



Daffodil
International
University

Bongo Music (Music Streaming Service)

By

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A project report submitted in partial fulfillment of the requirement for the degree of
Bachelor of Science in Software Engineering

Department of Software Engineering

DAFFODIL INTERNATIONAL UNIVERSITY

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APPROVAL

This project titled on “**Bongo Music (Music Streaming Service)**”, submitted by **Md. Joni Akter Labu (ID: 193-35-2913)** to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Software Engineering and approval as to its style and contents.

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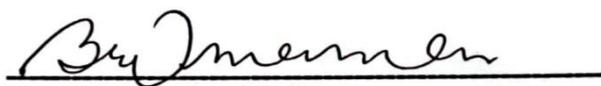
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ABSTRACT

Bongo Music is a web-based music streaming service that offers users access to a wide range of Bangla songs. The platform provides basic functions such as free music streaming, allowing users to listen to their favorite tracks without any limitations. However, users also have the option to upgrade to a Premium subscription for additional benefits.

By opting for the Premium subscription, users gain access to the following features:

- Unlimited Song Streaming
- Unlimited Song Downloads

Upgrade to Bongo Music Premium to unlock these enhanced features and elevate your music streaming experience.

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CHAPTER 1

INTRODUCTION

1.1 Project Overview

Bongo Music is a web-based Bangla music streaming service that provides users with access to a vast collection of Bangla songs. The platform allows users to search for music by artist name, song name, and album name. Additionally, users can create personalized favorite lists on the website.

Bongo Music aims to provide users with a comprehensive Bangla music streaming experience. With its extensive music library, advanced search functionality, personalized favorite lists, and potential music recommendations, users can easily find, organize, and enjoy a wide variety of Bangla songs on the platform.

1.2 Project Purpose

In recent years, there has been a remarkable shift in music consumption patterns, driven by the rapid internet penetration and the widespread use of mobile devices. This has led to the development and advancement of numerous music applications such as Apple Music, Spotify, Shazam, and SoundCloud.

As a web developer, my purpose and motivation are to create my own Bangla music streaming website that caters specifically to the Bangla music audience. This website will serve as a platform where people can listen to a wide range of Bangla music. Additionally, users will have the option to purchase a premium subscription, which grants access to premium features like exclusive Bangla songs and the ability to download songs.

By undertaking this project, I aim to provide a dedicated space for Bangla music enthusiasts to discover, enjoy, and support Bangla music. This website will offer a personalized experience and contribute to the promotion and accessibility of Bangla music in the digital realm.

1.3 Background

The project aims to create a Bangla music streaming service, a web-based platform dedicated to providing users with access to a wide range of Bangla songs. With the increasing popularity of music streaming and the growing demand for Bangla music, there is a need for a dedicated platform that caters specifically to this genre.

The quick penetration of the internet and the widespread use of mobile devices have paved the way for the development of various music applications like Apple Music and Spotify. However, there is a gap in the market for a Bangla music streaming service that offers a comprehensive collection of Bangla songs and a user-friendly interface.

Overall, the project seeks to meet the growing demand for Bangla music streaming and provide a dedicated platform for Bangla music enthusiasts to explore and enjoy their favorite songs.

1.4 Benefits & Beneficiaries

The Bangla music streaming website offers several advantages to users and artists alike:

- **User-Friendly Experience:** The website is designed to be fully functional and flexible, providing an easy-to-use interface for users to navigate and enjoy their favorite Bangla music.
- **Access to Extensive Music Library:** The website serves as a platform where people can listen to a wide variety of Bangla songs, offering a comprehensive collection that caters to diverse musical preferences.
- **Easy Music Distribution:** The website facilitates seamless distribution of Bangla music, allowing artists to reach a larger audience and share their creations with ease.
- **Encourages Support for Artists:** The platform encourages users to pay for music once again, creating a sustainable ecosystem for artists. By offering a premium subscription or purchase options, users can directly support their favorite Bangla artists.
- **Enhanced Data Analysis:** The website enables artists to gain insights into how users interact with their music.

1.5 Goals

- Develop a web-based music streaming service for customers to register and enjoy music.
- Ensure effective website management to enhance customer experience while listening to music.

1.6 Stakeholders

Stakeholders are individuals or groups who will be directly or indirectly affected by the web-based system (website). They encompass end-users who interact with the system and other parties impacted by its usage. In the case of our website, the following stakeholders have been identified:

- Users (both internal and external): These are the individuals who will visit the website and utilize its features and services. They may include general users, registered members, or paying subscribers.
- Admin: The website administrator is responsible for managing and maintaining the website, ensuring its smooth operation, and handling any administrative tasks or issues that may arise.
- Staff: This category includes employees or staff members involved in the day-to-day operations of the website. They may be responsible for content management, customer support, technical maintenance, or other relevant tasks.

1.7 Project Schedule

While our project is substantial in scope, I am aiming to complete the web application components of the entire system for our Final Defense. To achieve this, I have allocated a total of six months to develop and finalize our system. I have created a Gantt Chart to provide a visual representation of the project timeline, allowing me to track progress and determine when specific tasks have been completed. This schedule will help me stay organized and ensure timely completion of our work.

1.8 Gantt Chart

Week of works	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Requirement gathering	■	■																						
Analyzing			■	■																				
Project proposal				■																				
Making UML Diagram					■	■	■																	
UI Interface								■	■	■	■	■	■	■	■									
Midterm-Defense												■												
Implementing											■	■	■	■	■	■	■	■	■	■	■			
Testing											■	■	■	■	■	■	■	■	■	■	■			
Documentation																			■	■	■	■	■	■
Final-Defense																								■

1.8.1 Release Plan/Milestone

Release Plan I: Our goal is to release the initial version of our system on first week of next month.

Given the scope and complexity of our project, it is not feasible to complete it within a short timeframe. Therefore, I plan to continuously update and enhance the system based on user feedback and requirements. For our next release, we aim to incorporate an Appointment system and further improve the reliability of the system.

CHAPTER 2

SOFTWARE REQUIREMENT SPECIFICATION

2.1 Functional Requirements

FR01	Registration
Description	After providing the necessary information, the client can proceed to register themselves in our proposed system.
Stakeholders	Customers
Priority	Higher

FR02	Login
Description	Users will have the ability to log into the system using their individual username, email, and password.
Stakeholders	Customers, staffs, admin
Priority	Higher

FR03	Search
Description	Users have the capability to search for songs based on criteria such as the artist name, language, and album name.
Stakeholders	Customers
Priority	Higher

FR04	Favorite
Description	Users can add songs to their favorite list.
Stakeholders	Customers
Priority	Higher

FR05	Recent Played Music
Description	Users can navigate through a list of recently played or viewed songs by scrolling.
Stakeholders	Customers
Priority	Higher

FR06	Free Membership
Description	Users have the ability to listen to a limited selection of songs for free, but downloading songs is not available.
Stakeholders	Customers
Priority	Higher

FR07	Paid Membership
Description	Users have the ability to listen to a limited selection of songs for free, but downloading songs is not available.
Stakeholders	Customers
Priority	Higher

FR08	Free Membership
Description	Users have the privilege to listen to an unlimited number of songs and can freely download an unlimited amount of songs as well..
Stakeholders	Customers
Priority	Higher

FR09	Add music to database
Description	Staff/admins have the capability to update and add songs to the database.
Stakeholders	Staff, admin
Priority	Higher

2.2 Data Requirements

Data requirements for this music streaming service system include:

- Song metadata: Title, artist, album, release date, genre, duration, language.
- User information: Username, email, password.
- Playlists: User-created playlists and associated songs.
- User preferences: Preferred genres, favorite artists.
- Song ratings and reviews: User feedback and ratings for songs.
- Listening history: Recorded history of played songs.
- Licensing and rights management: Information on licensed songs and rights agreements.
- Analytics and metrics: User engagement, popular songs, demographic data.
- Payment information: Secure storage of payment details for premium subscriptions or purchases.
- Security measures: Encryption and protection of user data.

2.3 Speed and Latency Requirements

The generation of data results must exhibit faster performance.

- The dataset will be inserted into a PostgreSQL Database using the "Python manage.py make migrations" command.
- The user interface design will be built to display and fulfill the table dataset. The database will be set up using the "python manage.py migrate" command.

2.4 Precision or Accuracy Requirements

Accuracy is crucial for all types of users in the system.

- All users should have access to accurate information and be able to view accurate pages.
- Staff/administrators should be able to upload songs accurately, ensuring the correct data is associated with each song.
- Free membership users should have access to accurate limitations on the number of songs they can listen to.
- Paid membership users (monthly/yearly) should receive accurate benefits including
 - unlimited song streaming &
 - unlimited song downloads.

2.5 Capacity Requirements

We need to develop a robust system that can effectively handle database operations, manage HTTP requests, and perform other necessary tasks.

CR01	This system should be designed to efficiently handle a large volume of data
Description	Due to the extensive user information, including songs, membership profiles, user favorite lists, and other data, the system must be capable of efficiently handling thousands of data entries every month.
Stakeholders	Admin
Priority	Higher

2.6 Dependability Requirements

This project has dependability for depending on frameworks and users.

- Data integrity: User data, including profiles, playlists, and preferences, should be stored and managed securely, ensuring data integrity and protection against unauthorized access or loss
- Backup and recovery: Regular backups of user data should be performed to ensure data integrity and facilitate recovery in the event of data loss or system failures.
- Error handling and fault tolerance: The system should handle errors and exceptions gracefully, providing appropriate error messages and recovering from failures to minimize service disruptions.

2.7 Reliability Requirements

Here are the reliability requirements of bongo music

1. User Song Search and Favorite List:
 - Users should be able to easily search for songs and add them to their favorite lists without any issues or delays.
 - The search feature should provide accurate and relevant results, ensuring user satisfaction.
 - The favorite list functionality should reliably store and retrieve user-selected songs.
2. Premium User Online Payments:

- Premium users should be able to make online payments securely and reliably.
 - The payment processing system should ensure the confidentiality and integrity of user payment information.
 - The payment process should be reliable and free from errors or disruptions.
3. Admin/Staff Song Update/Addition:
- Admin and staff members should have a reliable interface to update or add new songs to the system.
 - The system should accurately store and display the updated song information in a consistent and timely manner.
4. User Song History:
- Users should have access to a reliable and accurate song history feature that shows their previously played songs.
 - The song history should be properly maintained, ensuring that users can view their playback history without errors or omissions.

2.8 Availability Requirements

Availability requirements for bongo music:

- Nginx server is required to handle traffic load.
- AWS S3 storage is needed to handle data storage.
- The website should be compatible with all web browsers.

2.8.1 Robustness or Fault-Tolerance Requirements

Given that the project is currently in the localhost environment, its robustness and fault-tolerance requirements are influenced by the user's computer specifications and configuration. The system should be capable of effectively managing datasets within the limits of the computer's capabilities and resources.

2.8.2 Safety-Critical Requirements

The project places a strong emphasis on safety and privacy to ensure user protection. The privacy policy explicitly states that no data will be disclosed or shared publicly, safeguarding the confidentiality of user information.

2.9 Maintainability and Supportability Requirements

2.9.1 Maintenance Requirements

- Ensure error-free loading of all website pages.
- Perform regular backups to store previous versions of the site.
- Keep website software and plugins updated.
- Verify proper functioning of all website forms.

2.9.2 Supportability Requirements

- Conduct database and system checks when issues arise.
- Regularly update all plugins.

2.9.3 Adaptability Requirements

- Seamless and effortless customer entry into the website.
- Organized and reliable website experience.
- 24/7 availability of the system for access.

2.9.4 Security Requirements

Ensuring web security is of utmost importance when developing websites. Here are some essential security requirements I have identified:

- Implementation of robust authentication and password management mechanisms.
- Effective authorization and role management systems.

- Thorough audit logging and analysis capabilities.
- Reliable network and data security measures.
- Comprehensive code integrity and validation testing procedures.

2.9.4 Access Requirements

Some access requirements for Bongo Music

- Paid members have access to unlimited song streaming and downloads.
- The website is accessible to the general public.

2.9.5 Integrity Requirements

- All data stored in the system, including user accounts and music content, must be accurate and reliable.
- The system should have measures in place to prevent unauthorized modifications, tampering, or corruption of data.
- Data integrity checks and validation processes should be implemented to ensure the consistency and reliability of information.
- Any changes or updates made to the system or data should be logged and auditable for accountability and traceability purposes.

2.9.6 Privacy Requirements

- The website uses an account activation system to ensure user authenticity and security.
- Customer account information is kept confidential and hidden from other users to protect their privacy

2.9.7 Usability and Human-Interaction Requirements

- The website should have a user-friendly interface for easy navigation.
- Users should be able to search for songs, artists, and albums intuitively.
- Playback controls should be clear and easy to use.

- The website should provide clear instructions and guidance for user actions.
- Users should have the option to create and manage playlists or favorite lists.
- The system should provide responsive and timely feedback to user interactions.
- The website should be compatible with various devices and screen sizes for a seamless user experience.

2.9.8 Ease of Use Requirements

Our application is designed with a user-friendly interface, making it easy to navigate and understand.

EUR01	This website is designed to be accessible and usable for users of all types.
Description	This website is highly usable for both customers and administrators.
Stakeholders	Users, staffs, admin
Priority	Higher

2.10 Look and Feel Requirements

The look and feel criteria describe the intended attitude, mood, or style of the product's appearance. These requirements focus on the overall aesthetic intent rather than specific details of the interface design. They define the desired visual and sensory experience that the product should convey to the users.

2.10.1 Appearance Requirements

Appearance:

The appearance of a website is crucial in making a positive impression on visitors and reflecting the professionalism of a business. A visually pleasing and polished website can create a lasting impact on potential customers and contribute to the overall success of the business. With the increasing number of businesses online, it is essential to attract and retain users' attention.

By focusing on creating an attractive and engaging website, businesses can stand out from the competition and effectively communicate their brand image. Public relations

experts recognize the importance of visually appealing websites in maintaining a profitable and successful company.

Functionality:

Functionality is a crucial aspect of a website that ensures all its components work effectively and efficiently. It is essential for every aspect of the website, including hyperlinks, contact forms, site search, event registration, and more, to function properly and deliver a seamless user experience. Broken or poorly designed components can frustrate visitors and create a negative impression of your organization.

