specification

I. Customer's Requirement Specifications

- Coming to PROTIFY
- Everybody can listen many kinds of music which the highest quality
- The theme very attract the client because they can use darkmode and lightmode with colorful such as: green, red, yellow, purple, pink, blue.

II. Functional Requirement Specifications

1. Function of User

- REQ-01. Register.
 - + Allow visitors to the homepage and force an account to be created, otherwise only visible on the home page and music cannot be heard
- REQ-02. Login, Logout.
 - + Allows customers to log into the site and exit the site
- REQ-03. Listen to music.
 - + Allows logged-in members to interact and listen to a variety of music on website
- REQ-04. Playlist
 - + Allow logged-in members to save their favorite songs as their own playlists and feel them
- REQ-05. Search
 - + Allow logged in members, enter the search box and find the music you want to search..
- REQ-05. Artist
 - + Shows members who have logged in information and albums of artists
- REQ-06. Contact
 - + Allow customers to contact support, support will help, record customer feedback.
- REQ-08: Chart.
 - + Show members who have logged in the list of top songs
- REQ-09: Comment.
 - + Allow logged members to comment on comments to everyone
- REQ-10: Contact.
 - + Allow logged-in members to contact support and report bugs



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2. Function of Admin

- REQ-11: Login, Logout.
 - + Allow administrators to login and logout from the website
- REQ-12: Listen to music.
 - + Allows administrators to listen to music in the website
- REQ-13: Catalog management.
 - + Update, edit and delete albums, songs, artist,...
 - + Manage your favorites and web listeners
- REQ-14: Manage member.
 - + Manage member information logged on the website
 - + Control members' comments
- REQ-15: Contact.
 - + Receive contact information, suggestions and error messages from members sent

III. System Requirement Specifications for Server

1. Hardware requirement

- Processor 1 GHz or faster
- Display of 800x600 resolution or better
- 512 MB RAM or better

2. Software requirement

- Windows 7 or higher
- NetBean 8.2
- PHP 7.0 or above - MySQL.
- IE (8.0 or above) / Google Chrome/Mozilla Firefox browsers

3. Server side Software requirements

- WAMP Server
- IIS 5.0 webserver or later

IV. System Requirement Specifications for Client

1. Hardware requirement:

- Processor 1 GHz or faster
- Responsive website can be display on all of resolution.
- 512 MB RAM or better
- Internet required

2. Software requirement:

- Windows 7 or higher
- NetBean 8.2
- PHP 7.0 or above - MySQL.
- IE (8.0 or above) / Google Chrome/Mozilla Firefox browsers



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Task Sheet Review 1

No.	Description	Begin Date	Teammate Name	Notes
1	Acknowledgement	May 22 th 2020	Lương Trúc Quỳnh	Done
2	Problem Defination		Hoàng Minh Tâm	Done
3	Requirement Specitfication		Ngô Thị Đoan Dung	Done
4	Task Sheet Review		Võ Minh Thư	Done

Date	
Signature of Instructor:	Signature of Team Leader:
Mrs. Le Mong Thuy	Ms. Ngo Thi Doan Dung



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REVIEW 2



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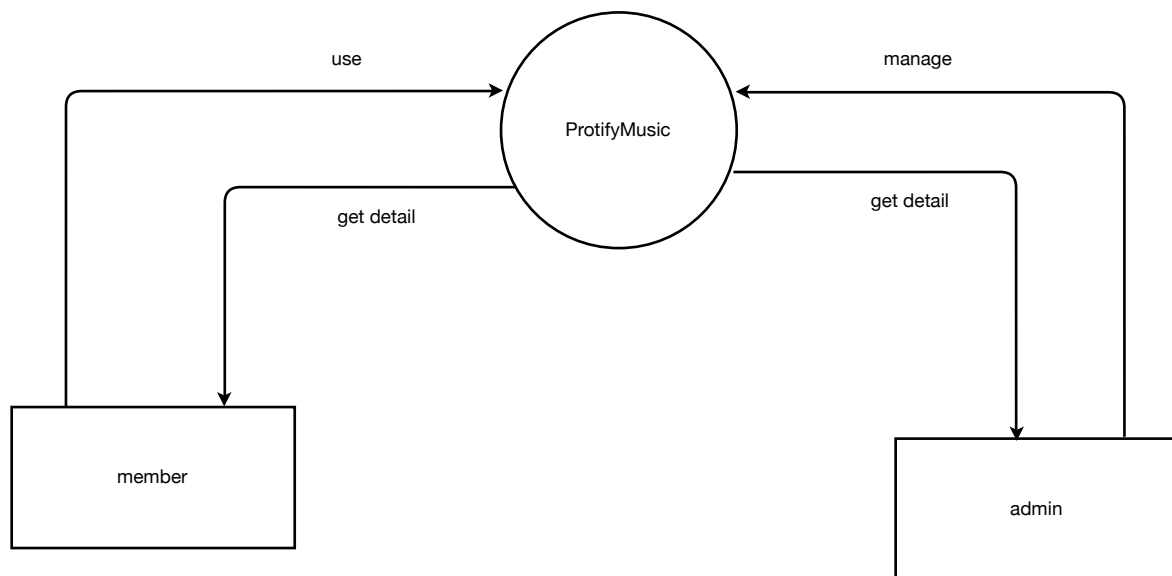
Data Flow Diagram



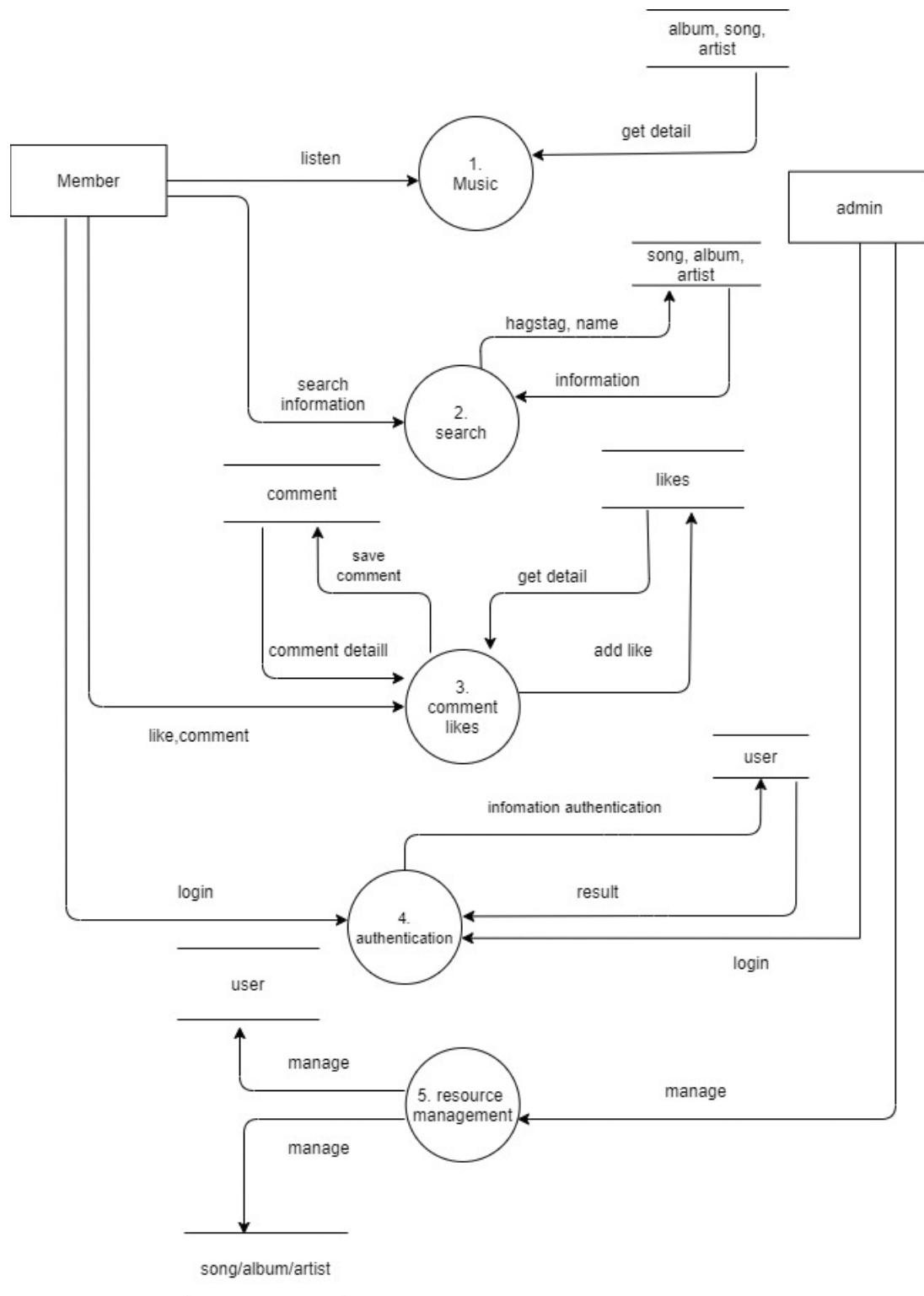
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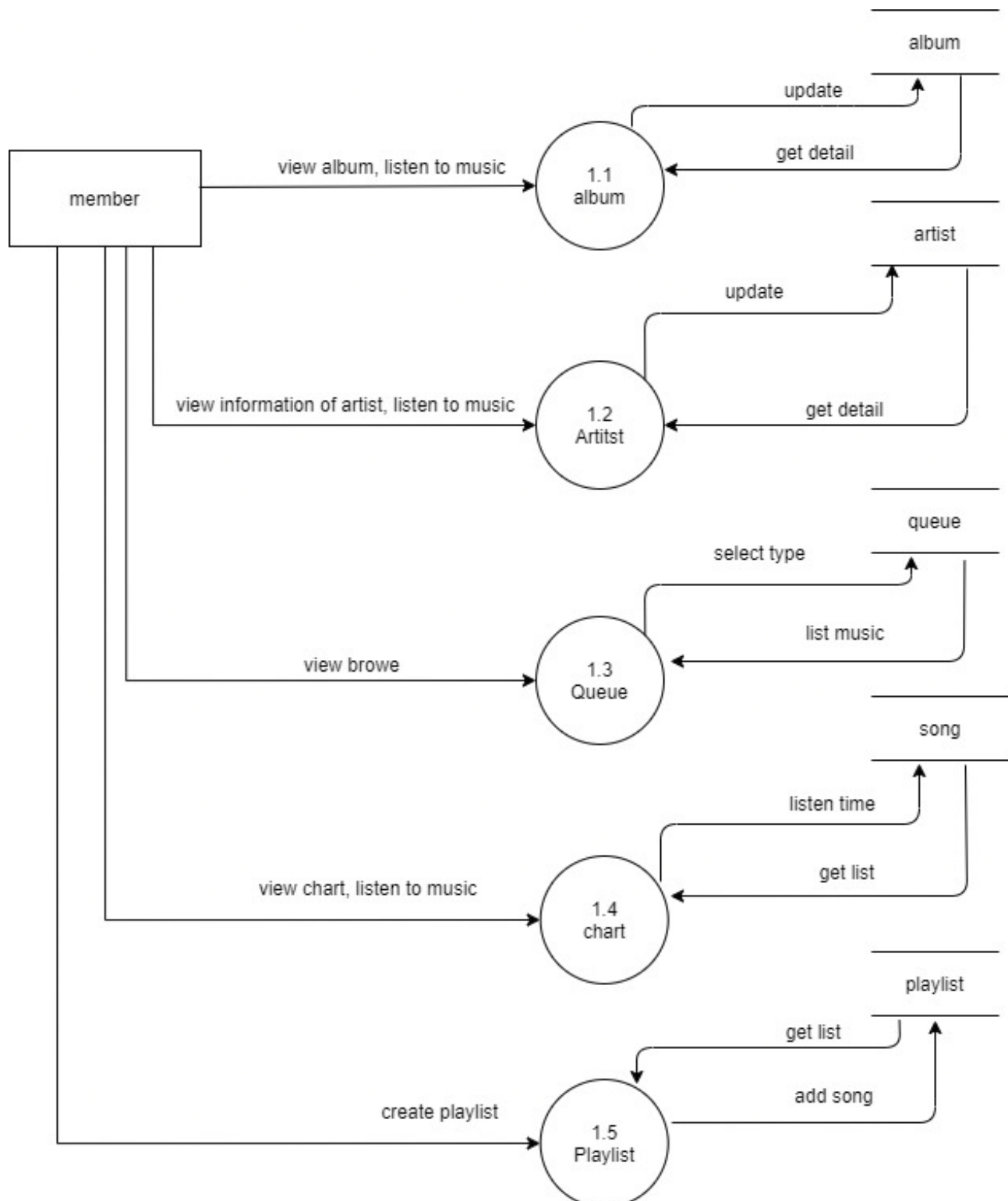
Context Level