Therefore, it is important to ensure that all functionalities work seamlessly across different devices, browsers, and platforms.

Error free copy:

Given the extensive exposure your website will receive, it is essential to verify facts and numbers. Avoid typos, improper language, punctuation errors, and misspellings, as they can undermine your credibility. Consistently maintaining error-free content on your website is crucial for maintaining a professional and reputable image.

Usability:

The usability of a website is a critical aspect of its success, often overlooked. It is essential that your website is easy to read, navigate, and understand. Some key elements of usability include:

- Fast loading pages
- Minimal Scrolls
- Consistent layout
- Prominent, logical navigations
- Descriptive link texts
- Cross platform compatibility
- SEO friendly (Search Engine Optimization)
- Screen Resolutions

2.10.2 Style Requirements

We strive to enhance the management of the look, feel, and complexity of our website. As a small team of two members, we adhere to the following style guidelines for our project:

Style Guide:

A style guide is a comprehensive document that outlines the code standards and visual elements of a website or application. It serves as a central reference for various visual styles, including headers, links, buttons, color palettes, and other visual elements used throughout the site.

2.11 Legal Requirements

As per the Act, it is mandatory for us to disclose specific information about our company's identity on our website. While this information does not need to be displayed on every page, it should be easily accessible, typically on our Contact Us page. The footer section of our pages will serve as a useful location for users and aid in program optimization.

2.11.1 Compliance Requirements

The terms and conditions agreement is essential not only for our customers but also for protecting our business by ensuring that users are aware of their rights and responsibilities. It helps prevent user uncertainty and misunderstandings, so it must be written with absolute clarity, outlining the necessary actions in any given situation. Users should be able to report any issues to the admin panel.

2.11.2 Standards Requirements

Tech Requirements & Getting Set Up The "Right Way":

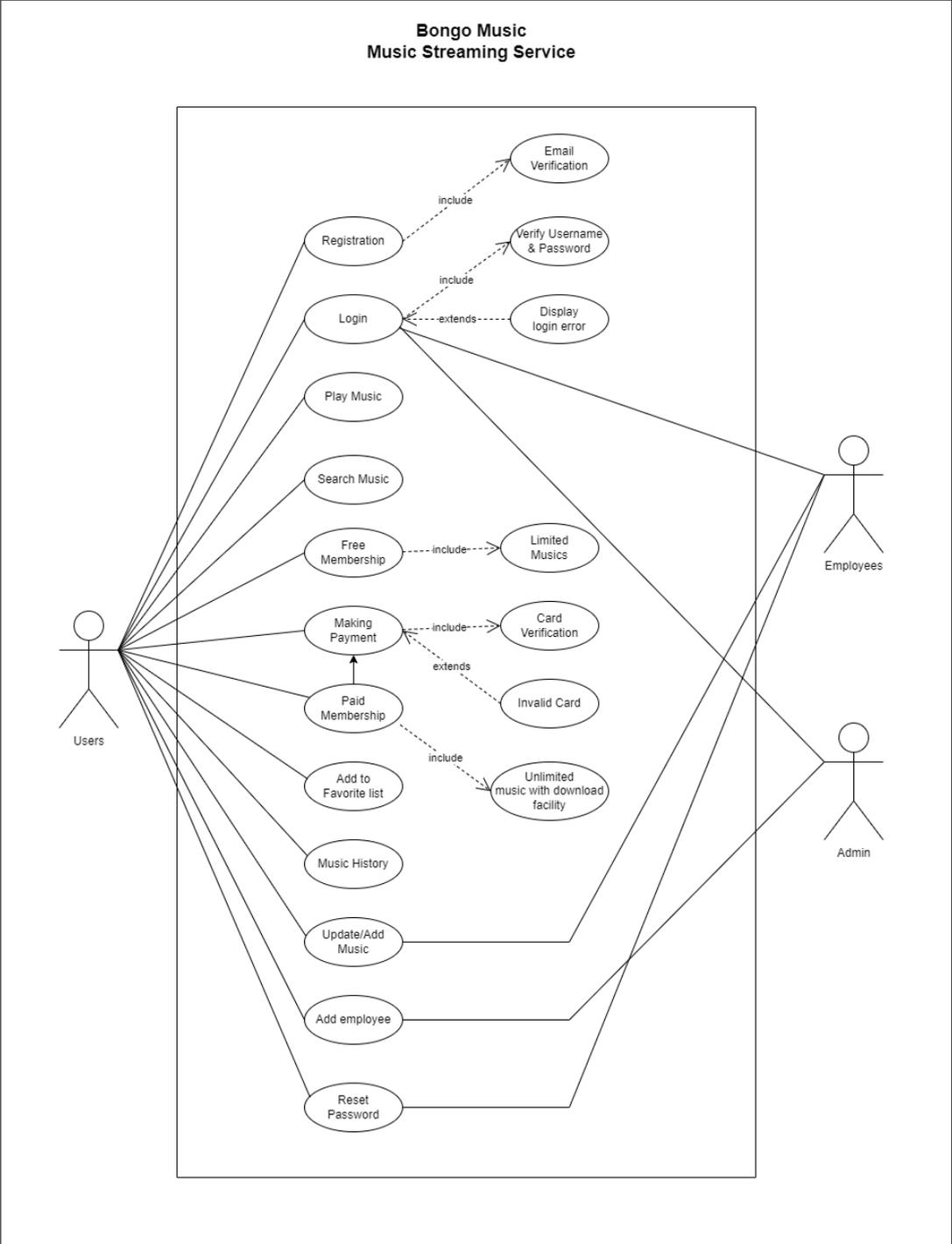
- Domain Name: Select an appropriate domain name for our website.
- Hosting: Choose from the two most common types of hosting:
- Shared Hosting: Multiple websites share server resources, providing an affordable option.
 - Dedicated Hosting: Dedicated server resources are allocated to our website.

- Website Platform: Determine the suitable website platform or content management system (CMS).
- Website Speed: Optimize our website to ensure fast loading times.
- SSL (Security): Implement SSL encryption to enhance security and protect user data.
- SEO Friendly: Apply SEO techniques to improve our website's visibility and ranking in search engine results.
- Tracking and Analytics: Integrate tracking and analytics tools to gain insights and monitor website performance.

CHAPTER 3

SYSTEM ANALYSIS

3.1 Use Case Diagram



3.2 Use Case Description

3.2.1 Registration

Use Case	Registration
Primary Actor	Users
Goal	Users have the option to apply for registration and receive email verification to verify their account.
Precondition	Users must complete all the required fields during the registration process
Trigger	Access the website
Scenario	<ul style="list-style-type: none">• Users have the ability to register on this website.• The public can access the website's URL and navigate to the "registration" pages.• The public is required to enter all the necessary information in the "Registration" form.• An email verification is sent to the user.• The user must verify their account by following the instructions in the email.
Exceptions	The system is unable to receive the registration application from the user.

3.2.2 Login & Logout

Use Case	Login & Logout
Primary Actor	Users, employees, admin
Goal	Enable user, employee, and admin access to the system through the website. Also provide a logout functionality for all users.
Precondition	All types of users must have a valid username and password to access the system.
Trigger	Access the website
Scenario	The user enters his/her username and password in the login section of the "Sign in" screen.
Exceptions	Display an error message if the login credentials are incorrect.

3.2.3 Reset password

Use Case	Reset password
Primary Actor	Users, employees, admin
Goal	It's to allow users to regain access to their accounts by resetting their forgotten or expired passwords.
Precondition	All types of users must have a valid username or email.
Trigger	Access the website
Scenario	<ul style="list-style-type: none"> • User submits the email address and a password reset link is sent to their email. • User is redirected to a password reset page where they can enter a new password. • User submits the new password, and a confirmation message is displayed.
Exceptions	Display login error message.

3.2.4 Play music

Use Case	Play music with details
Primary Actor	Users
Goal	Played music successfully.
Precondition	Users must have a registered account.
Trigger	Played music.
Scenario	<ul style="list-style-type: none"> • must have a registered account. • Played music successfully
Exceptions	Can't listen music due to the "@login_required" functionality.

3.2.5 Search Music

Use Case	Filter based search music.
Primary Actor	Users
Goal	Search music successfully
Precondition	Users must have a registered account.
Trigger	Search music
Scenario	<ul style="list-style-type: none"> • Search music based on "music name", "singer name", "album name" • Must have a registered account
Exceptions	Input wrong queries

3.2.6 Free Membership

Use Case	Free Membership
Primary Actor	Users
Goal	Successful account creation with Free Membership
Precondition	Must have a valid email and input a unique username
Trigger	Create account
Scenario	<ul style="list-style-type: none"> • Without any subscription it's a free membership • Limited music playing option • Can't download any music
Exceptions	N/A

3.2.7 Paid Membership

Use Case	Paid membership by make payment
Primary Actor	Users
Goal	User buying paid membership
Precondition	Users must have a free membership account
Trigger	Buy subscription
Scenario	<ul style="list-style-type: none"> • User can subscribe monthly or yearly subscription • Unlimited music access • Music downloading option
Exceptions	N/A

3.2.8 Favorite List

Use Case	Add music to favorite list
Primary Actor	Users
Goal	Adding music to favorite personal list
Precondition	User must have a registered account.
Trigger	Add music to favorite
Scenario	<ul style="list-style-type: none"> • User must have a registered account. • Then they can add music.
Exceptions	Add music to favorite without login

3.2.9 Recent played Music/History

Use Case	Find recently played music
Primary Actor	Users
Goal	User can find their played music history
Precondition	User must have a registered account.
Trigger	Go to music history
Scenario	<ul style="list-style-type: none">• When played a music it shows in history.• Also play from history.
Exceptions	N/A

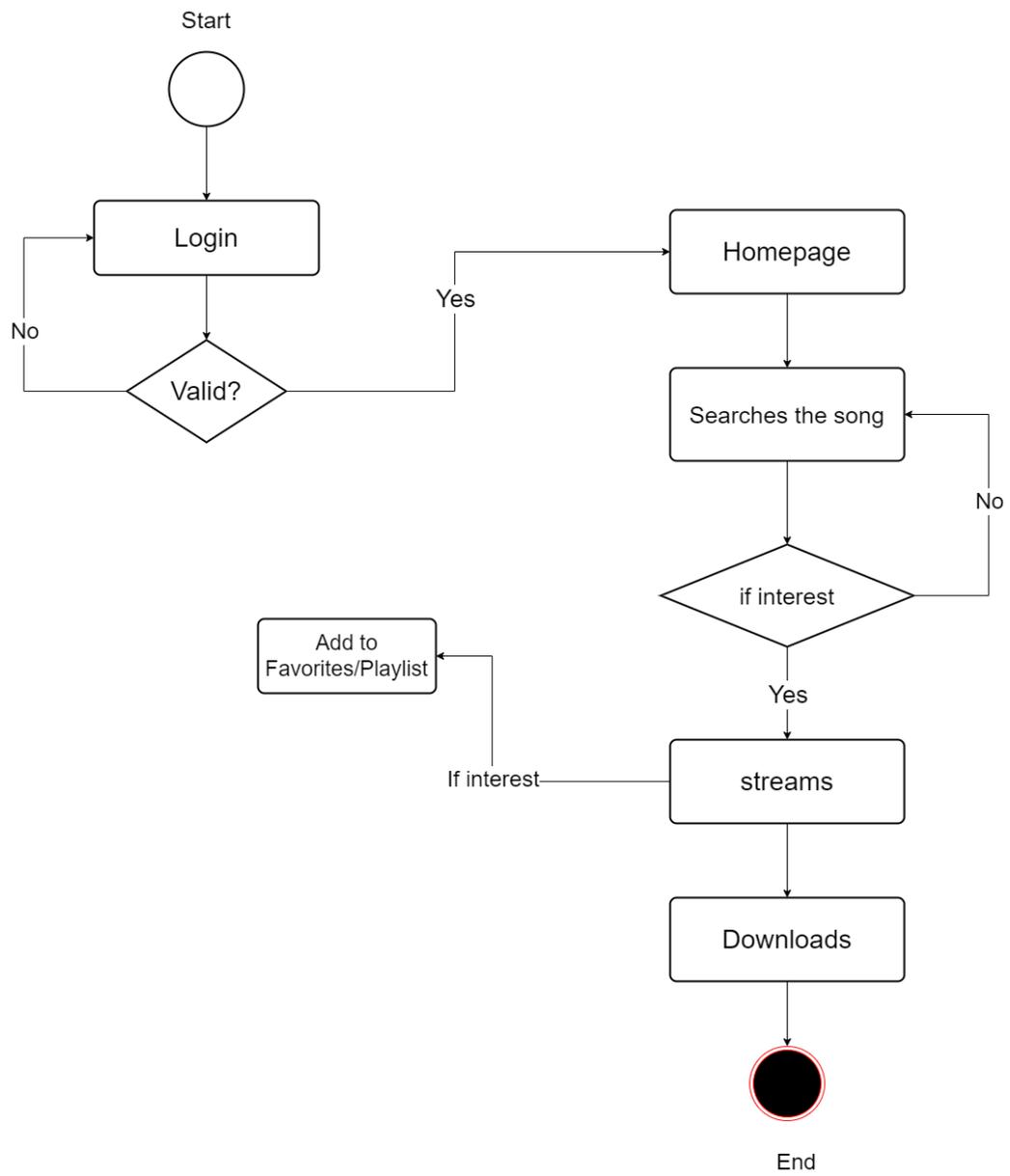
3.2.10 Add or Update Music

Use Case	Add/update music to system
Primary Actor	Employees, admin
Goal	Adding music to system
Precondition	Employees must have verified account given by admin
Trigger	Add music
Scenario	<ul style="list-style-type: none">• Employees must have a verified account• Adding music to system database
Exceptions	N/A