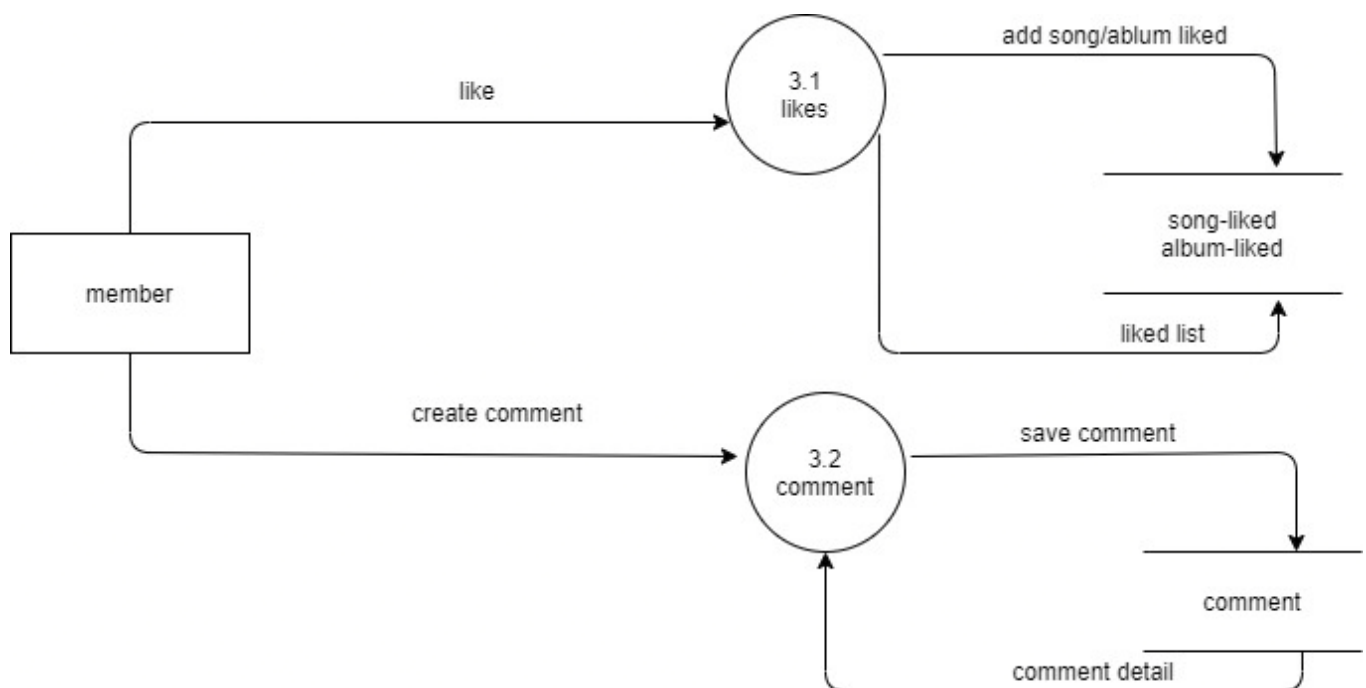
Level 0



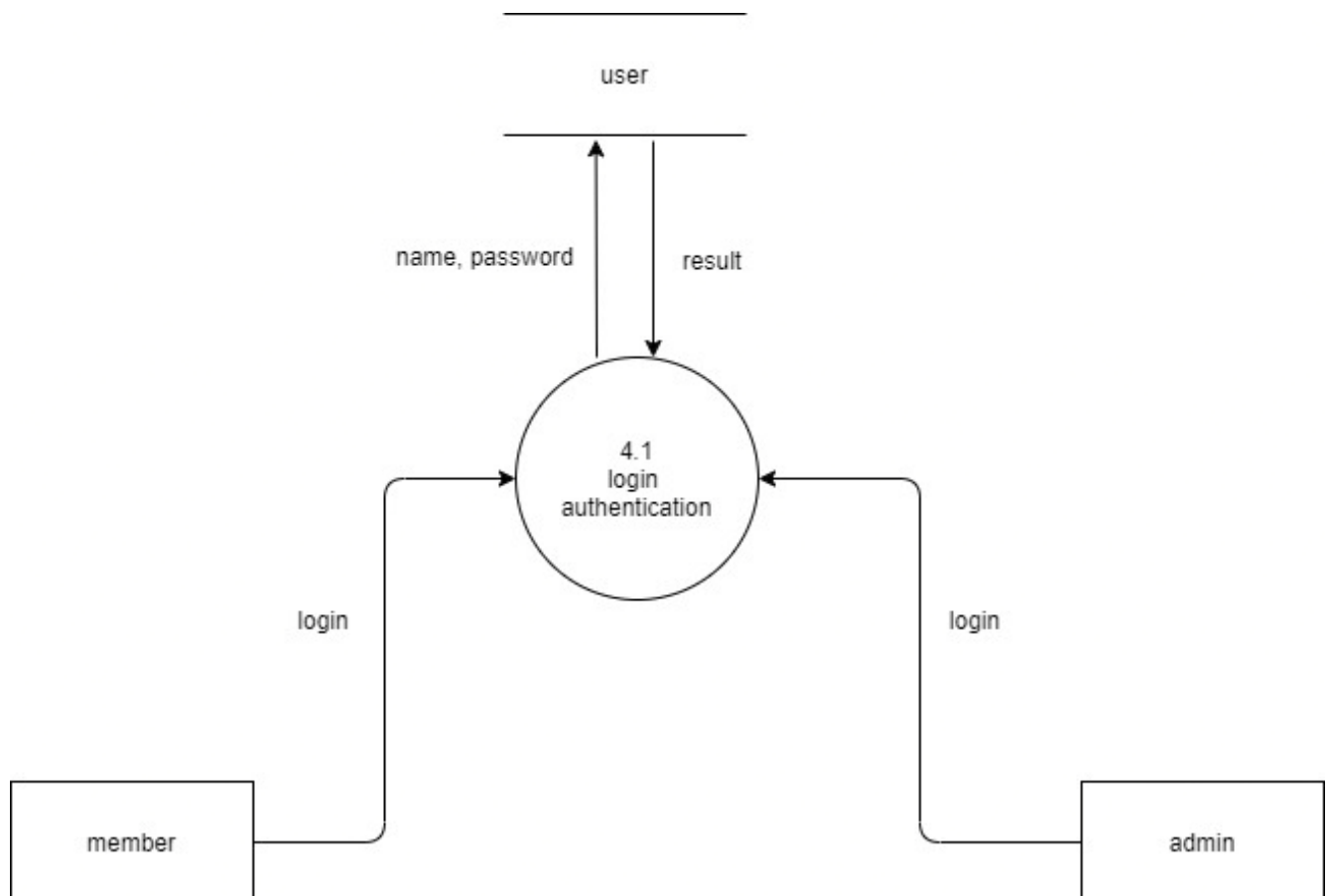
Level 1 Music



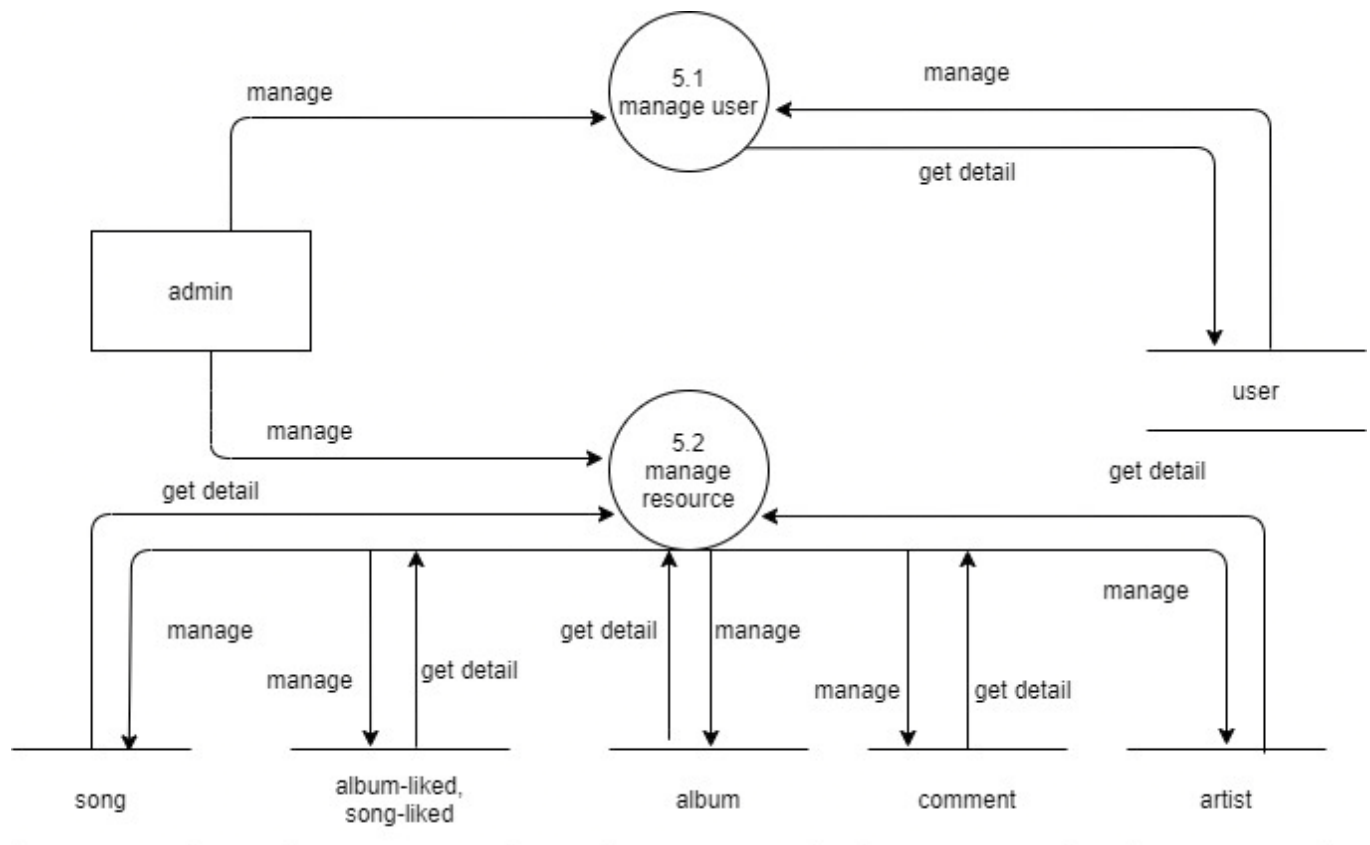
Level 1 Like Comment



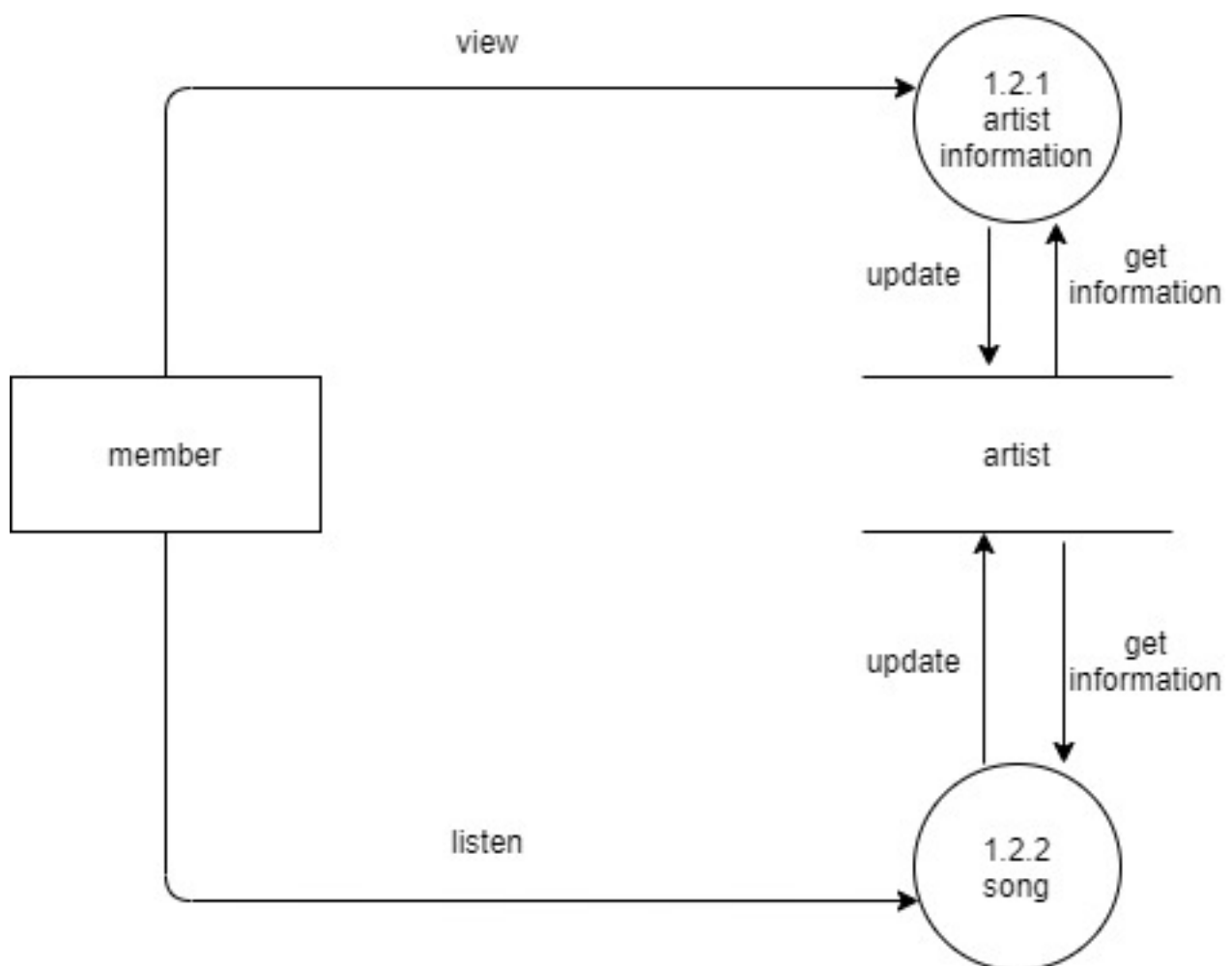
Level 1 Authentication



Level 1 Resource Management



Level 2 Artist



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Entities & Entity Relationship Diagram