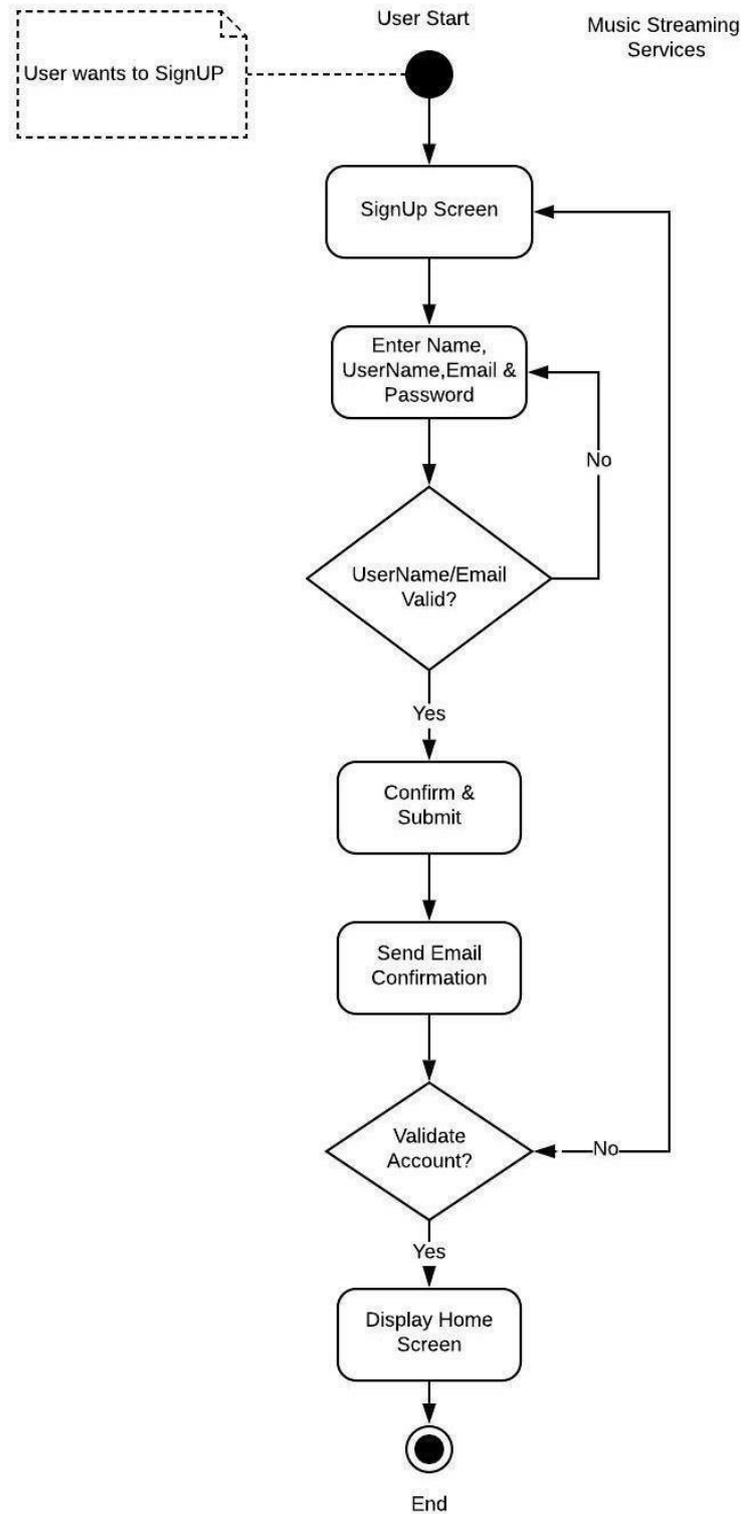
3.2.11 Add employee

Use Case	Adding employee for update
Primary Actor	Admins
Goal	Admin can add employee for update music
Precondition	Actor must be an admin
Trigger	Add employees in system
Scenario	<ul style="list-style-type: none">• Admin add employee to the system
Exceptions	N/A