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I. Entities

User

Track

Artist

Album

Album-Track

Artist-Track

Playlist

Playlist-Track

Queue-Track

Track-Liked

Album-Liked

Playlist-Liked

Artist-Type

Album-Type

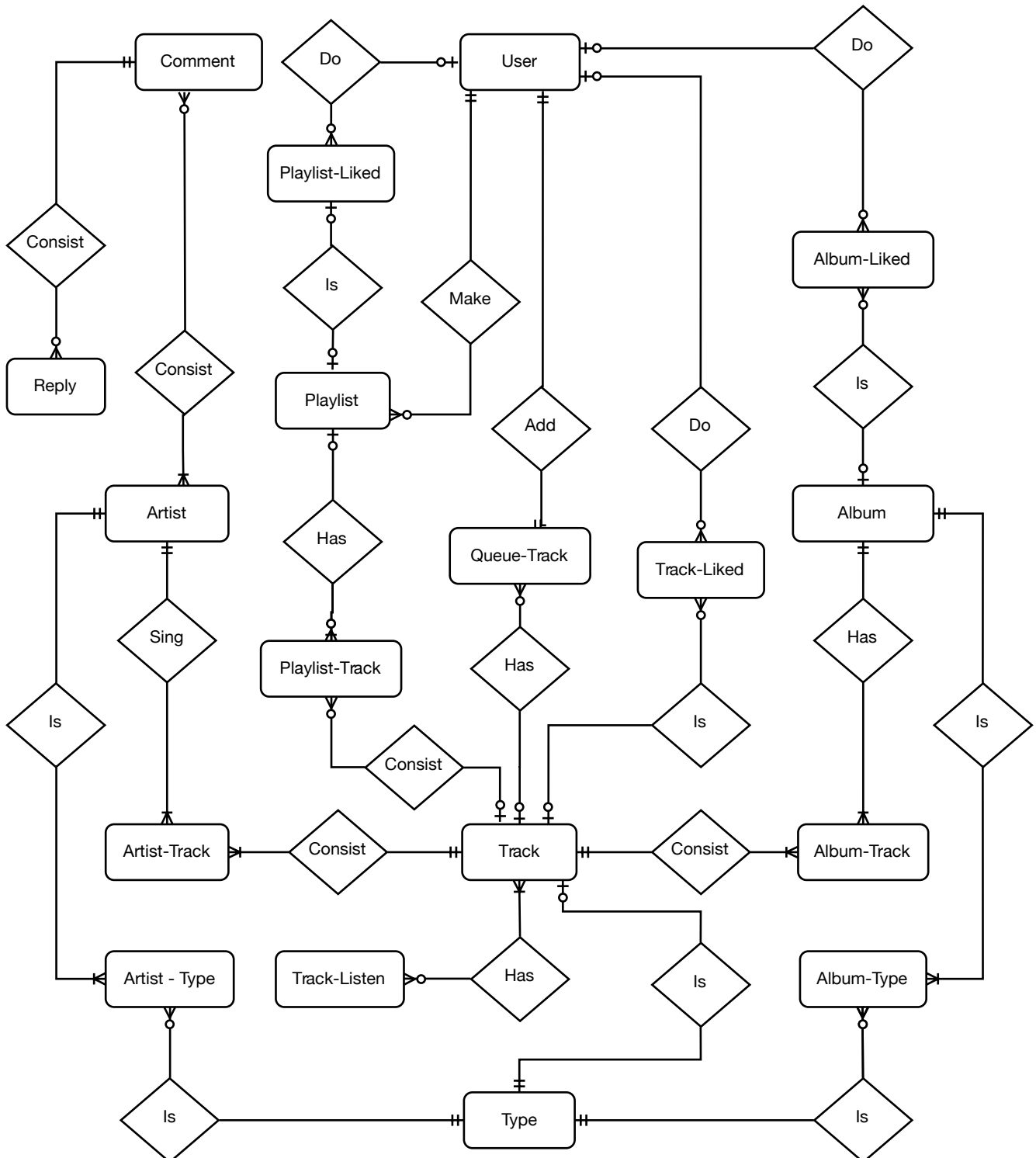
Type

Comment

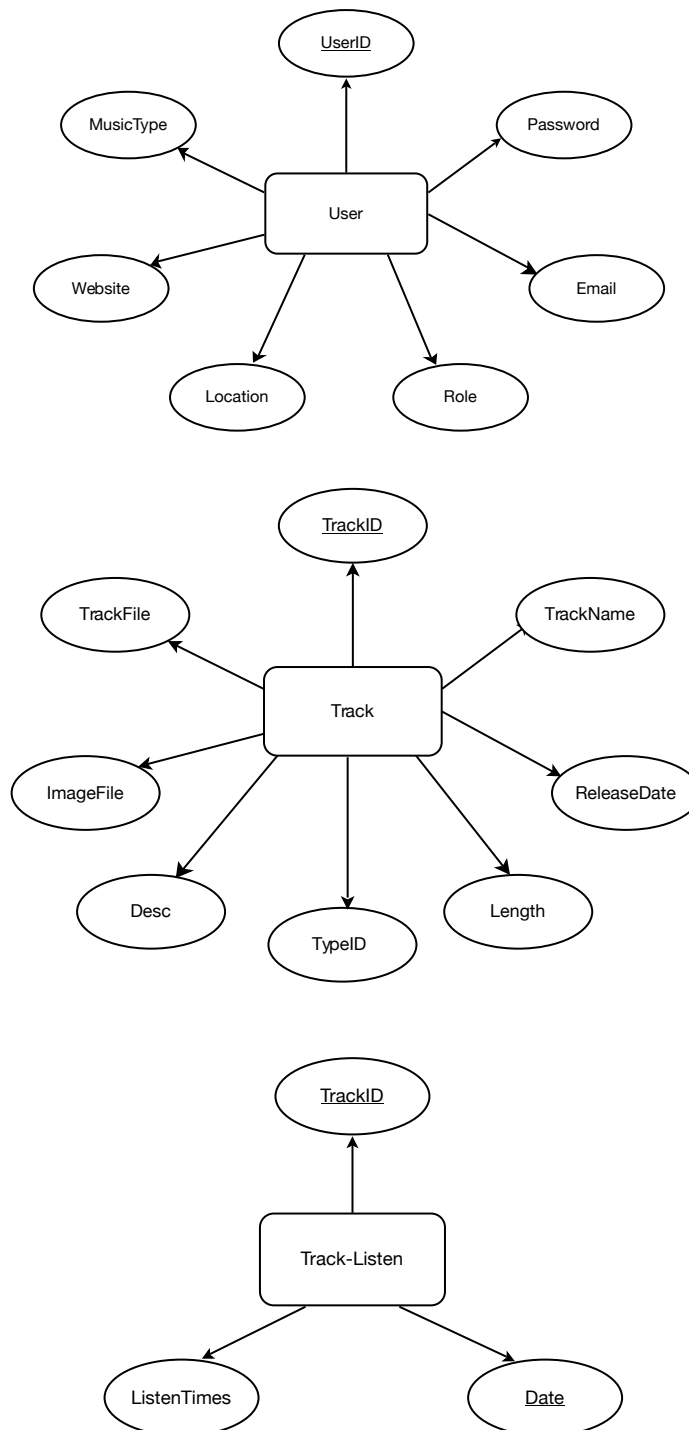
Reply

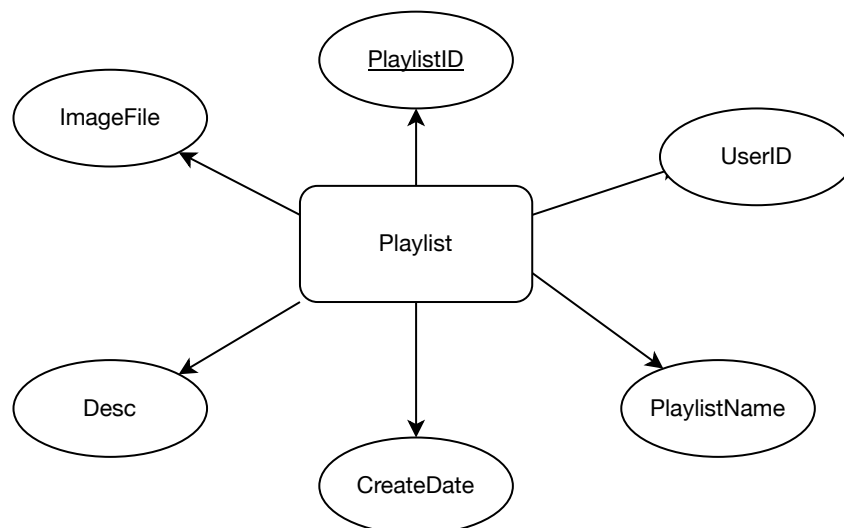
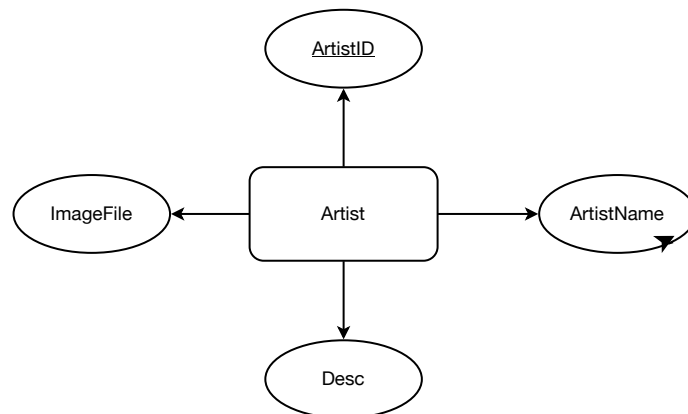
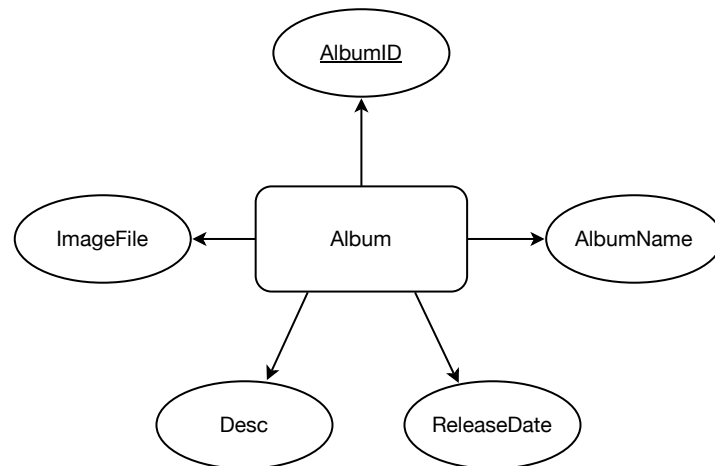