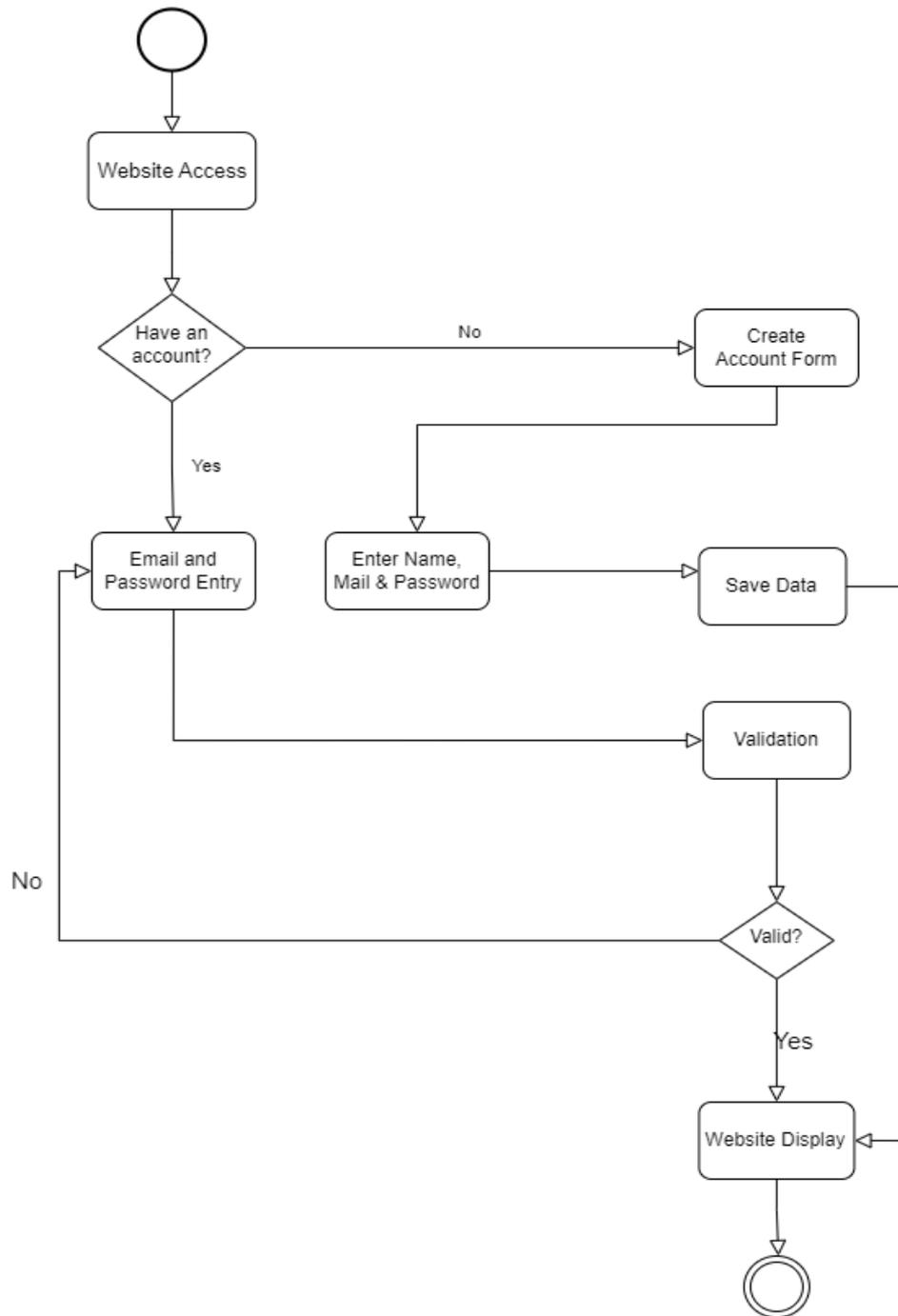
3.3 Activity Diagram



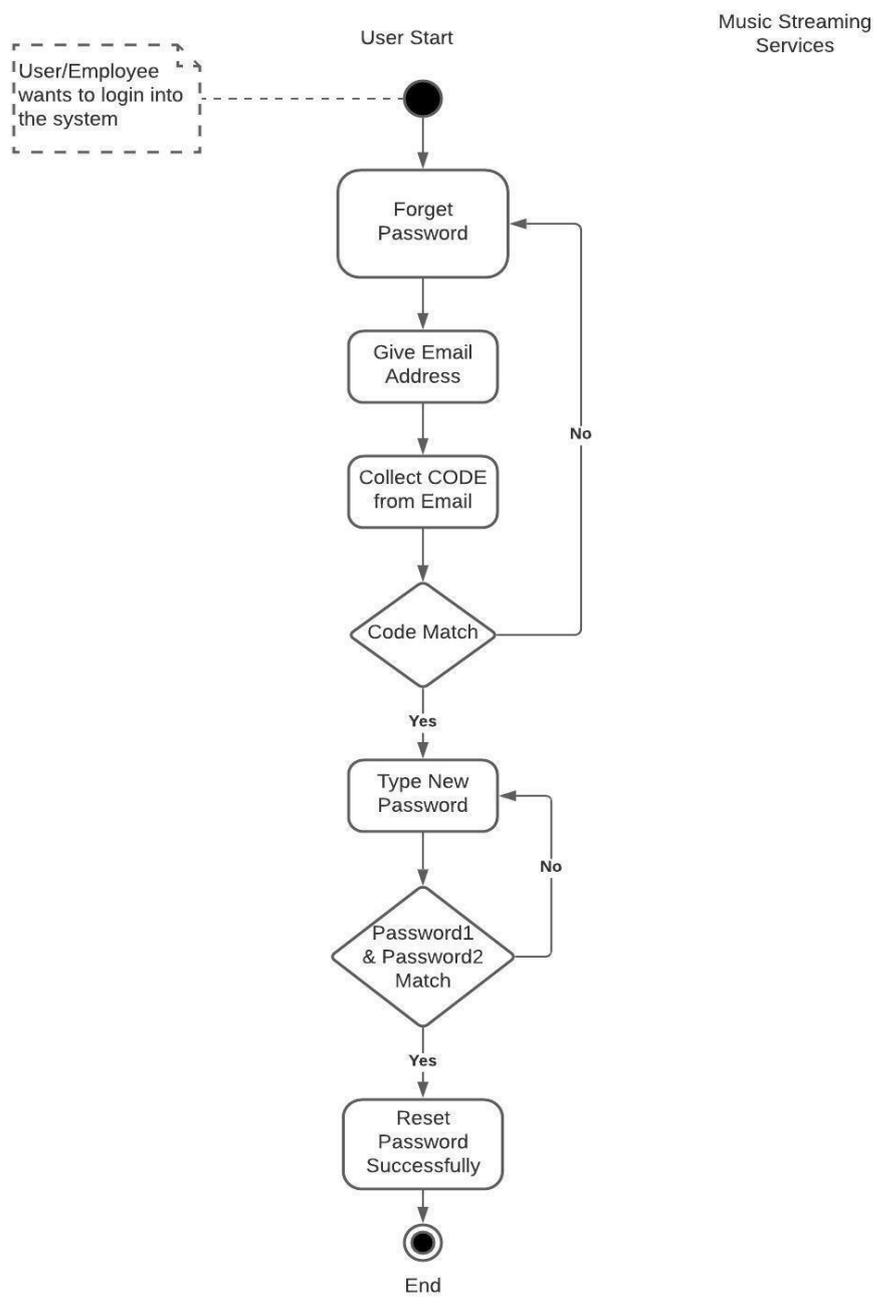
3.3.1 Registration



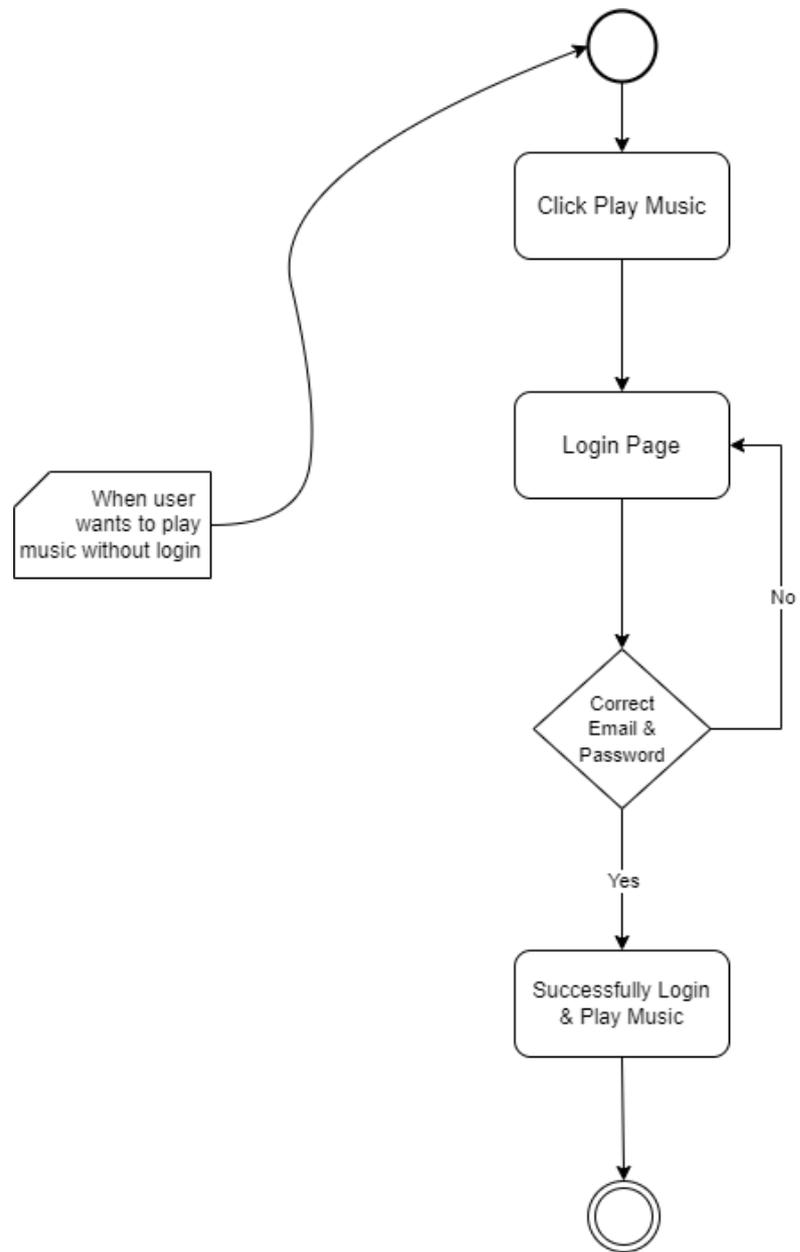
3.3.2 Login



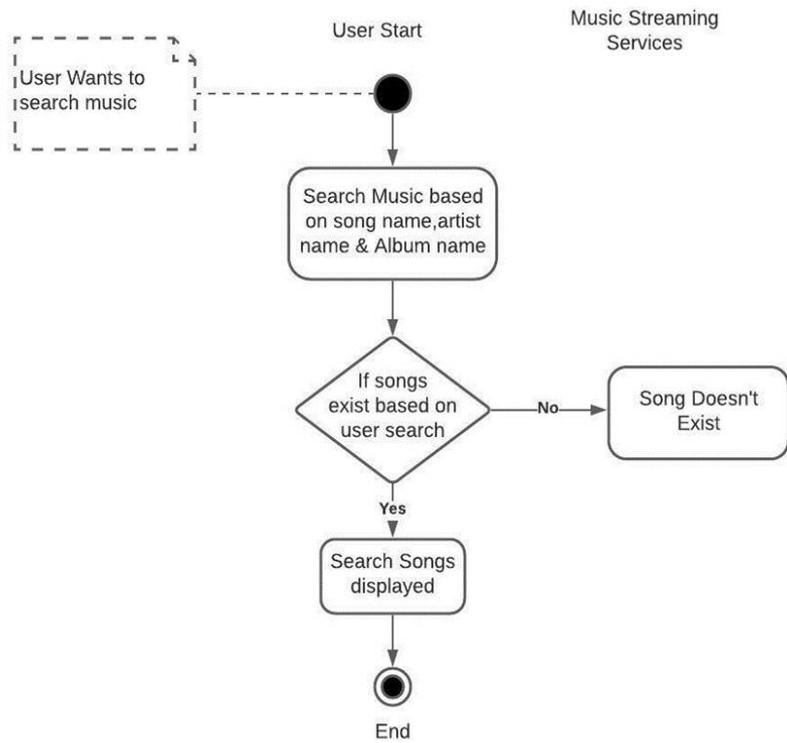
3.3.3 Reset password



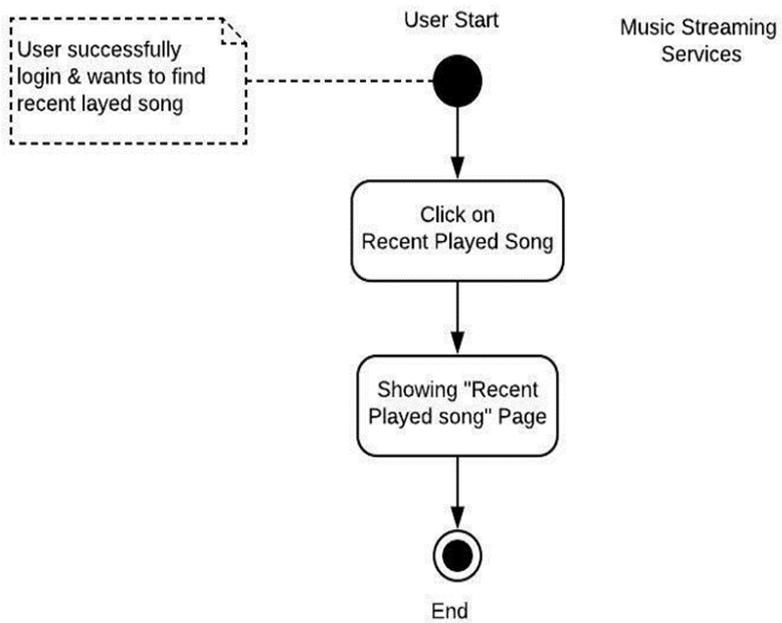
3.3.3 Play Music



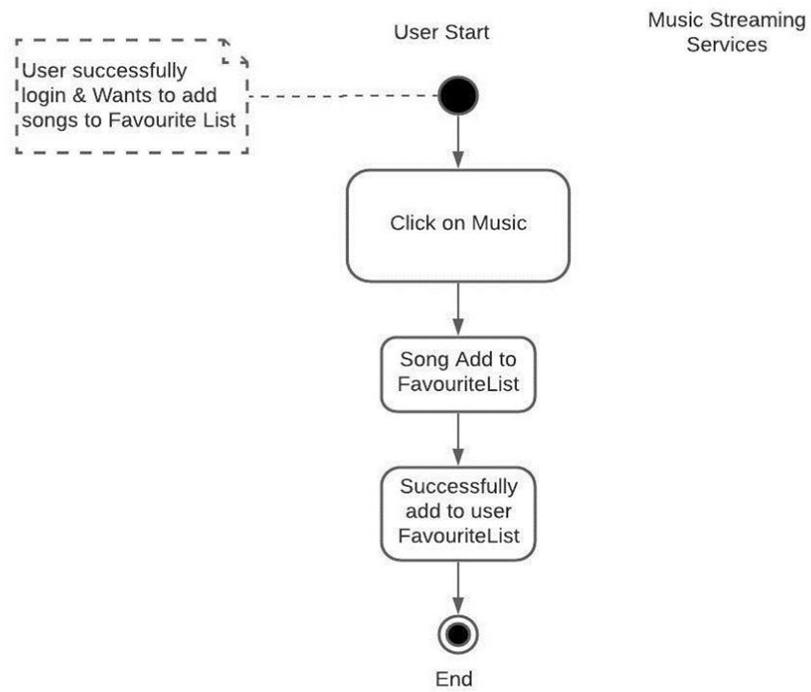
3.3.4 Search Music



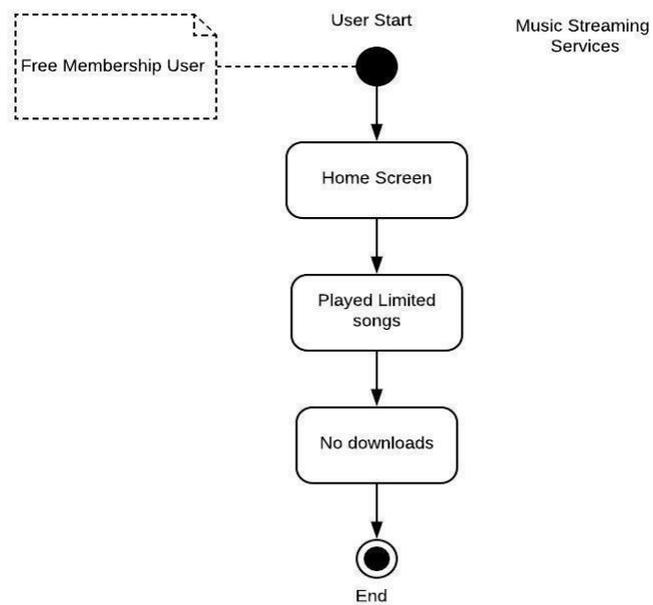
3.3.5 Music History



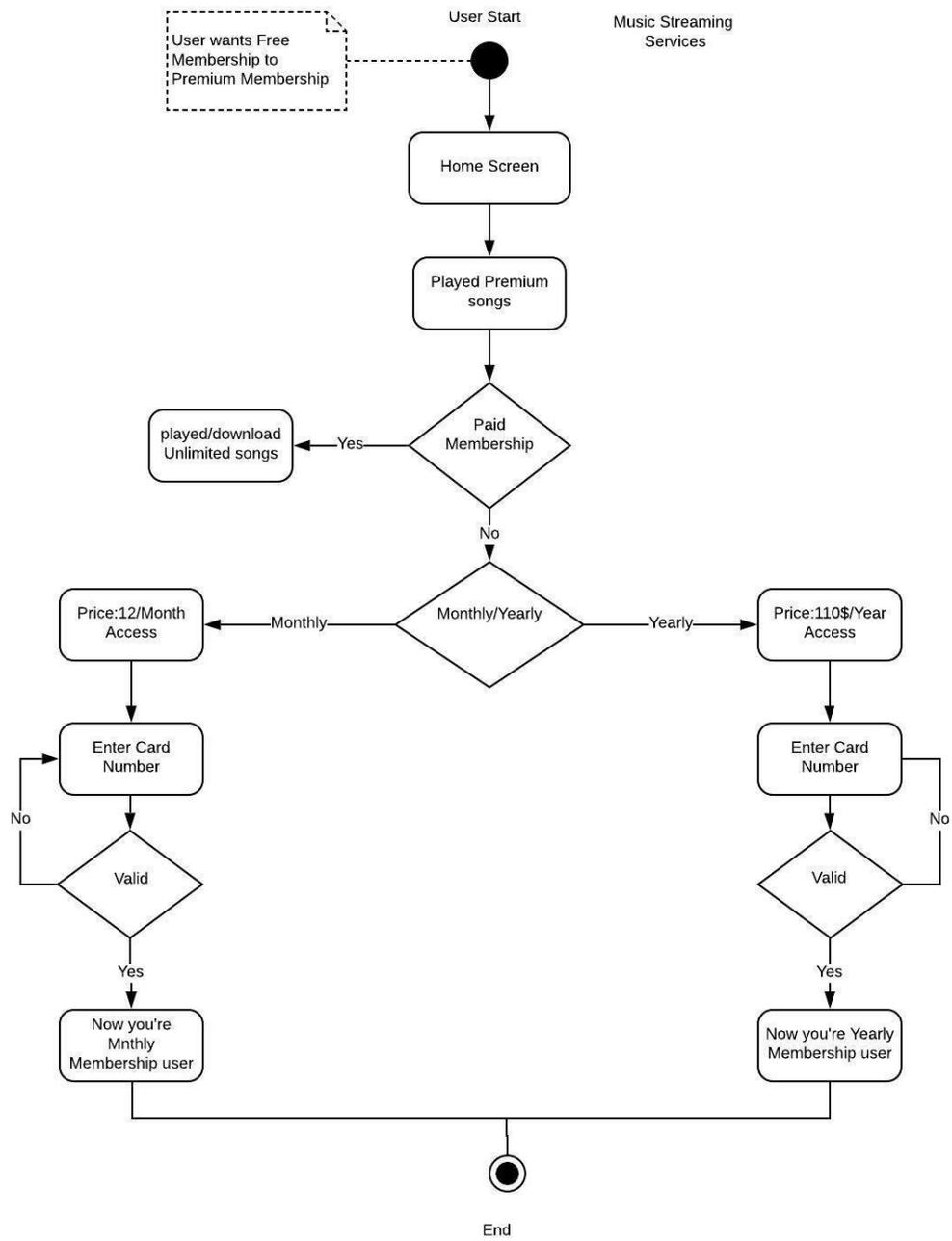
3.3.6 Adding Music to Favorite List



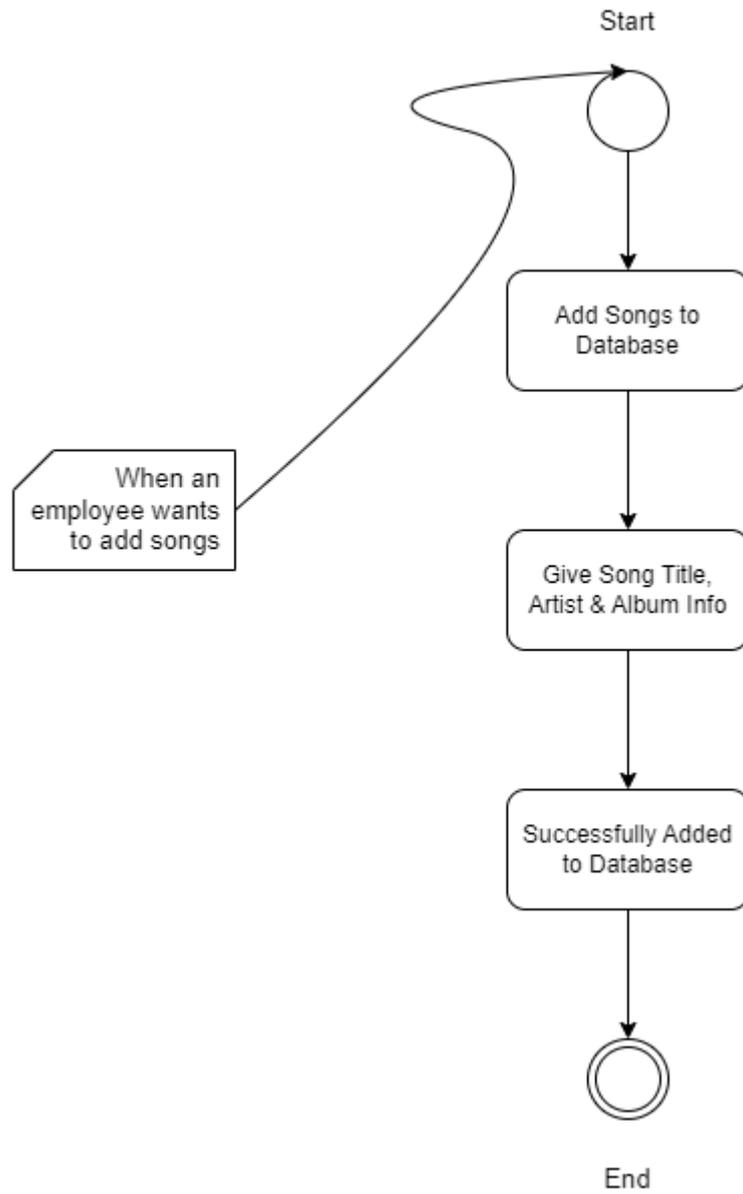
3.3.7 Free Membership



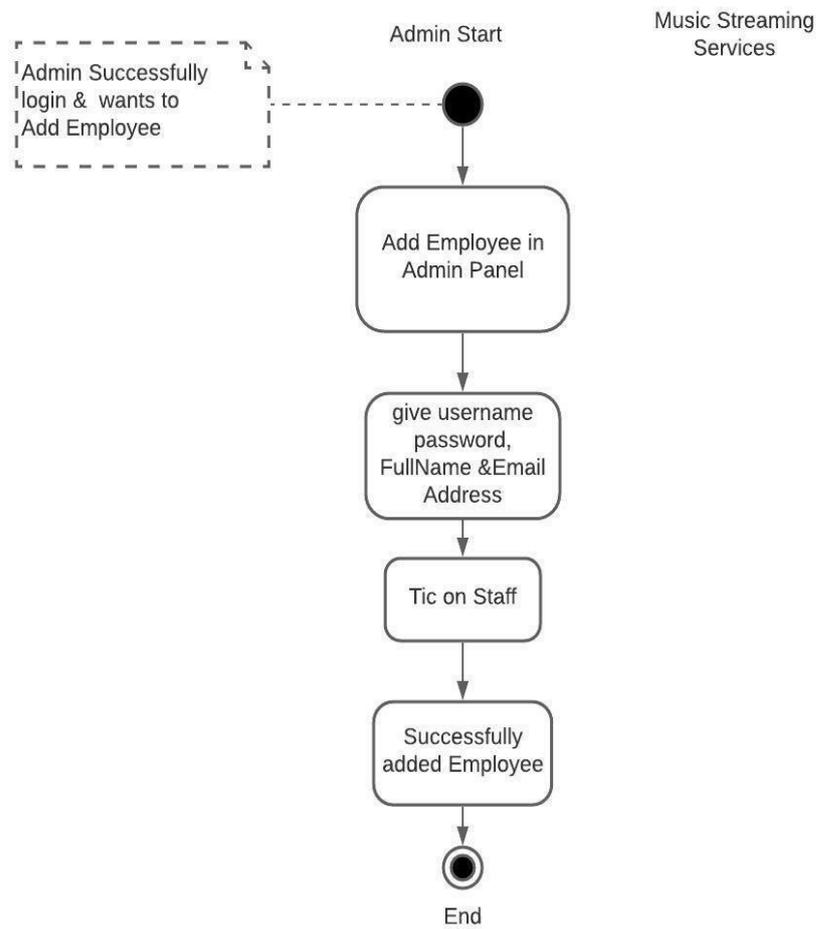
3.3.8 Paid Membership Payment Making



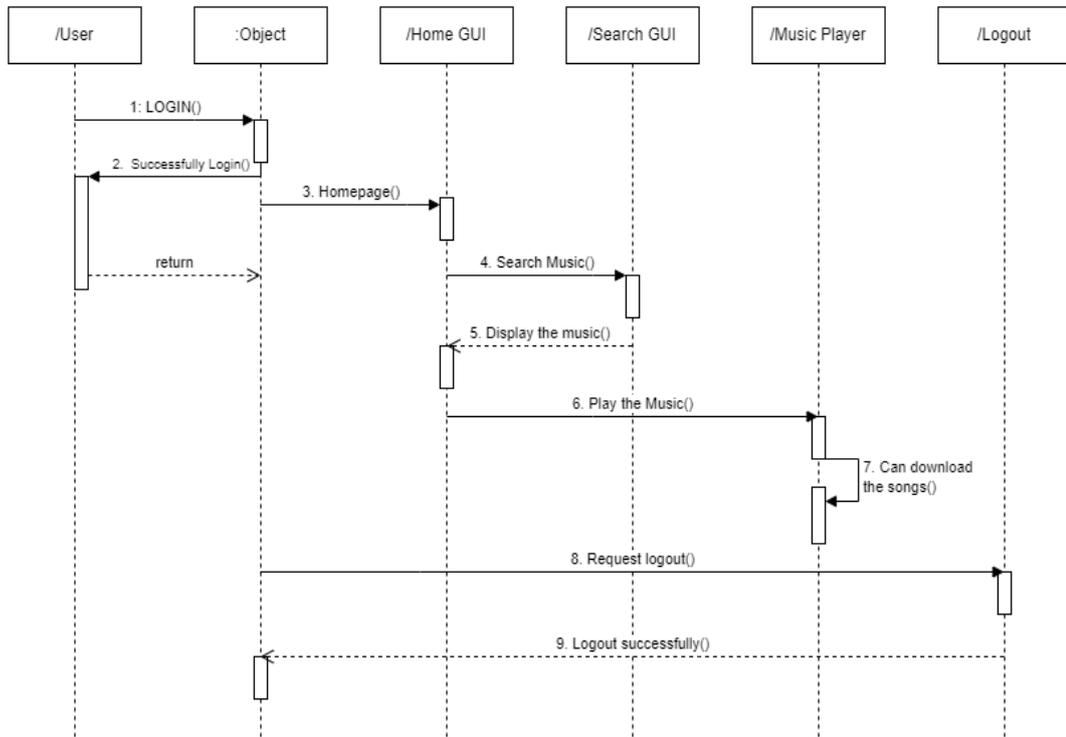
3.3.9 Add or Update Music



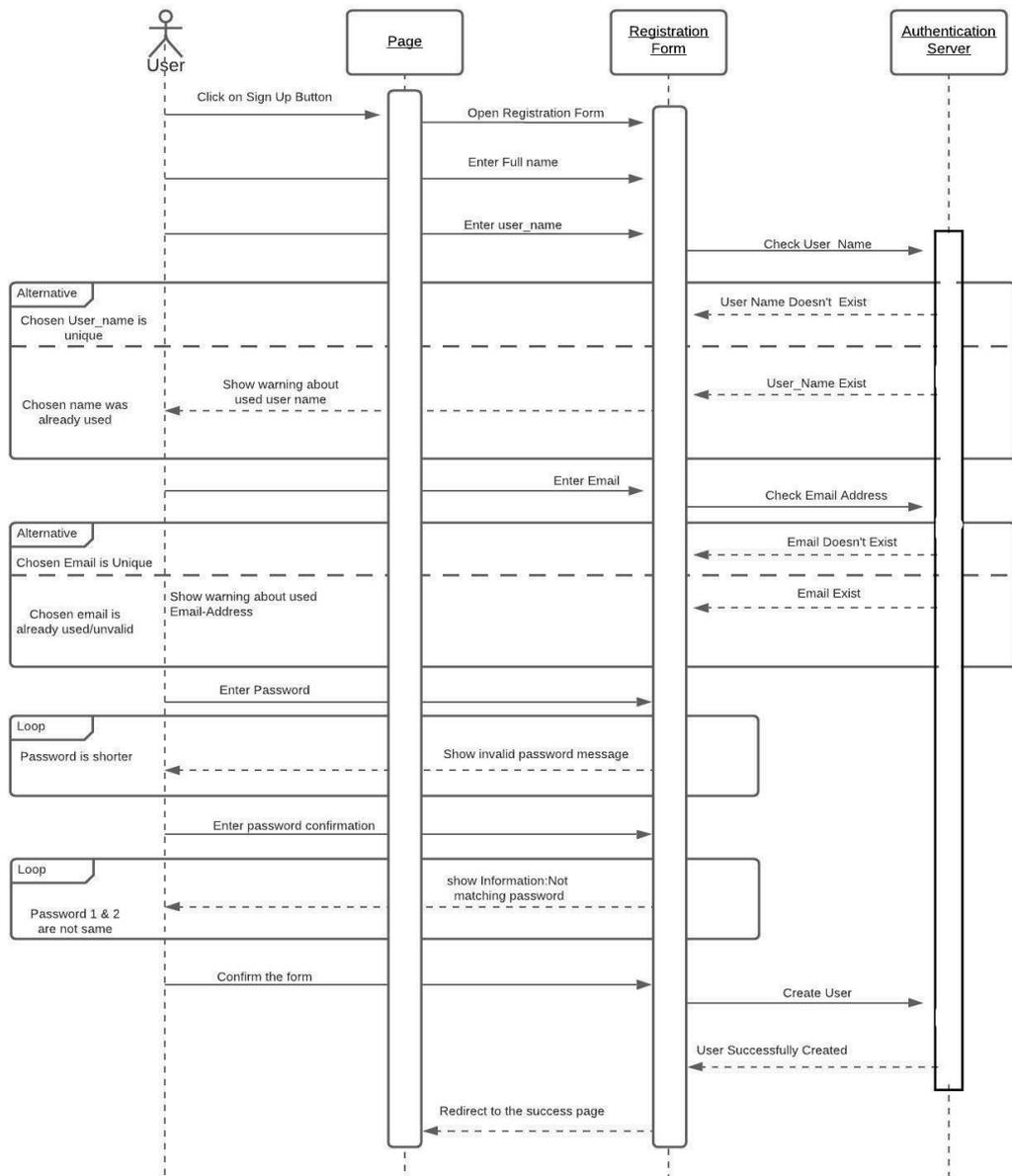
3.3.10 Adding Employees



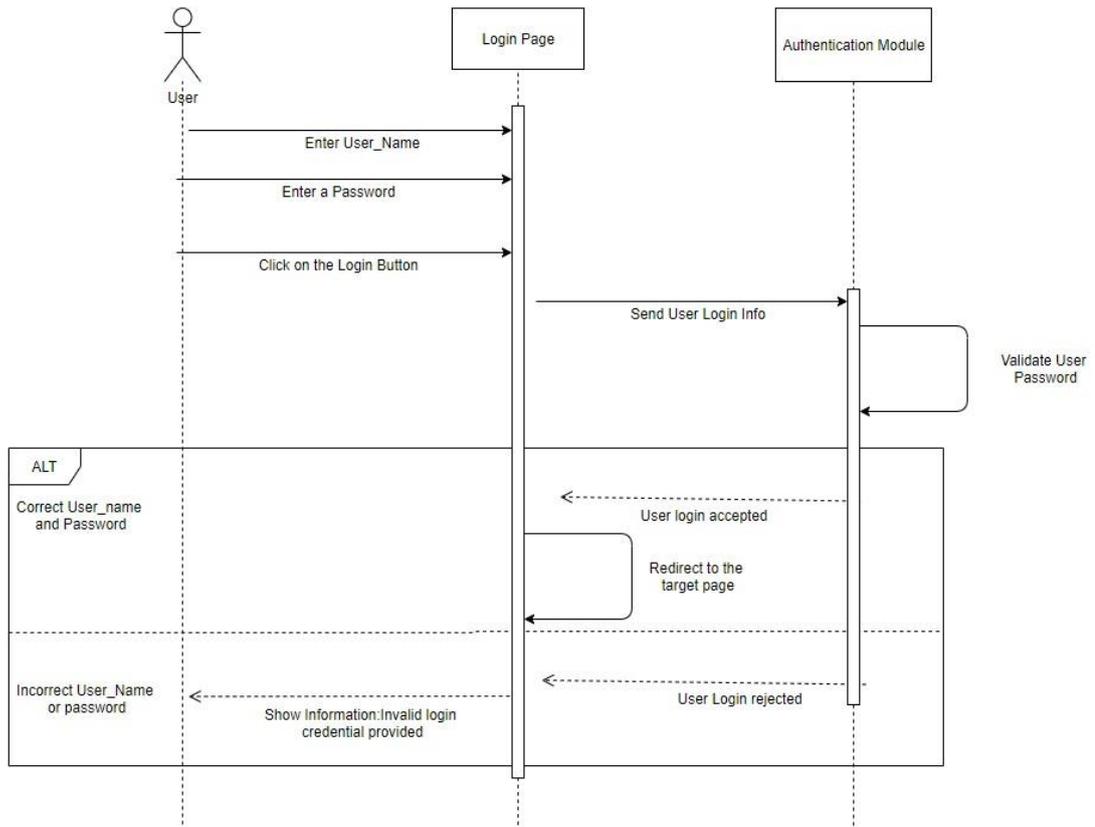
3.4 System Sequence Diagram



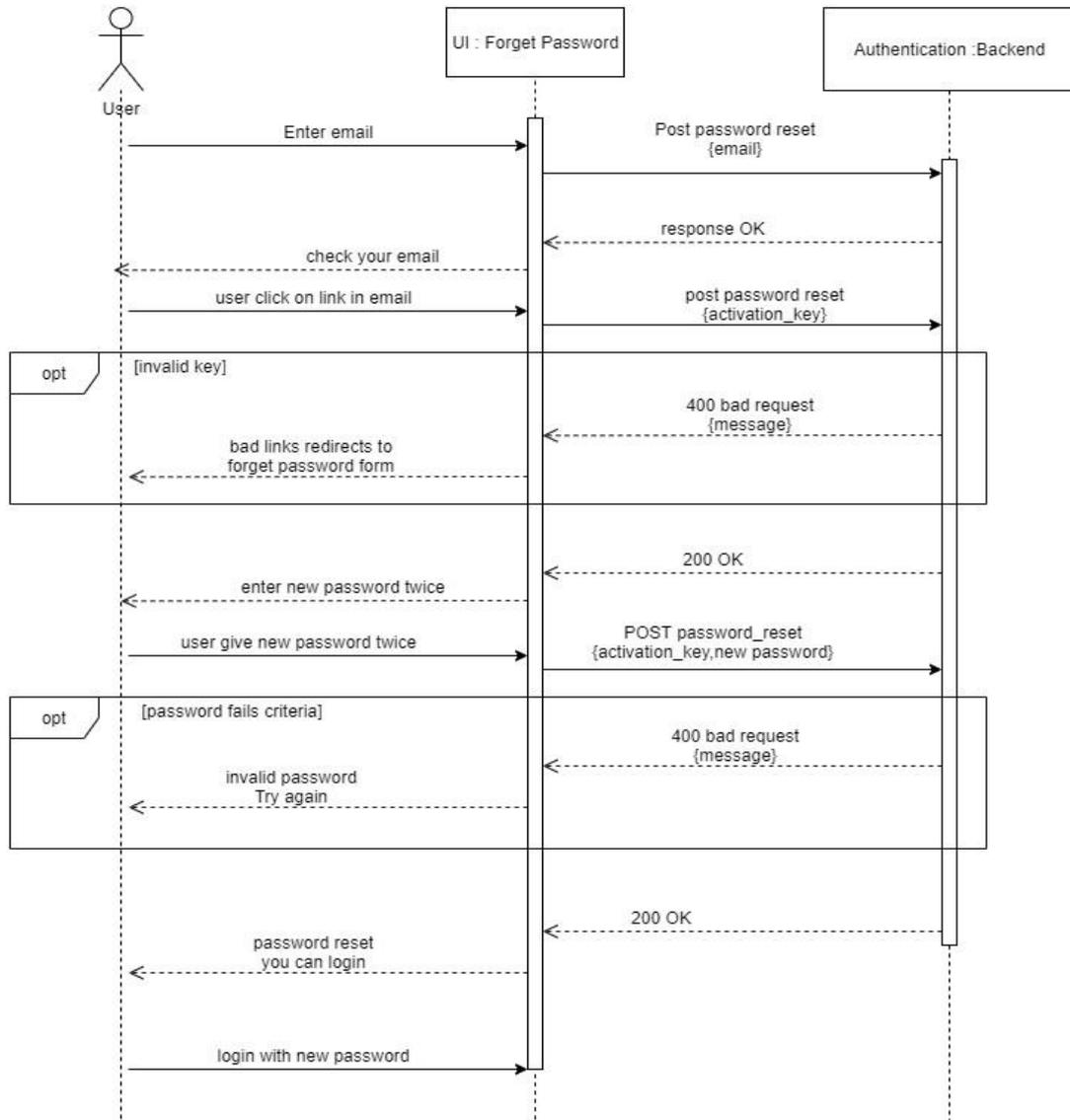
3.4.1 Registration



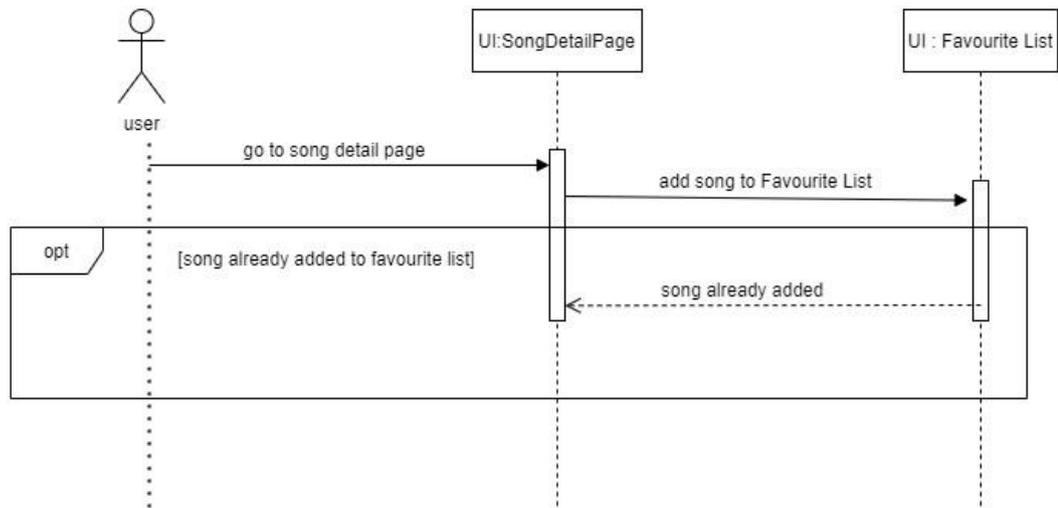
3.4.2 Login



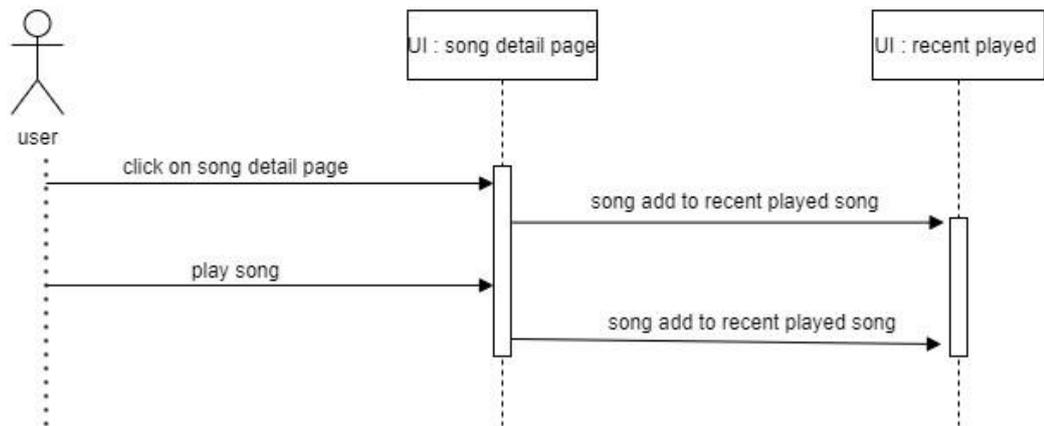
3.4.3 Reset Password



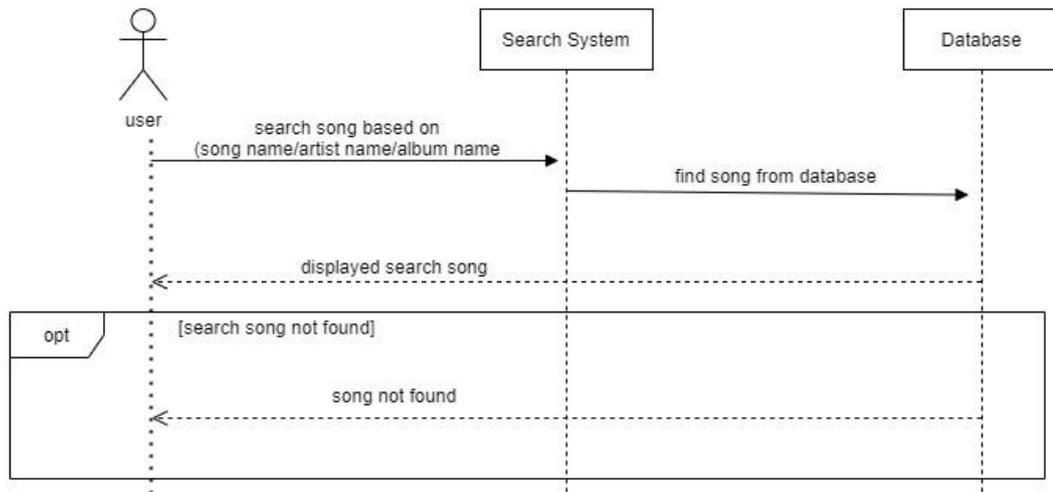
3.4.4 Add Music to Favorite List



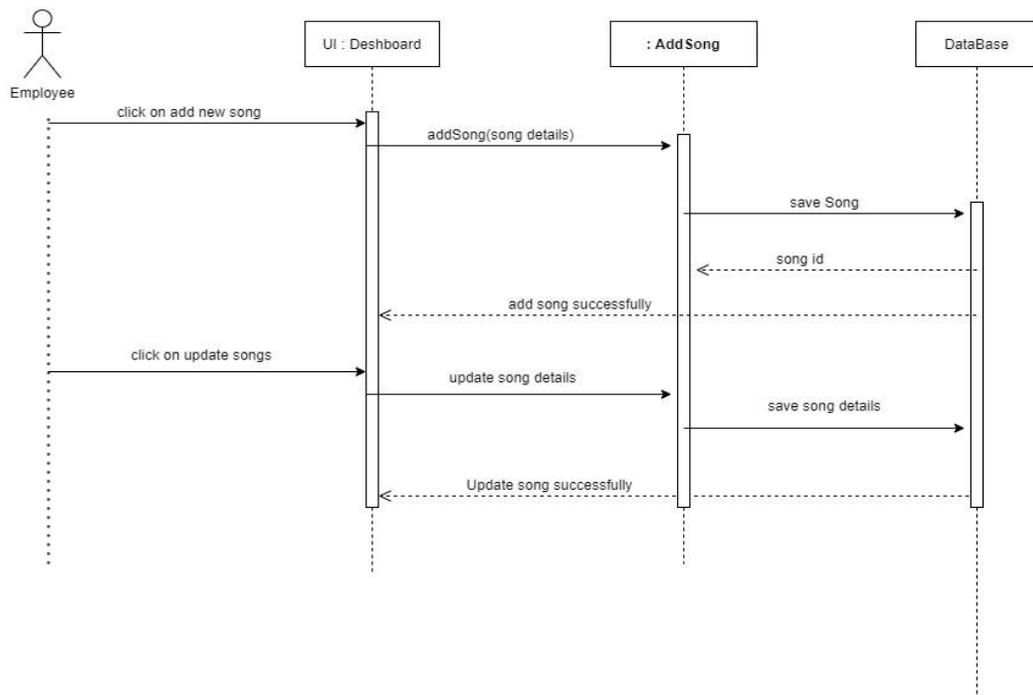
3.4.5 Music History



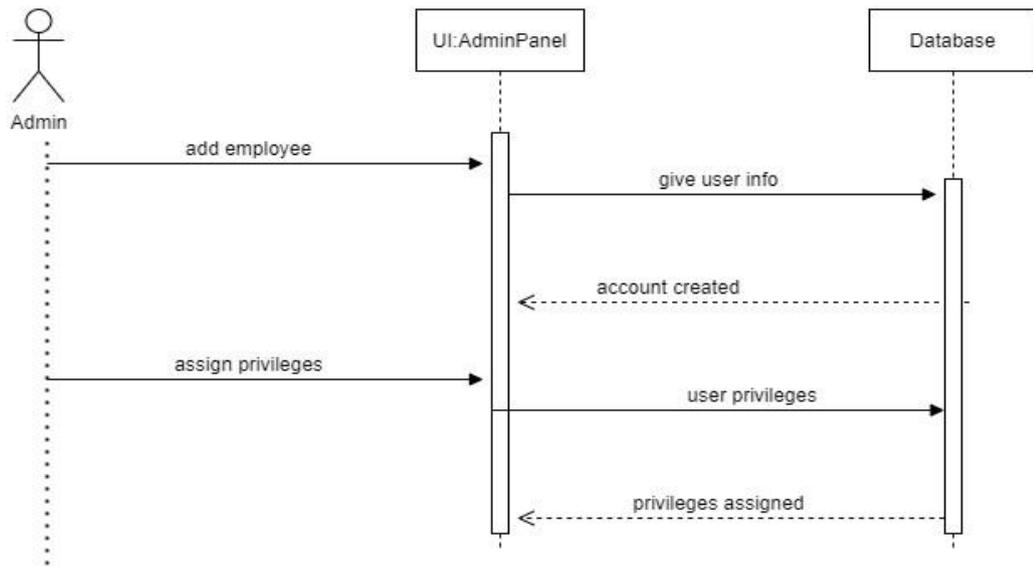
3.4.6 Search Music



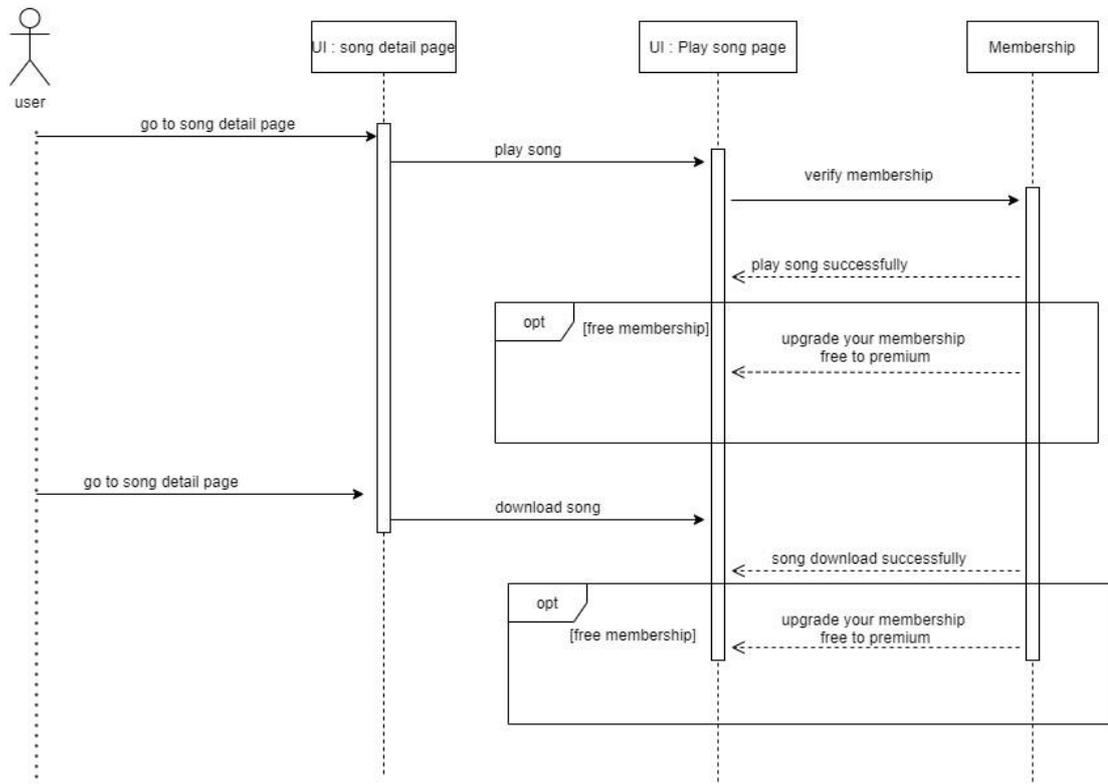
3.4.7 Add or Update Music



3.4.8 Add Employee to System