Track-Listen

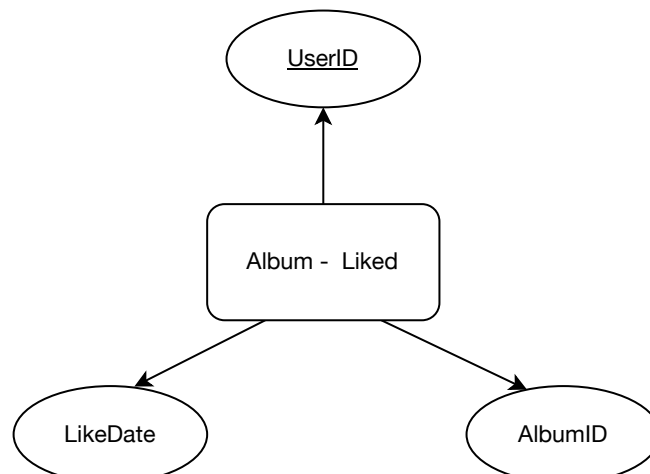
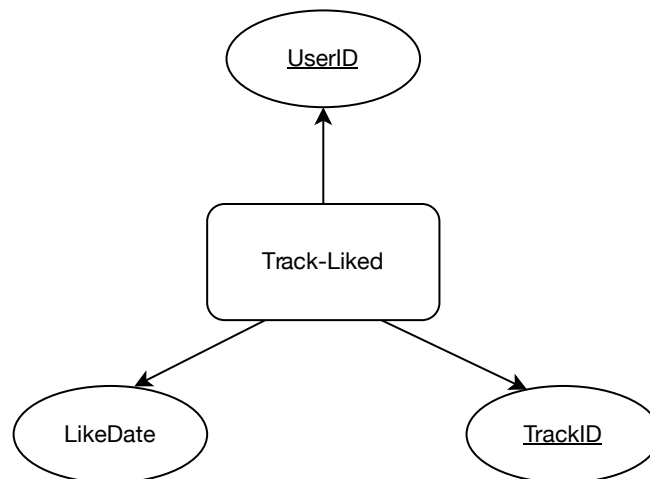
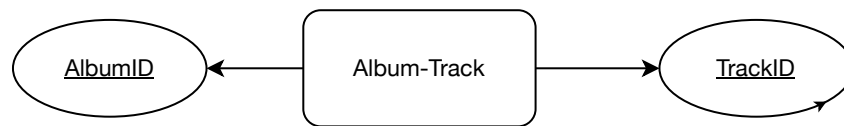
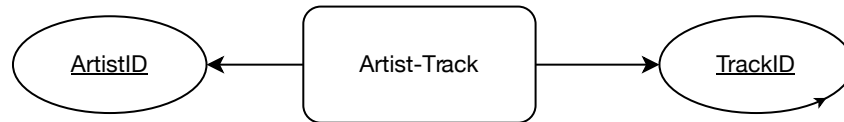
II. Entity Relationship Diagram

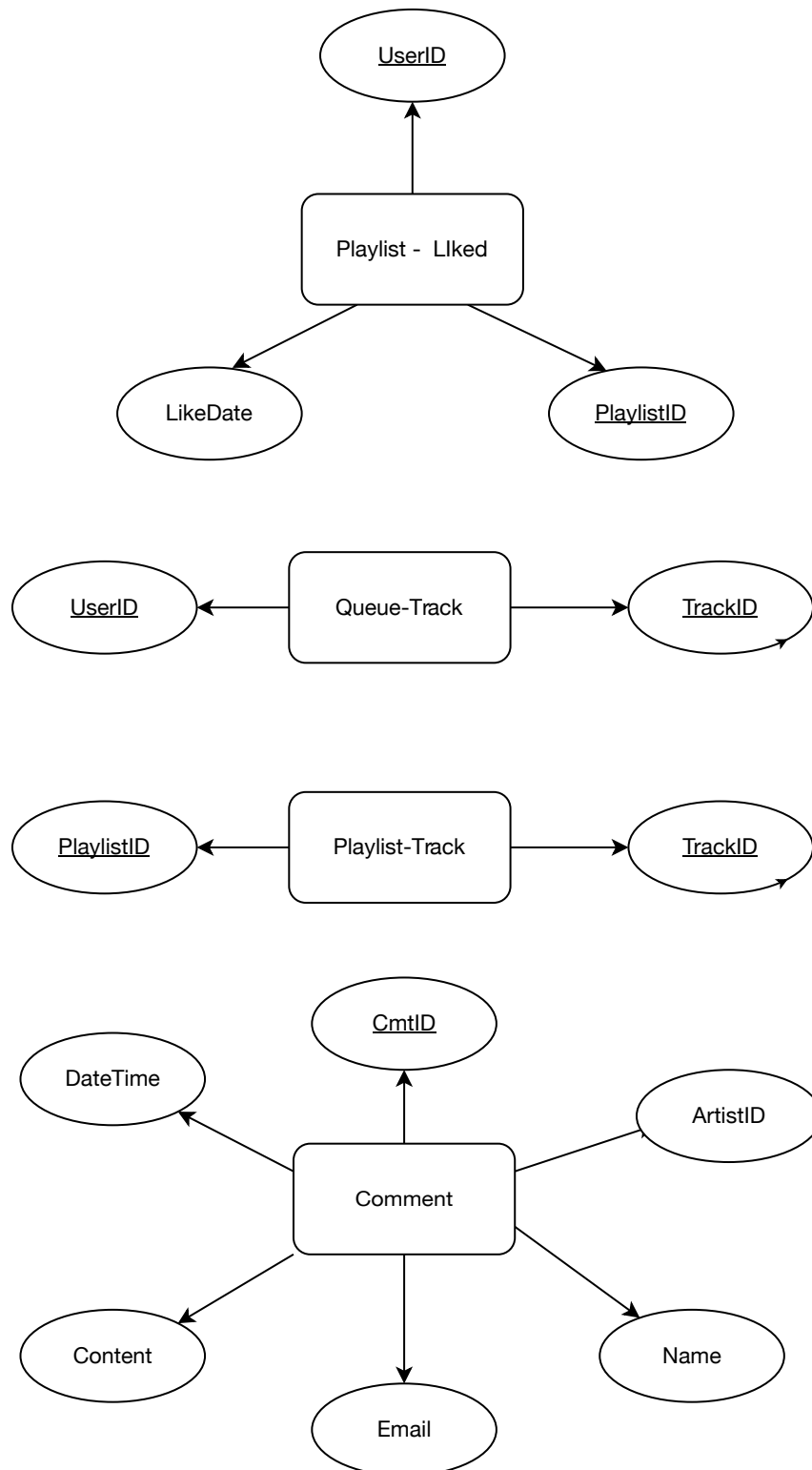


III. Property





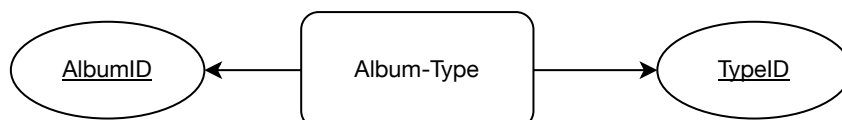
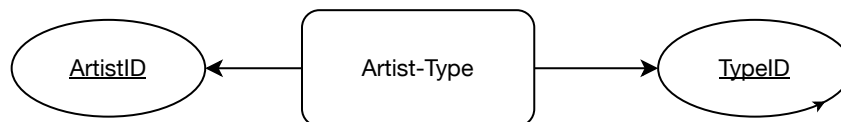
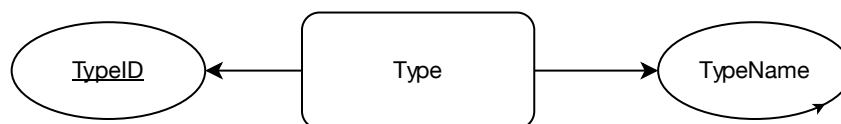
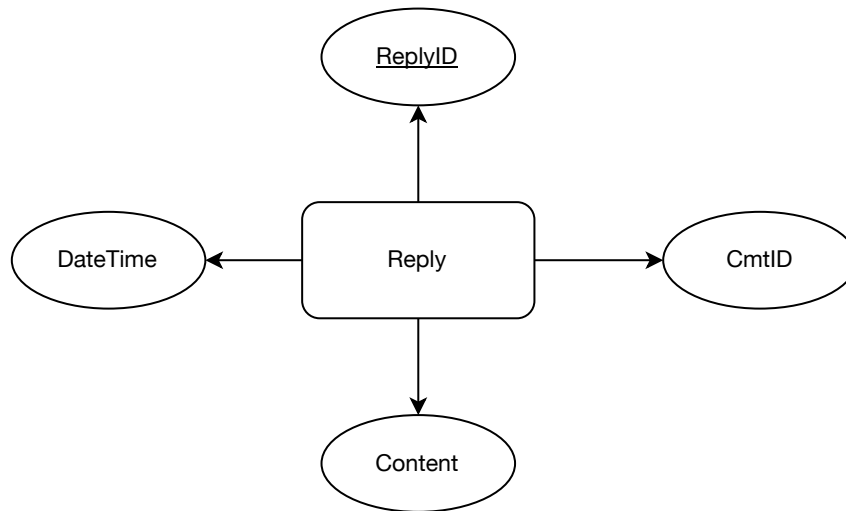






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IV. Table Design

1. Table: tb_User

Collum Name	Data Type	Null	Key	Constraint	Note
UserID	Varchar(30)	No	Primary Key	At least 3	
Password	Varchar(30)	No		At least 5	
Email	Varchar(40)	No			
Role	Boolean	No			0=Member ; 1= Admin
Location	Varchar(100)				
Website	Varchar(100)				
MusicType	Varchar(30)				

2. Table: tb_Track

Collum Name	Data Type	Null	Key	Constraint	Note
TrackID	Int (10)	No	Primary Key	Identity	
TrackName	Varchar(30)	No			
ReleaseDate	Date	No			
Length	Time	No			Length of Song
TypeID	Int (10)	No	Foreign Key		
Desc	Varchar(100)	No			
ImageFile	Varchar(100)				
TrackFile	Varchar(100)	No			

3. Table: tb_Track_Listen

Collum Name	Data Type	Null	Key	Constraint	Note
TrackID	Int (10)	No	Foreign Key	Primary Key	
Date	Date	No			Default=CurrentDate
ListenTimes	Int(10)				Default=0



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4. Table: tb_Album

Collum Name	Data Type	Null	Key	Constraint	Note
AlbumID	Int (10)	No	Primary Key	Identity	
AlbumName	Varchar(30)	No			
ReleaseDate	Date	No			
Desc	Varchar(255)				
ImageFile	Varchar(100)	No			

5. Table: tb_Artist

Collum Name	Data Type	Null	Key	Constraint	Note
ArtistID	Int (10)	No	Primary Key	Identity	
ArtistName	Varchar(30)	No			
Desc	Varchar(255)				
ImageFile	Varchar(100)	No			

6. Table: tb_Playlist

Collum Name	Data Type	Null	Key	Constraint	Note
PlaylistID	Int (10)	No	Primary Key	Identity	
UserID	Varchar(30)	No	Foreign Key		
PlaylistName	Varchar(30)	No			
CreateDate	Date	No			Deafuld = Current Date
Desc	Varchar(255)				
ImageFile	Varchar(100)	No			



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7. Table: tb_Artist_Track

Collum Name	Data Type	Null	Key	Constraint	Note
ArtistID	Int (10)	No	Foreign Key	Primay Key	
TrackID	Int (10)	No	Foreign Key		

8. Table: tb_Album_Track

Collum Name	Data Type	Null	Key	Constraint	Note
AlbumID	Int (10)	No	Foreign Key	Primay Key	
TrackID	Int (10)	No	Foreign Key		

9. Table: tb_Track_Liked

Collum Name	Data Type	Null	Key	Constraint	Note
UserID	Varchar(30)	No	Foreign Key	Primay Key	
TrackID	Int (10)	No	Foreign Key		
LikeDate	Date	No			Deafult = Current Date

10. Table: tb_Album_Liked

Collum Name	Data Type	Null	Key	Constraint	Note
UserID	Varchar(30)	No	Foreign Key	Primay Key	
AlbumID	Int (10)	No	Foreign Key		
LikeDate	Date	No			Deafult = Current Date

11. Table: tb_Playlist_Liked

Collum Name	Data Type	Null	Key	Constraint	Note
UserID	Varchar(30)	No	Foreign Key	Primay Key	
PlaylistID	Int (10)	No	Foreign Key		
LikeDate	Date	No			Deafult = Current Date



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12. Table: tb_Queue_Track

Collum Name	Data Type	Null	Key	Constraint	Note
UserID	Int (10)	No	Primary Key		
TrackID	Int (10)	No	Foreign Key		

13. Table: tb_Playlist_Track

Collum Name	Data Type	Null	Key	Constraint	Note
PlaylistID	Int (10)	No	Foreign Key	Primary Key	
TrackID	Int (10)	No	Foreign Key		

14. Table: tb_Comment

Collum Name	Data Type	Null	Key	Constraint	Note
CmtID	Int (10)	No	Primary Key	Identity	
ArtistID	Int (10)	No	Foreign Key		
Name	Varchar(50)	No			
Email	Varchar(50)	No			
Content	Varchar(255)	No			
DateTime	Date	No			Default = Current

15. Table: tb_Reply

Collum Name	Data Type	Null	Key	Constraint	Note
ReplyID	Int (10)	No	Primary Key	Identity	
CmtID	Int (10)	No	Foreign Key		
Content	Varchar(30)	No			
DateTime	Date	No			Default = Current



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16. Table: tb_Type

Collum Name	Data Type	Null	Key	Constraint	Note
TypeID	Int (10)	No	Primary Key	Identity	
TypeName	Varchar(30)	No			

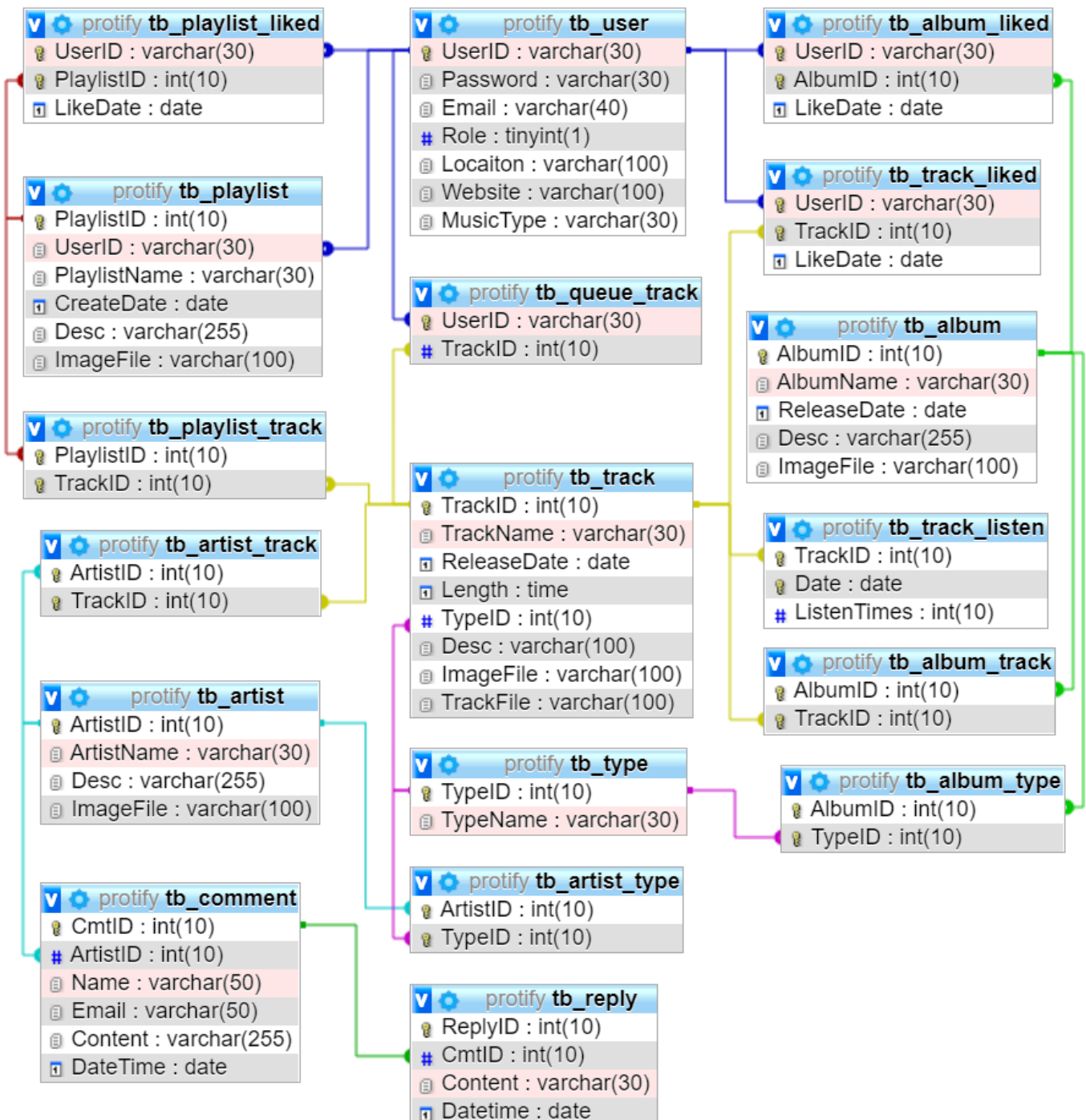
17. tb_Artist_Type

Collum Name	Data Type	Null	Key	Constraint	Note
ArtistID	Int (10)	No	Foreign Key	PK	
TypeID	Int (10)	No	Foreign Key		

18. tb_Album_Type

Collum Name	Data Type	Null	Key	Constraint	Note
AlbumID	Int (10)	No	Foreign Key	PK	
TypeID	Int (10)	No	Foreign Key		