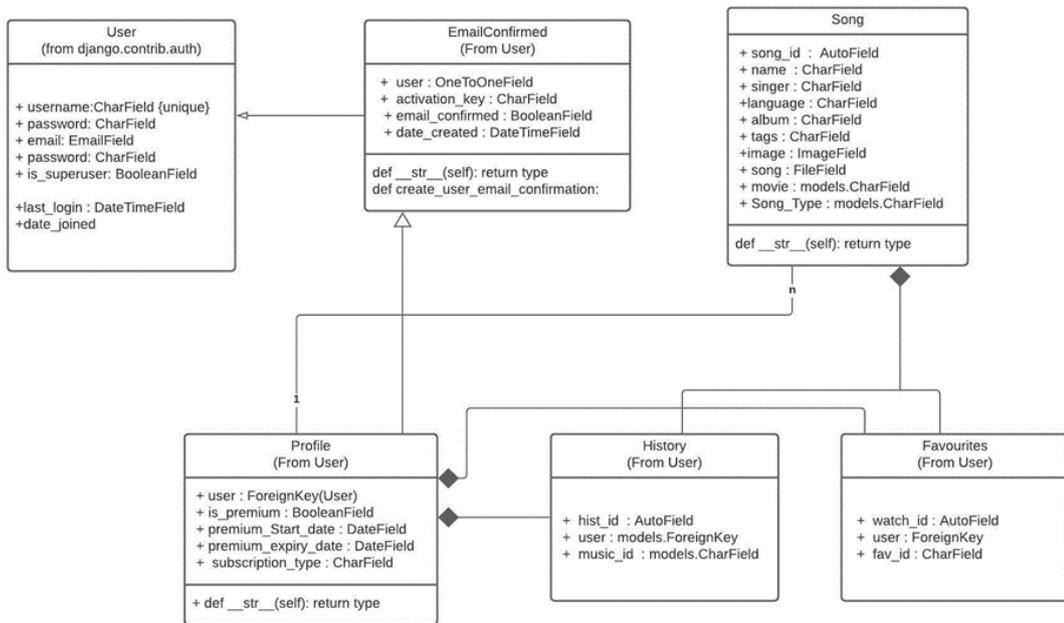
3.4.9 Membership



CHAPTER 4

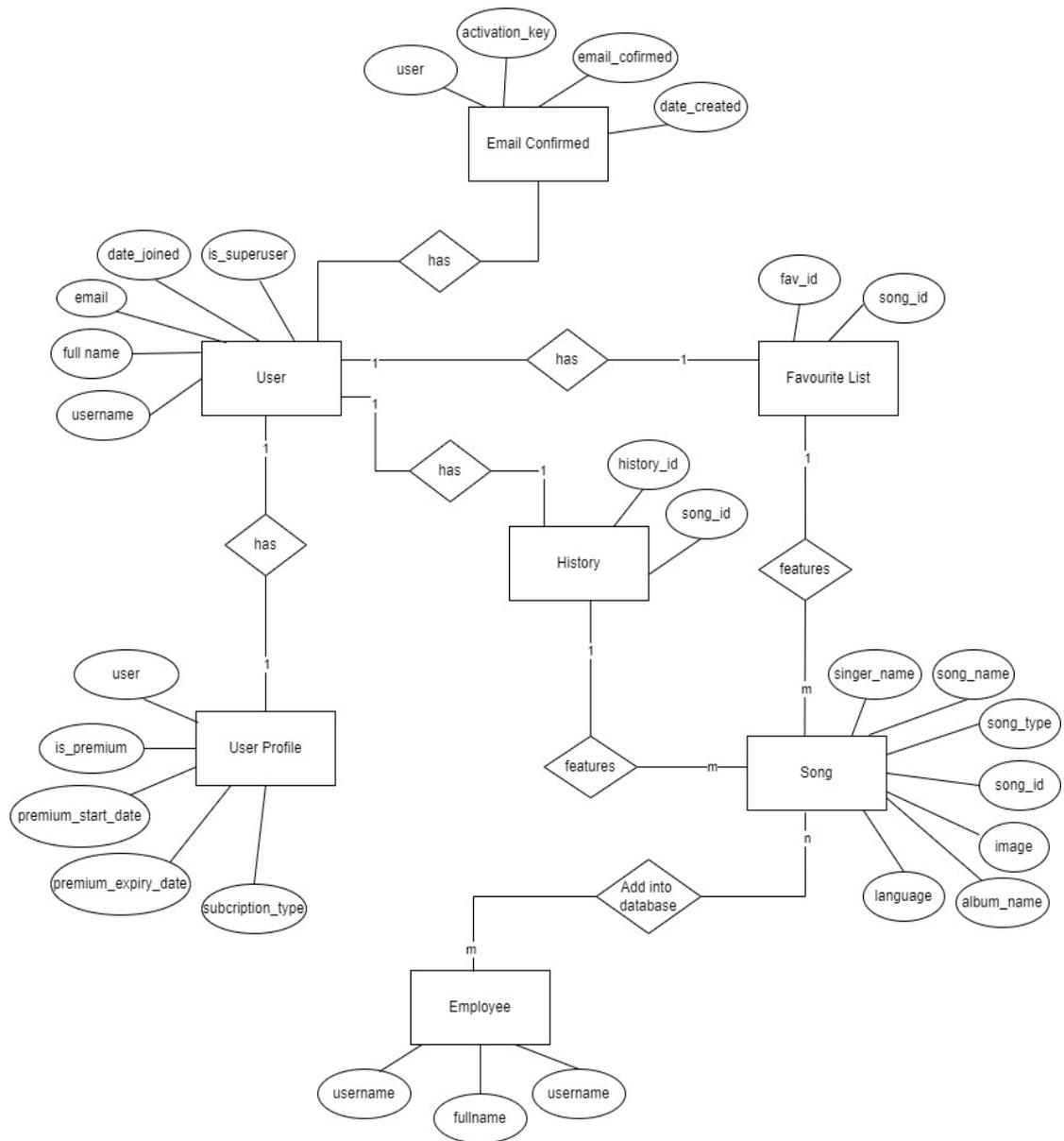
SYSTEM DESIGN SPECIFICATION

4.1 Class Diagram



Class Diagram for Django framework

4.2 Entity-Relationship Diagram



4.3 Development Tools & Technology

Development Tools and Technology refer to the tools, software, frameworks, and platforms used in the process of developing a software application. These tools and technologies aid in building, testing, debugging, and deploying the application. Below development tools and technologies that I used for this project:

4.3.1 User Interface Technology

- HTML
- CSS
- Bootstrap-4

Used for creating the visual layout and styling of the user interface.

- JavaScript
- Font-Awesome
- jQuery

Used for enhancing the interactivity and functionality of the user interface.

- Stripe API

Integrated for handling online payments.

4.3.2 Implementation Tools & Platforms

- Django Framework (Python): Used as the backend framework for developing the application.
- PostgreSQL: Utilized as the database management system for storing and managing data.
- Windows CMD and Git-Bash: Command line interfaces used for executing commands and managing the project.
- Visual Studio Code and Atom: Integrated Development Environments (IDEs) for writing, editing, and organizing the project code.

CHAPTER 5