V. Relationship Diagram



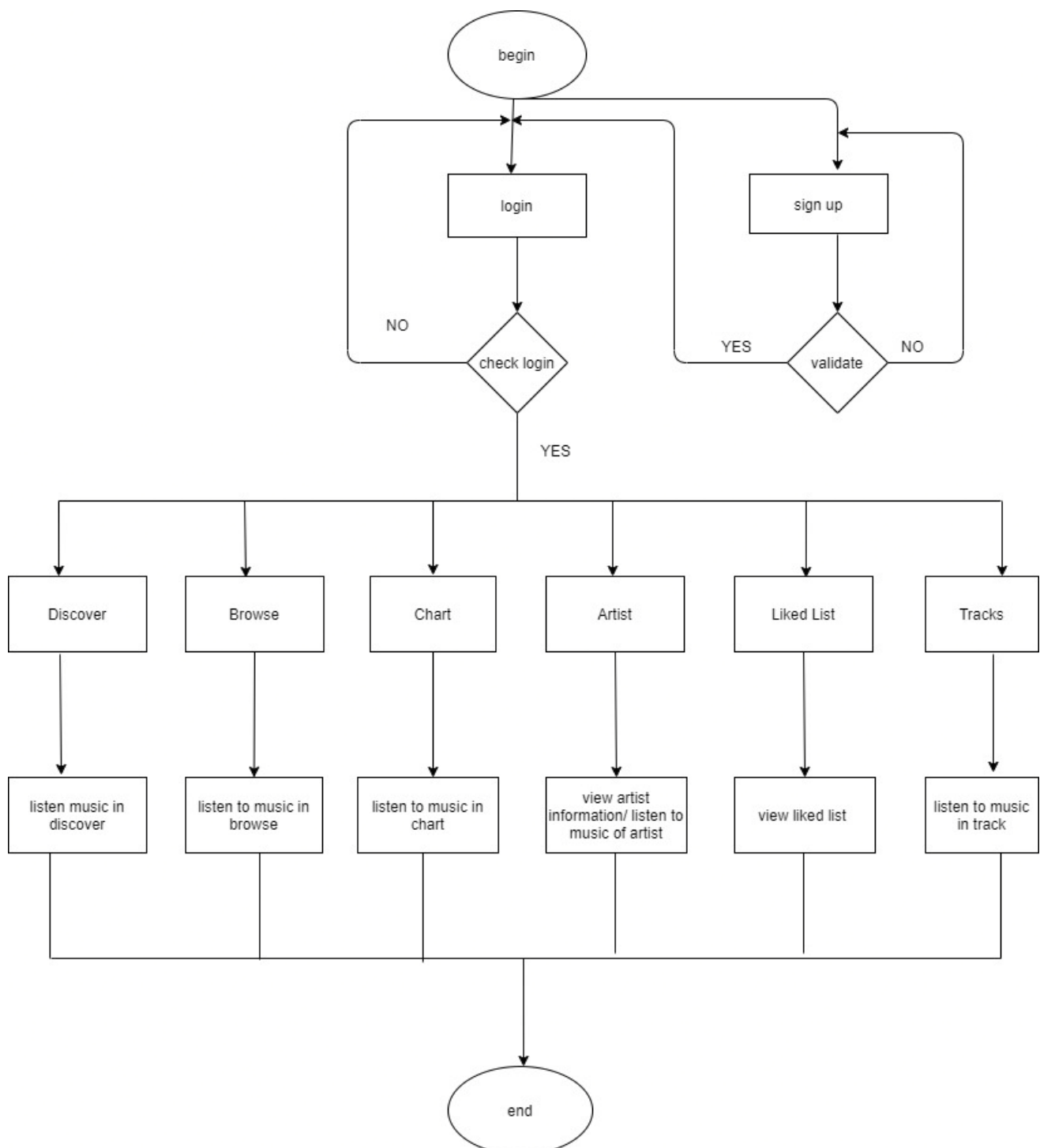


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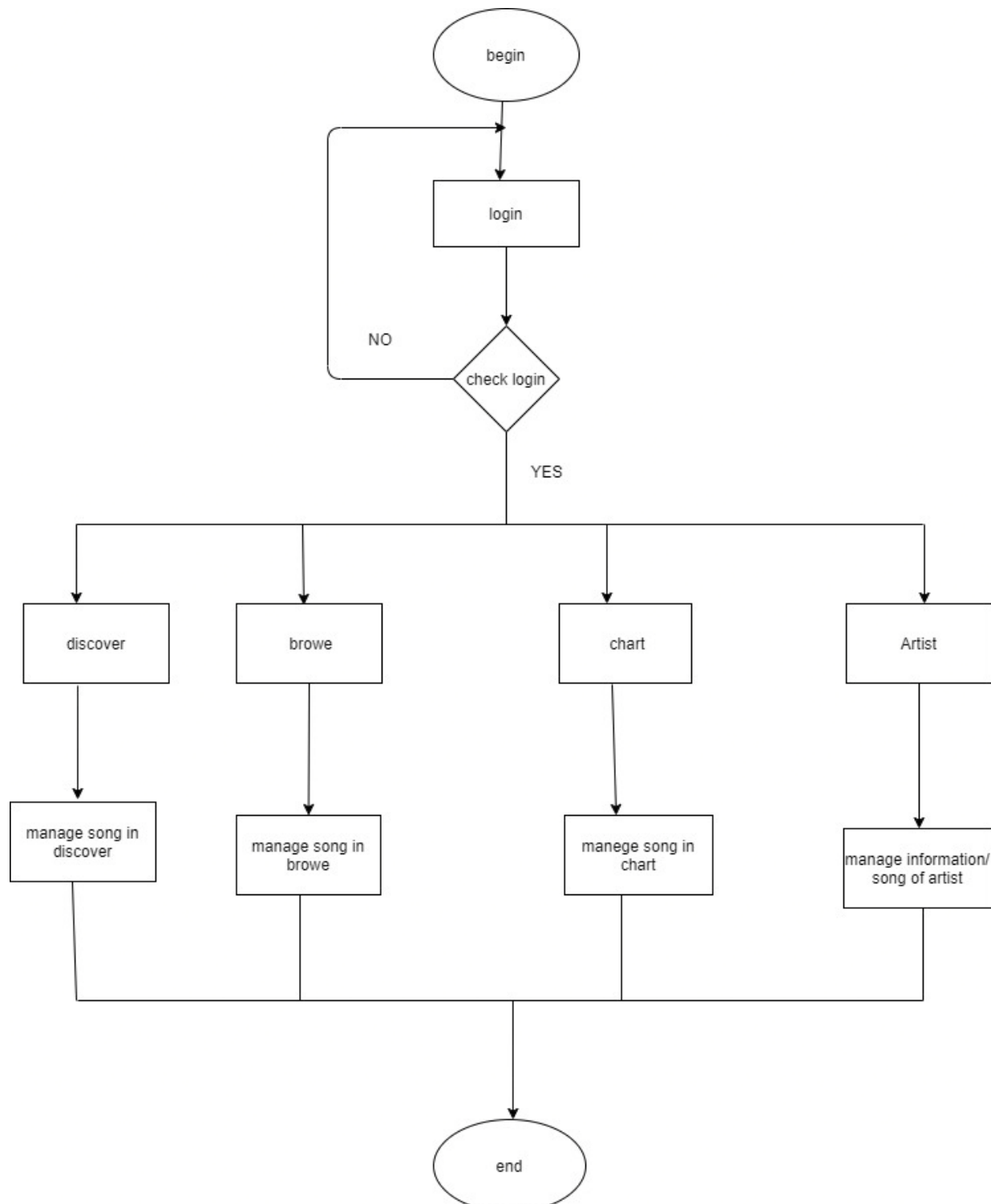
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Function Diagram

I. Function Diagram Of Member



II. Function Diagram Of Admin





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Site Map



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I. SiteMap - The Members Website

Home page:

- Allow access to the site and register an account to log in to the site, otherwise it is only displayed on the introduction page
- Display web-related categories: About Us, Login/Signup, Site, WebApp, RTL, Contact, Site Map, FAQs.

Site:

- Where the website will be display like the normal website

WebApp:

- Where the website will be display like the app on the mobile device

RTL (Right To Left):

- Where the website can be display with several other languages in different countries, including Arabic, Urdu, Hebrew, Persian, and a few others, are written right to left.

Login/Signup:

- Allow customers to login and logout from the website when registered members

Search:

- Allow members to enter and search songs, artist names, genres, albums, tracks

Artist:

- For the details of the artist
- For detailed information about the artist's tracks

Browse:

- The index of tracks on the website. Where the user can search tracks by music type

Chart:

- Displays the most listened song all of day, month, week, ..

Discover:

- The interface displays and constantly updates the trends for the site. New songs, new albums, new tracks, new trends, ...

Playlist:

- Show details and all songs in the playlist

Like:

- Members are allowed to save the favorite song into liked catalogue

Profile:

- Display and allow members to edit names, captions, .. in their profile

FAQs:

- A list of questions and answers relating to a particular subject, especially one giving basic information for users of a website.

FAQs:

- A list of pages of a web site. This page will help the user be easier to user our website.

Contact:

- Allow members to contact, comment bugs to the support

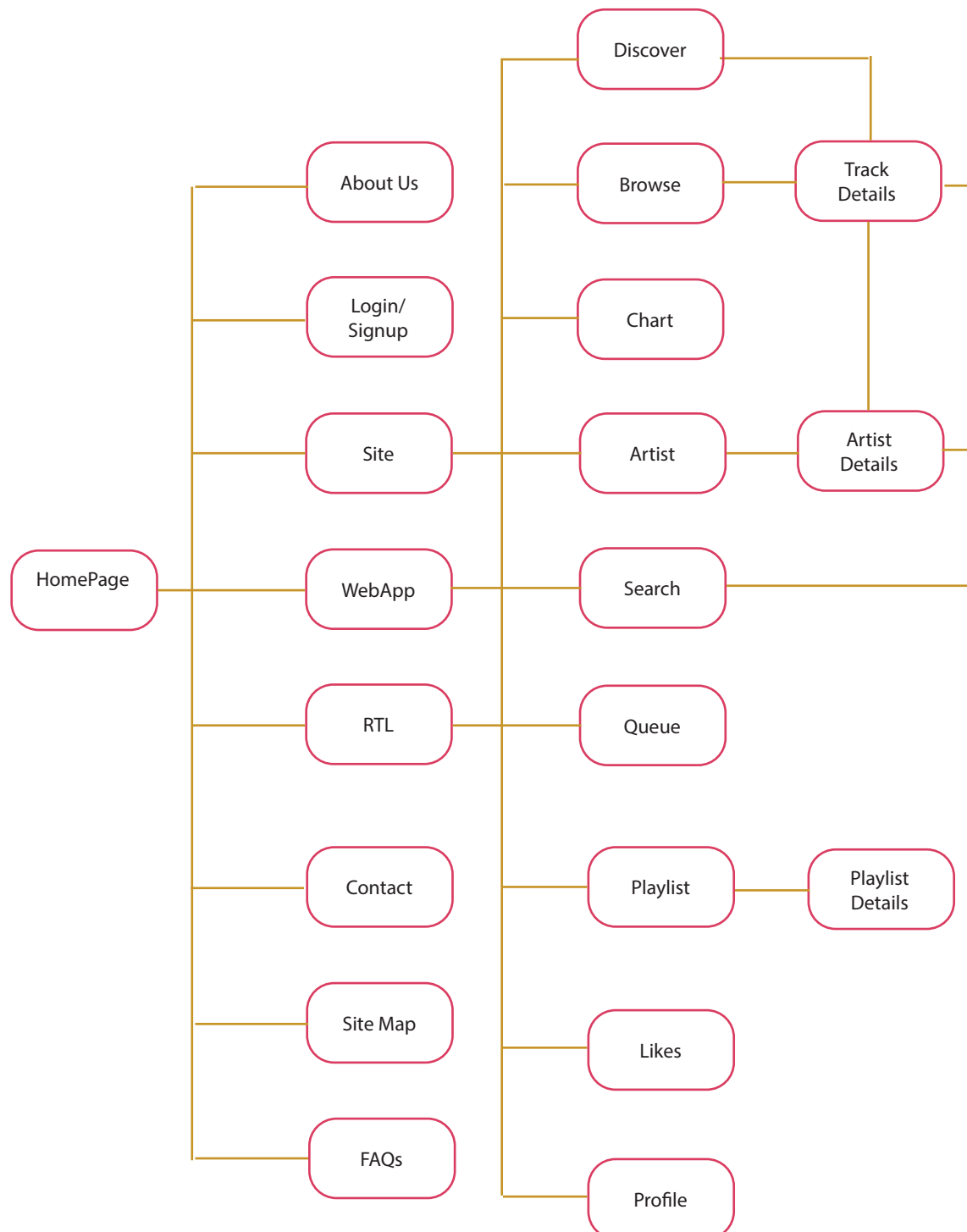
About Us:

- Is a special website on the website where members can better understand About page



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II. SiteMap - The Admin's Website

Home page:

- Allow access to the site and manage the website
- Display web-related categories: About Us, Login/Signup, Site, WebApp, RTL, Contact, Site Map, FAQs.

Site:

- Where the website will be display like the normal website

WebApp:

- Where the website will be display like the app on the mobile device

RTL (Right To Left):

- Where the website can be display with several other languages in different countries, including Arabic, Urdu, Hebrew, Persian, and a few others, are written right to left.

Login/Signup:

- Allow logging in to manage and log out of the website

Search:

- Allow members to enter and search songs, artist names, genres, albums, tracks

Artist:

- Manage the details of the artist, allowed to add, delete, edit the information

Browse:

- The index of tracks on the website. Where the user can search tracks by music type

Chart:

- Manage the most listened song all of day, month, week,.

Discover:

- The interface displays and constantly updates the trends for the site. New songs, new albums, new tracks, new trends,...
- Manage which will be display on this site.

Playlist:

- Show details and all songs in the playlist

Like:

- Manage liked song to make the top liked tracks ranking board

Profile:

- Manage all members who are logged in on the web and all member information.

FAQs:

- A list of questions and answers relating to a particular subject, especially one giving basic information for users of a website.

FAQs:

- A list of pages of a web site. This page will help the user be easier to user our website.