SYSTEM TESTING

5.1 Testing Features

5.1.1 Features to be tested

- First, I need to test Registration & Login features.
- Then I need to test the reset password features.
- After login, I need to test the play music features.
- Favorite list also needs to test.
- Add music features need to test.
- I need to test payment system features.
- Add employee as an admin feature need to test.

5.1.2 Features not to be tested

- I need not test the feature of Homepage.
- I need not test the recent played song feature.

5.2 Testing Strategy

A test strategy is a documented plan that outlines the approach to testing during the software development cycle. Its purpose is to establish a logical connection between the high-level objectives of an organization and the specific test activities required to achieve those objectives, with a focus on quality assurance.

5.3 Test Case Table

Test Case-01 (User Authentication)

Step	Action	Expected System response	Pass/ Fail	Comment
01	When a user fills out the user login field and clicks the login button	If the user does not enter an email ID or username, a "required" message should be displayed.	Pass	Valid credentials are required.
02	Sign up with empty fields.	To verify the none of fields remain empty.	Pass	Error
03	When the user enters an email address such as xyz@gmail.com.	The system indicates that the email field is required.	Pass	The valid email needs to login.

Test Case-02 (Music Playback)

Step	Action	Expected System response	Pass/ Fail	Comment
01	When someone enters music name and click search option.	If there is a nearby match to the song name, the website will display the corresponding song.	Pass	Music name required.
02	Test music formats	Test the playback of different music formats (Like mp3, aac, etc)	Pass	Error
03	Shuffle and repeat functionality	Test the shuffle and repeat functionality.	Pass	Many music required.

Test Case-03 (Making Payment)

Step	Action	Expected System response	Pass/ Fail	Comment
01	Users give account details.	If the user provides incorrect credit card information, the system will display an error message.	Pass	Valid card required

02	When users enter like “4455 cc 8834”	System shows wrong credit card.	Pass	N/A
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Test Case-04 (Cross-Platform Compatibility)

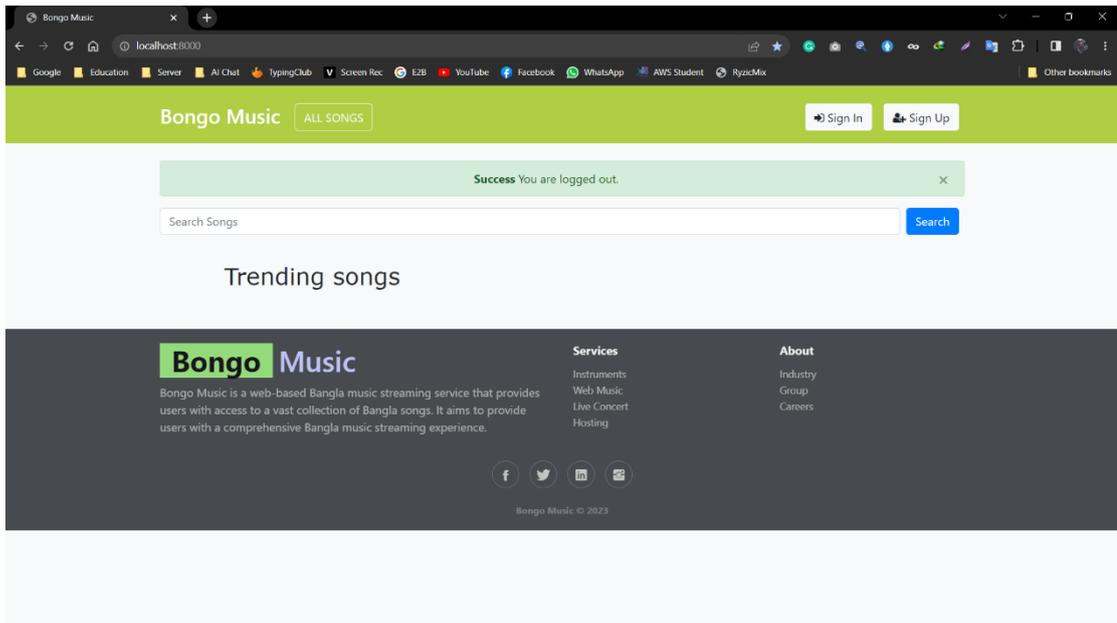
Step	Action	Expected System response	Pass/ Fail	Comment
01	Check into different devices.	Test the functionality and user interface across different devices (web, mobile, smart TVs).	Pass	N/A

CHAPTER 6

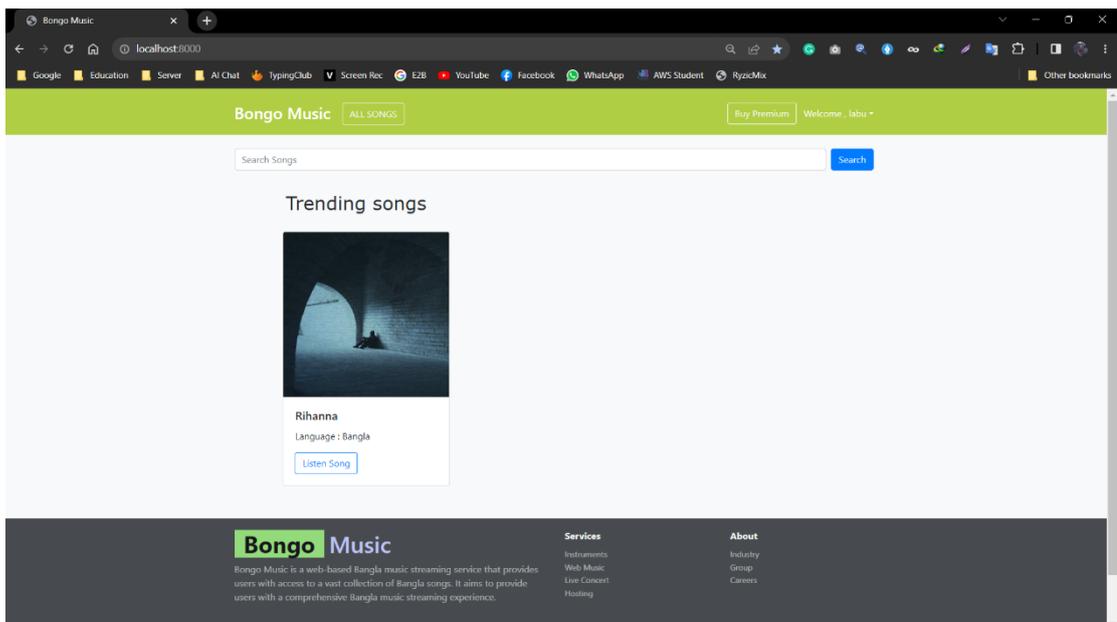
USER MANUAL

6.1 Homepage

Homepage without any songs:

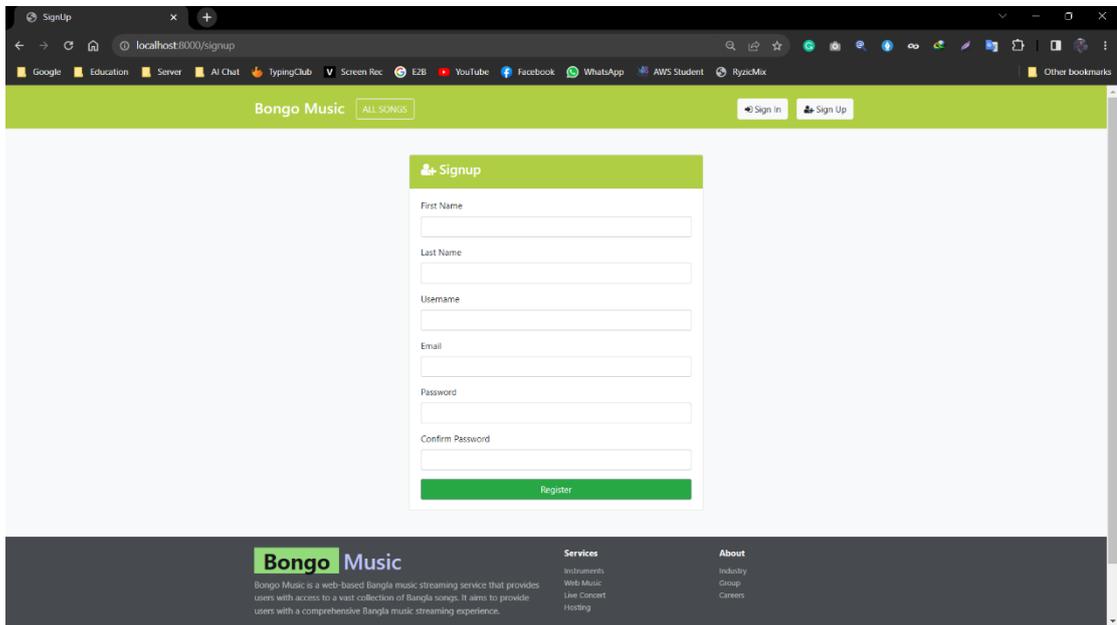


Homepage after adding songs:



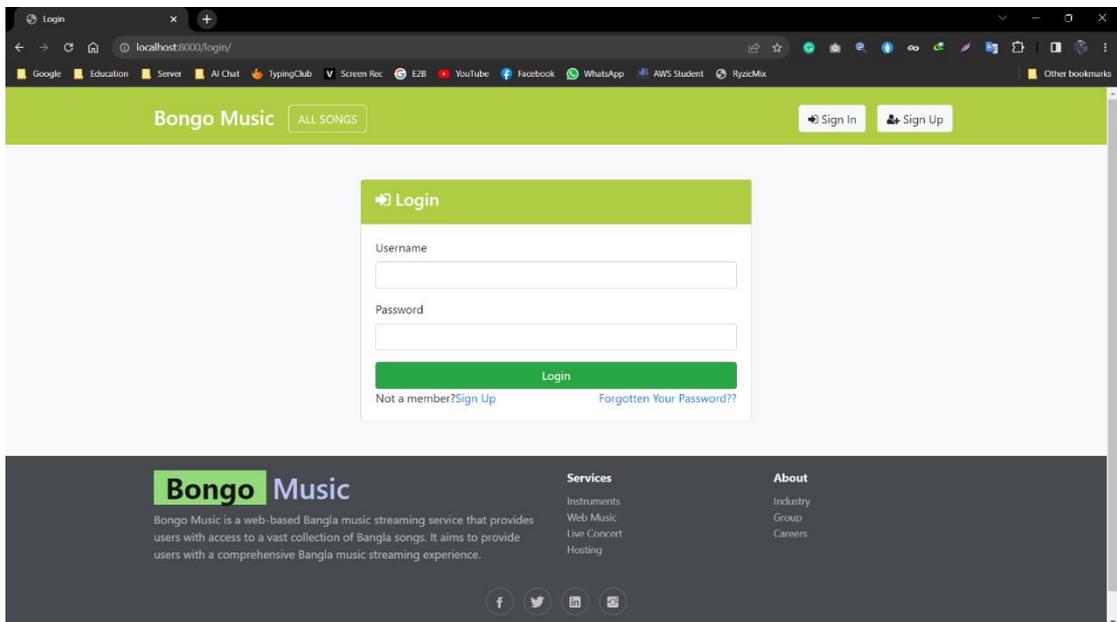
6.2 Registration & Login Page

Registration Page:



The screenshot shows the registration page of Bongo Music. The browser address bar indicates the URL is localhost:8000/signup. The page features a green header with the Bongo Music logo and a navigation menu. The main content area contains a registration form with the following fields: First Name, Last Name, Username, Email, Password, and Confirm Password. A green 'Register' button is located at the bottom of the form. The footer includes the Bongo Music logo, a description of the service, and links for Services (Instruments, Web Music, Live Concert, Hosting) and About (Industry, Group, Careers).

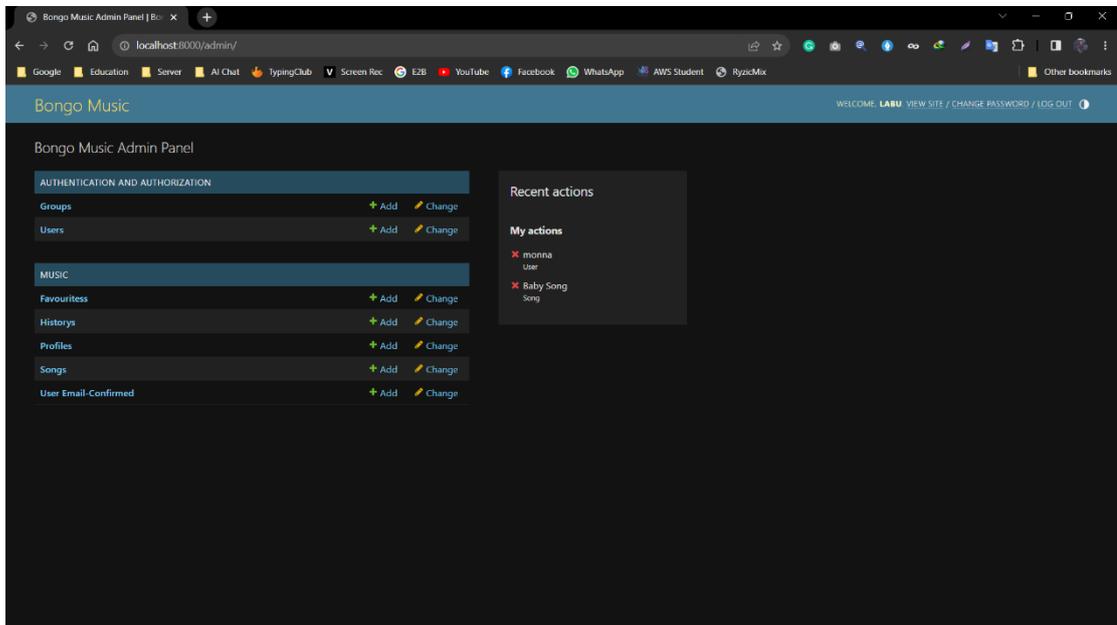
Login Page:



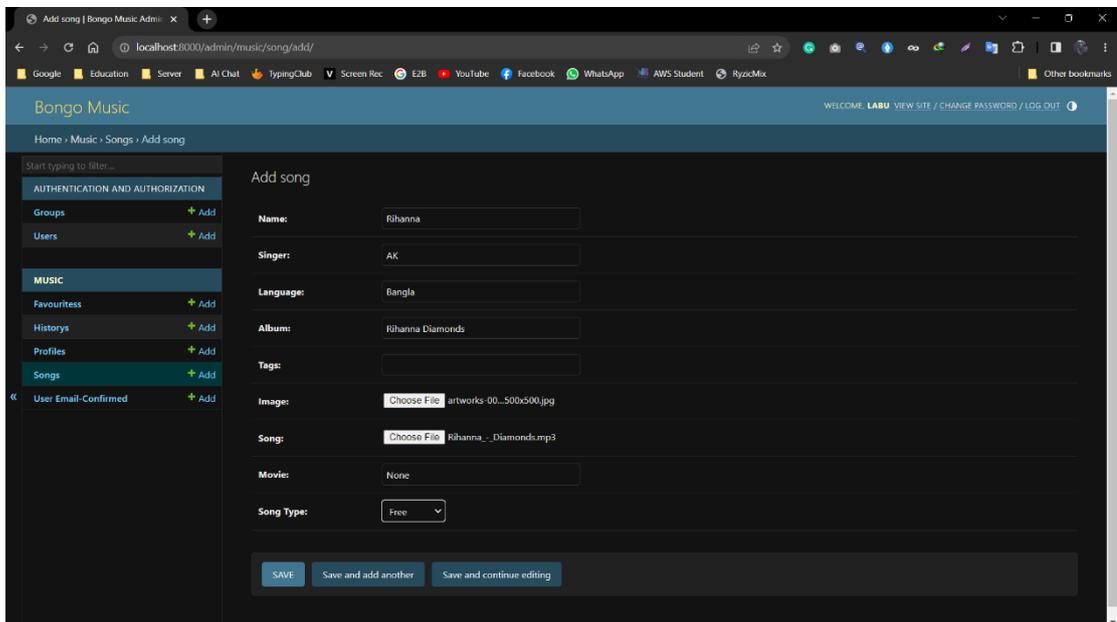
The screenshot shows the login page of Bongo Music. The browser address bar indicates the URL is localhost:8000/login/. The page features a green header with the Bongo Music logo and a navigation menu. The main content area contains a login form with the following fields: Username and Password. A green 'Login' button is located at the bottom of the form. Below the button are links for 'Not a member? Sign Up' and 'Forgotten Your Password?'. The footer includes the Bongo Music logo, a description of the service, and links for Services (Instruments, Web Music, Live Concert, Hosting) and About (Industry, Group, Careers). Social media icons for Facebook, Twitter, and YouTube are also present.

6.3 Admin Panel

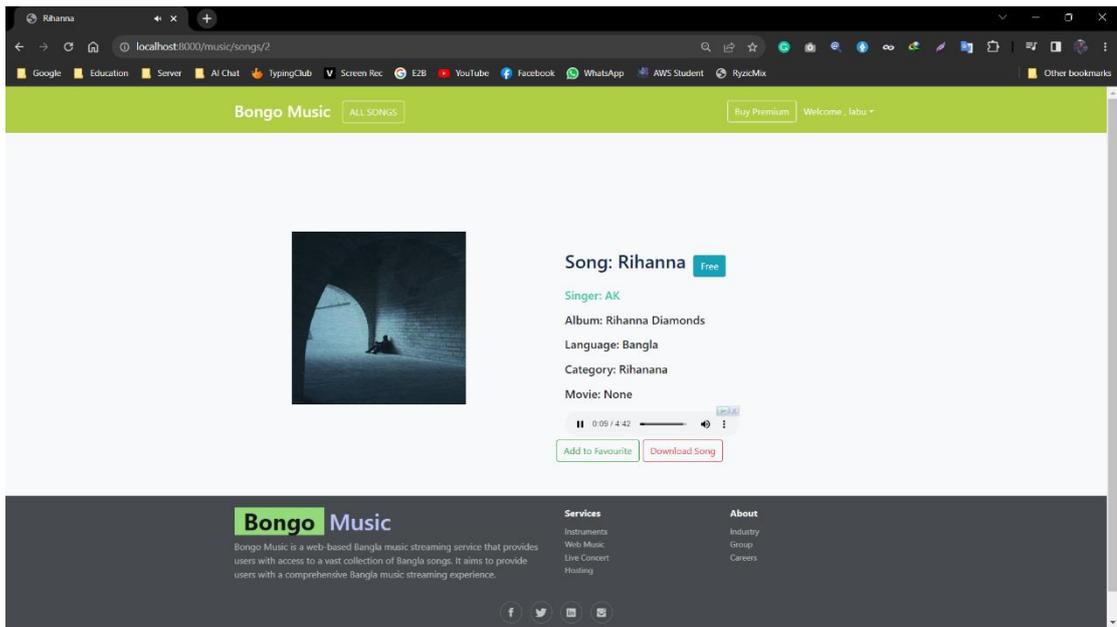
Admin Panel Options:



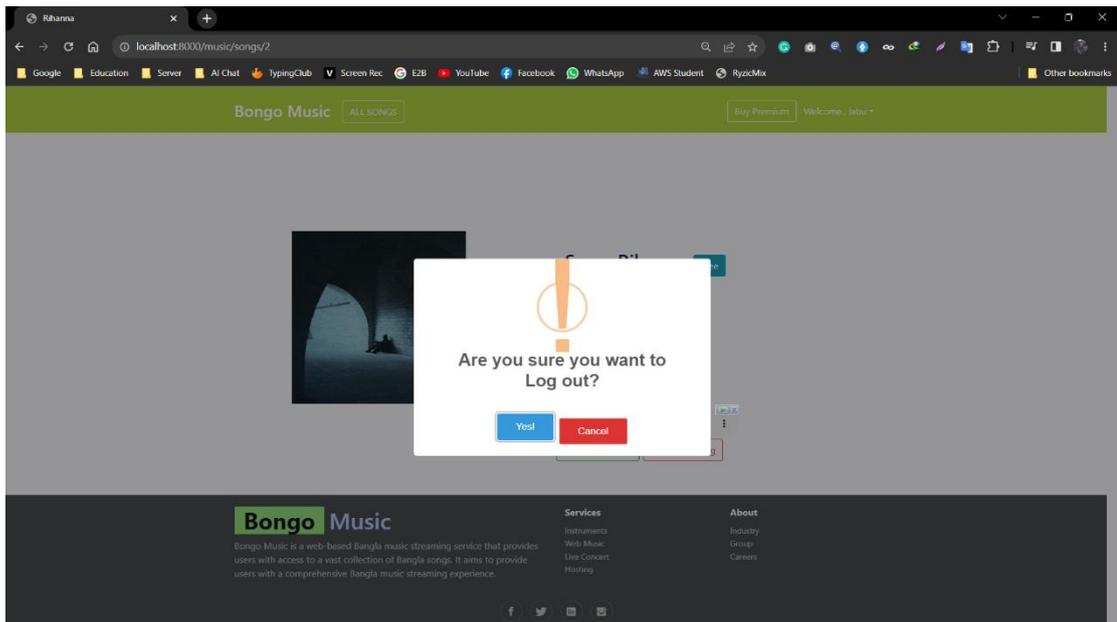
Add songs to database:



6.4 Play Songs



6.5 Logout



CHAPTER 7

PROJECT SUMMARY

7.1 Critical Evolution

- Enhanced Recommendation Engine
- High-Quality Audio Streaming
- Offline Music Syncing
- Cross-Platform Synchronization
- Personalized User Profiles
- Enhanced Music Discovery

7.2 Limitation

- The main limitation of the system is its inability to handle a large volume of data and signals simultaneously, particularly in the range of millions.
- Additionally, the application does not include a registration system for recruiters.
- Recruiters are required to view talent profiles without going through a registration process.

7.3 Achievements

- Successful Project Completion
- Learning a New Technology
- Gaining hands-on experience in deploying a project
- Gaining practical experience by deploying the project on a live server
- Understanding Documentation and the Development Process

7.4 Future Scope

- Relishing app version
- Adding podcasts system
- Live radio show
- Adding updated features

7.5 References

- <https://www.w3schools.com/python/>
- <https://getbootstrap.com/docs/5.3/getting-started/introduction/>
- <https://www.w3schools.com/css/default.asp>
- <https://docs.djangoproject.com/en/4.2/>
- <https://www.tutorialspoint.com/django/index.htm>
- <https://www.geeksforgeeks.org/django-forms/?ref=lbp>
- <https://chat.openai.com/?model=text-davinci-002-render-sha>
- <https://www.javatpoint.com/django-virtual-environment-setup>
- https://www.w3schools.com/django/django_admin.php