Contact:

- Allow members to contact, comment bugs to the support

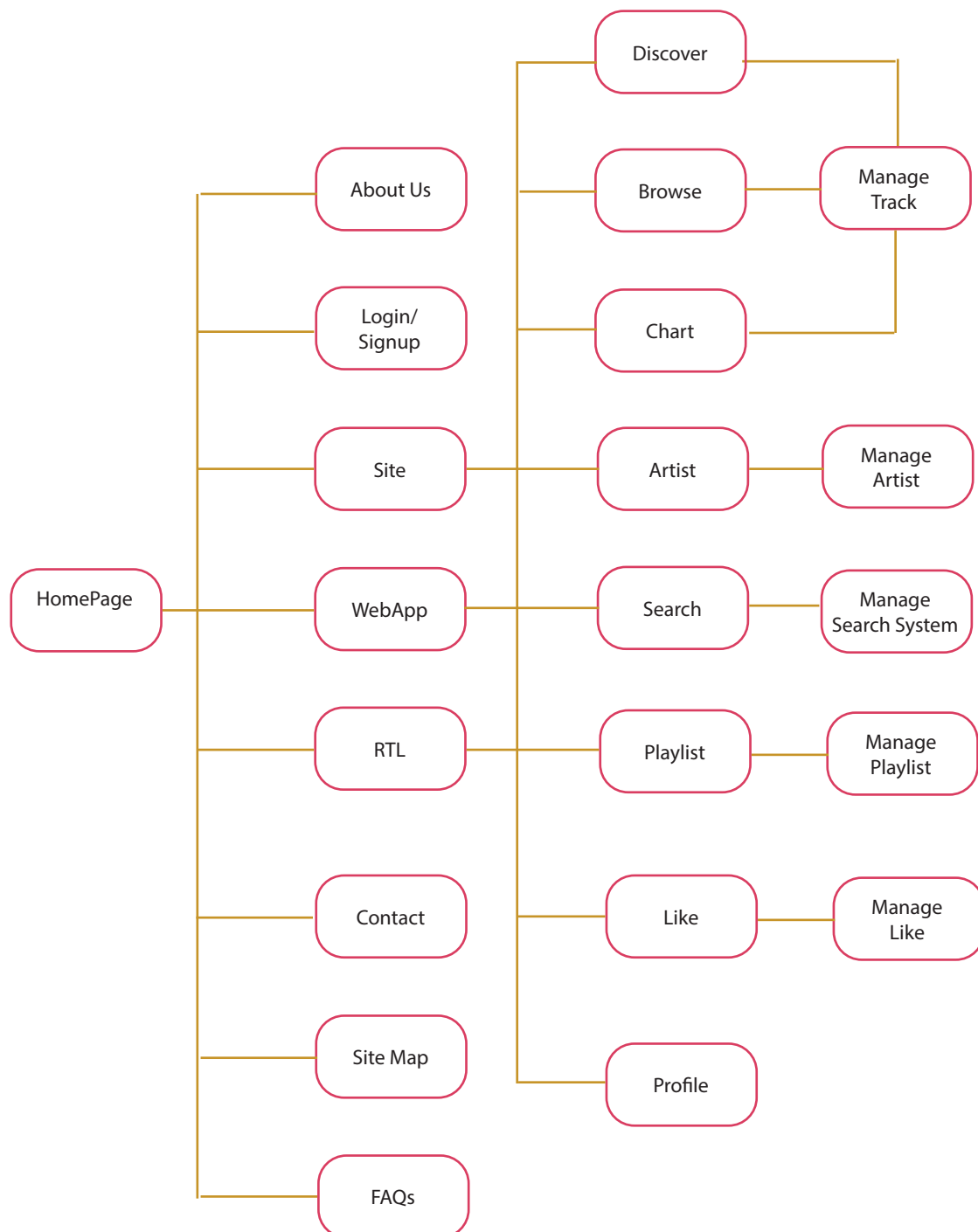
About Us:

- Is a special website on the website where members can better understand About page



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Task Sheet Review 2

No.	Description	Begin Date	Teammate Name	Notes
1	Data Flow Diagram	May 22 th 2020	Lương Trúc Quỳnh	Done
2	Entity Relationship Diagram		Hoàng Minh Tâm	Done
3	Table Design & Relationship Diagram		Ngô Thị Đoan Dung	Done
4	Task Sheet Review		Võ Minh Thư	Done

Date	
Signature of Instructor: Mrs. Le Mong Thuy	Signature of Team Leader: Ms. Ngo Thi Doan Dung



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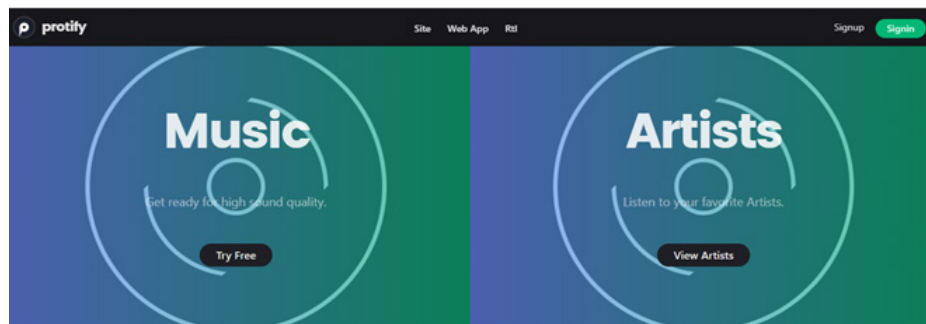
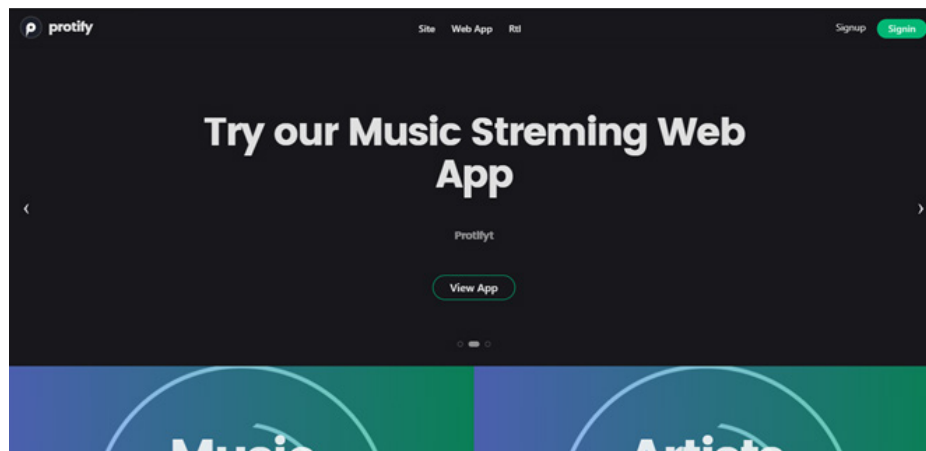
User Interface

I. Home Page

1. Overview

- Purpose: The home page provides some basic information about Protify ,and what they offer. Everybody can listen many kinds of music which the highest quality. The theme very attract the client because they can use darkmode and lightmode with colorful such as: green, red, yellow, purple, pink, blue.

2. Screenshot

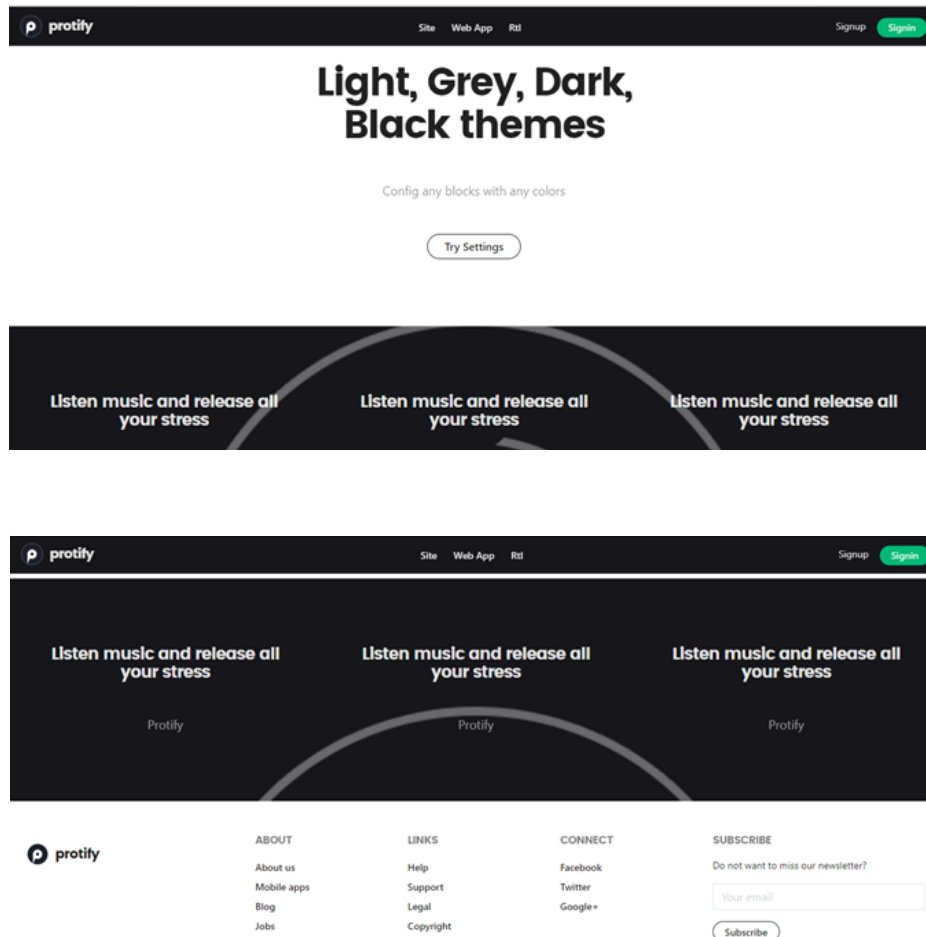


Light, Grey, Dark,
Black themes



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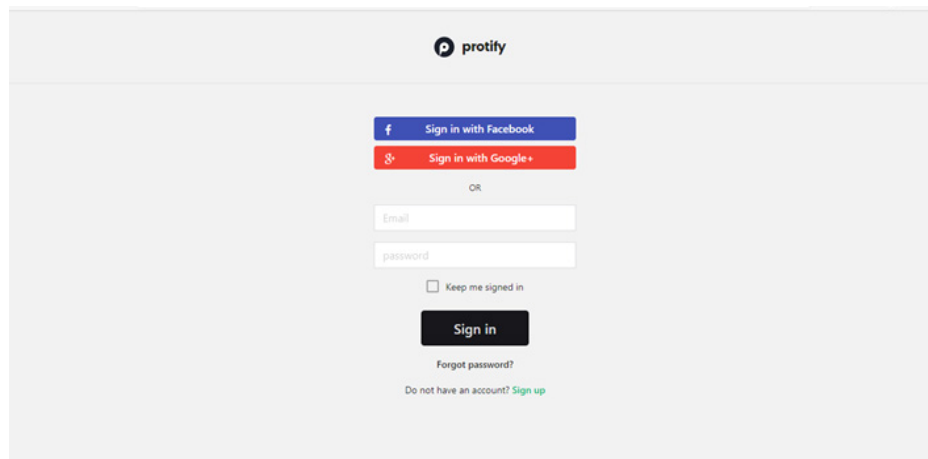


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3. Functionality

- The homepage includes a sticky navigation bar to allow easy access. The user can also choose to log in or register on the same page. If the user decide to log in, the header will display “Welcome”, and the header will also change from login, register to “Upload”. The login will prompt a box for user to enter their email, and password to log in or sign in with Facebook, Google+

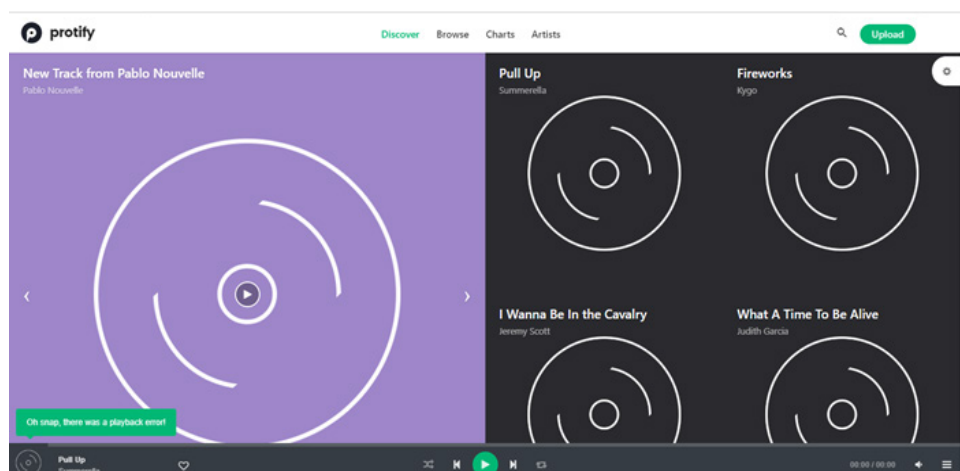


II. Discover

1. Overview

- Purpose: The interface displays and constantly updates the trends for the site. New songs, new albums, new trends,...

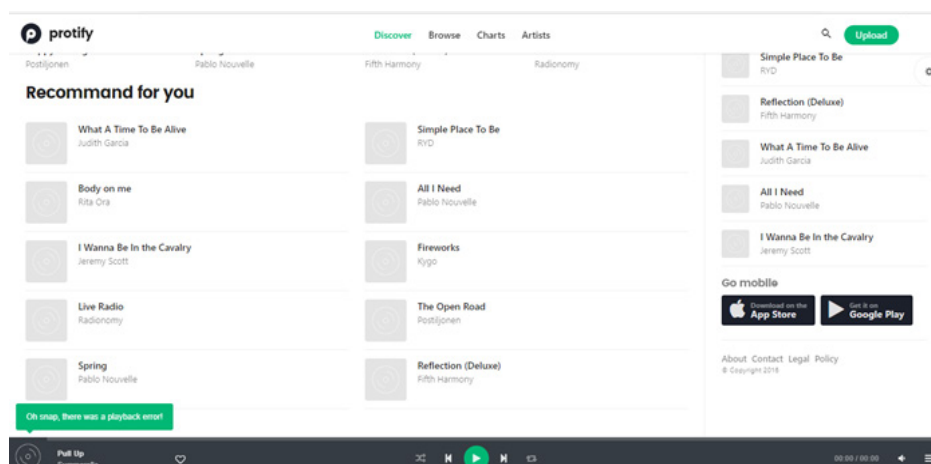
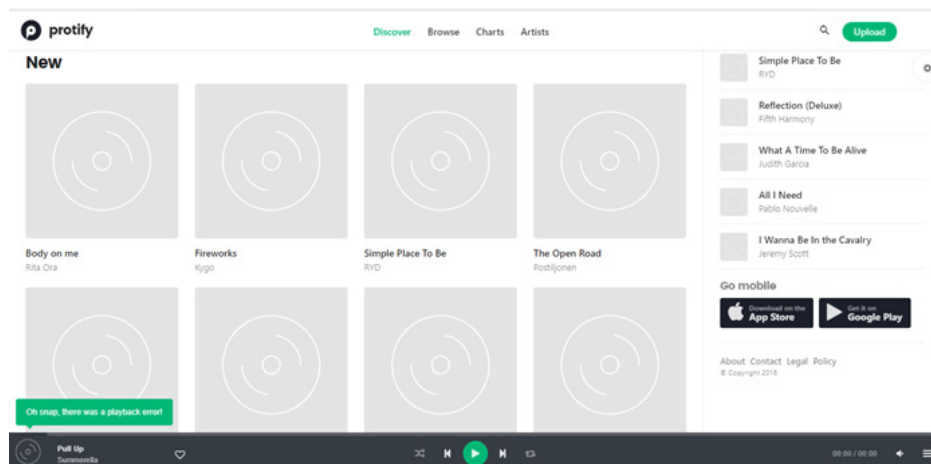
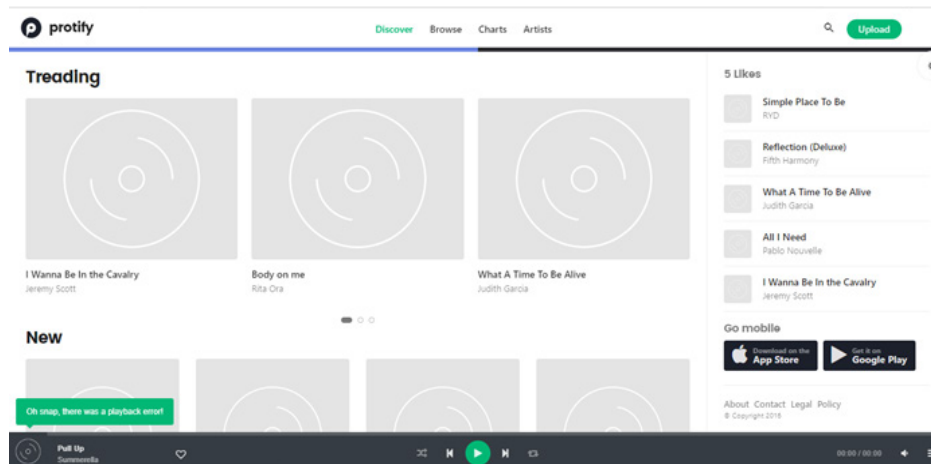
2. Screenshot





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3. Functionality

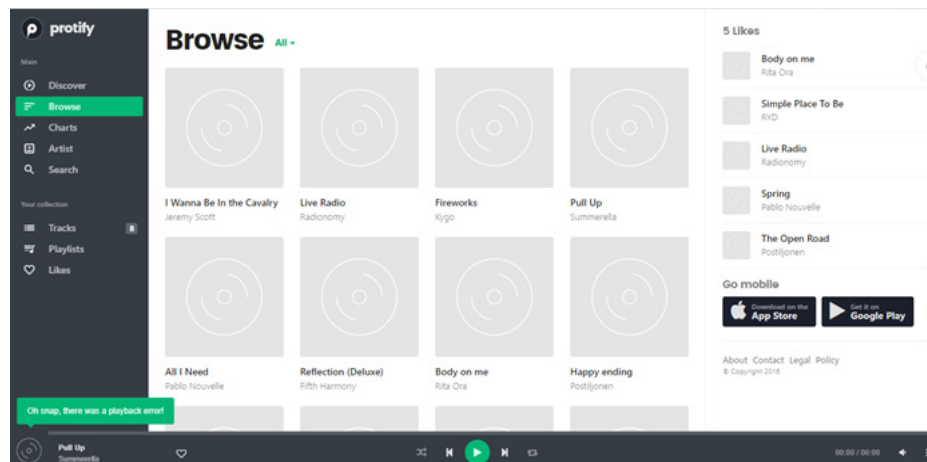
- Like the home page user can choose to register or login, users can decide to listen to the song they want, then the taskbar below will display and play the song of their choice. In this page, users can decide to choose their available or favorite songs or a specific song they are looking for. We also paged the data so that users are not overwhelmed by the number of items.

III. Browse Page

1. Overview

- Purpose: The index of tracks on the website. Where the user can search tracks by music type

2. Screenshot





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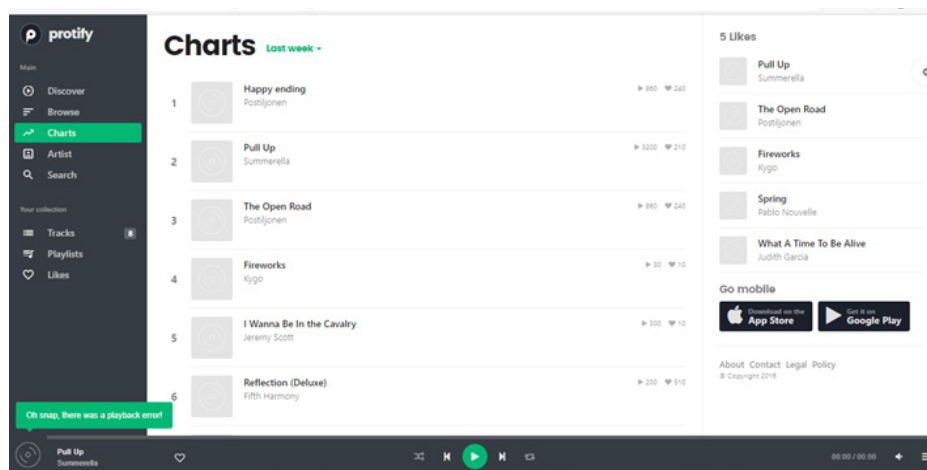
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III. Chart

1. Overview

- Purpose: Displays the most listened song all of day, month, week,.

2. Screenshot

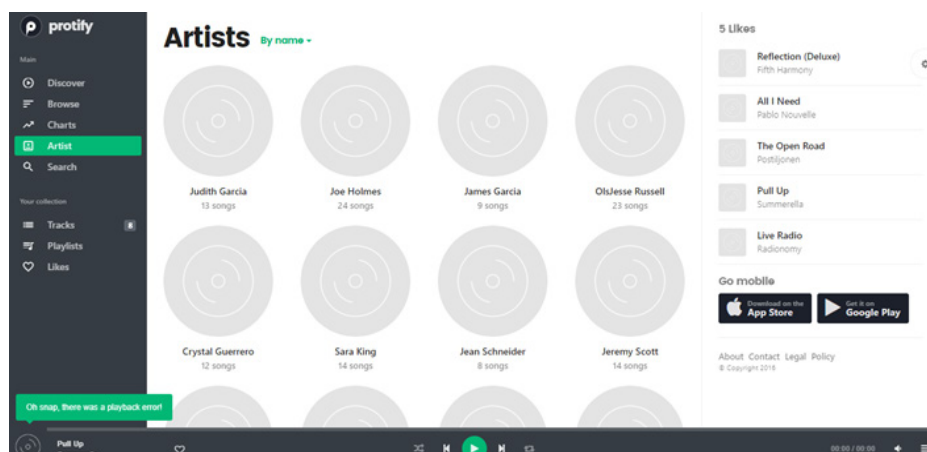


III. Artist

1. Overview

- Purpose: For the details of the artist. For detailed information about the artist's tracks

2. Screenshot





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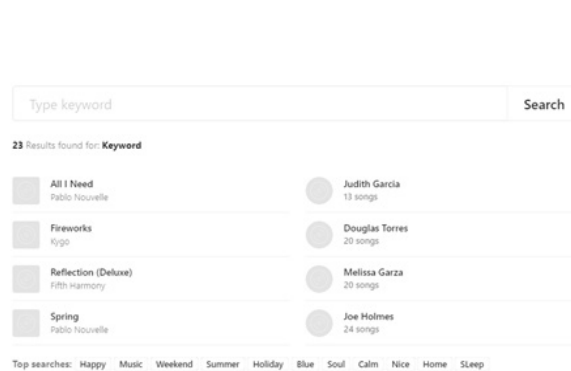
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III. Search Page

1. Overview

- Purpose: Allow members to enter and search songs, artist names, genres, albums, tracks

2. Screenshot





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Administor Interface

I. Home Page



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Task Sheet Review 3

No.	Description	Begin Date	Teammate Name	Notes
User Interface				
1	HomePage	May 22 th 2020	Lương Trúc Quỳnh	
2	Discover Page		Hoàng Minh Tâm	
3	Browse Page		Ngô Thị Đoan Dung	
4	Chart Page		Võ Minh Thư	
5	Artist Page		Ngô Thị Đoan Dung	
6	Search Page		Hoàng Minh Tâm	
Administor Interface				
6	HomePage	May 22 th 2020	Lương Trúc Quỳnh	
7	Discover Page		Hoàng Minh Tâm	
8	Browse Page		Ngô Thị Đoan Dung	
9	Chart Page		Võ Minh Thư	
10	Artist Page		Ngô Thị Đoan Dung	
11	Search Page		Hoàng Minh Tâm	

Date	
Signature of Instructor:	Signature of Team Leader:
Mrs. Le Mong Thuy	Ms. Ngo Thi Doan Dung