MUSIC GALLERY SYSTEM

A MINI-PROJECT REPORT

Submitted by

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BONAFIDE CERTIFICATE

Certified that this mini project **"MUSIC GALLERY SYSTEM**" is the bonafide work of **"DHARANESSHWAR S (2116220701063)"** who carried out the project work under my supervision.

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INTERNAL EXAMINER **EXTERNAL EXAMINER**

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Dharaneeshwar S (2116220701063)

ABSTRACT

A Music Gallery System is a web-based platform designed to provide users with seamless access to a vast collection of music tracks across various genres and artists. This system enables the efficient organization and management of music libraries, allowing users to browse, search, and stream their favorite songs effortlessly. It includes features such as personalized playlists, user account management, and music categorization based on genres, artists, and mood. The system also supports backend integration for storing and retrieving music data, ensuring a smooth user experience. Accessible from any device with internet connectivity, the Music Gallery System fosters an interactive and engaging environment for music enthusiasts while streamlining the process of discovering and enjoying music. This abstract highlights the core functionalities and benefits of the Music Gallery System, enhancing the accessibility and enjoyment of music for its users.

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CHAPTER 1

1.1 INTRODUCTION

The purpose of a Music Gallery System is to efficiently organize and manage a diverse collection of music, providing users with an engaging platform to explore, stream, and enjoy their favorite tracks. It aims to enhance the user experience by offering seamless navigation, personalized playlists, and easy access to music resources while fostering a deeper connection with the world of music. This system supports the discovery of new artists and genres, promoting the growth and appreciation of musical diversity.

1.2 SCOPE OF THE WORK

The scope of a Music Gallery System includes managing a comprehensive music library, user accounts, playlists, and recommendations. It encompasses organizing tracks by genres, artists, albums, and moods, as well as providing seamless music streaming and search functionality. The system also involves implementing features such as personalized recommendations, playlist sharing, and integration with social media platforms. The ultimate goal of the Music Gallery System is to deliver an enjoyable and immersive music experience for users while supporting the discovery and appreciation of diverse musical styles and artists.

1.3 PROBLEM STATEMENT

The current music gallery system lacks intuitive navigation, personalized recommendations, and seamless integration with various music streaming platforms, making it difficult for users to discover and enjoy music effectively. As a result, there is a decrease in user engagement, with many complaints related to poor search functionality, limited music options, and a lack of features for interaction between users and music creators. This music gallery system is being developed to address these challenges and is intended for music enthusiasts, artists, and listeners who want a personalized and immersive music experience. It is designed to be accessible by users with web access, enabling them to explore music tracks, albums, and artists easily. This system aims to enhance the overall music discovery experience and foster greater interaction between users and the music community.

1.4. AIM AND OBJECTIVES OF THE PROJECT

The current music streaming platforms often lack intuitive navigation, personalized recommendations, and efficient organization, making it challenging for users to discover and enjoy their favorite tracks seamlessly. As a result, users experience reduced engagement and satisfaction. The **Music Gallery System** is being developed to provide a user-friendly platform for music enthusiasts with web access, offering easy exploration of a vast collection of music across various genres and artists. This system is particularly useful for individuals looking to create personalized playlists, discover new music, or simply enjoy a streamlined listening experience.

Other objectives of the Music Gallery System include ensuring data security and user privacy, promoting accessibility for all users, and fostering engagement through personalized features and recommendations. Ultimately, a well-designed Music Gallery System can enhance the overall music experience, driving greater user satisfaction and increased appreciation for musical diversity.

CHAPTER 2

SYSTEM SPECIFICATIONS

2.1 HARDWARE SPECIFICATIONS

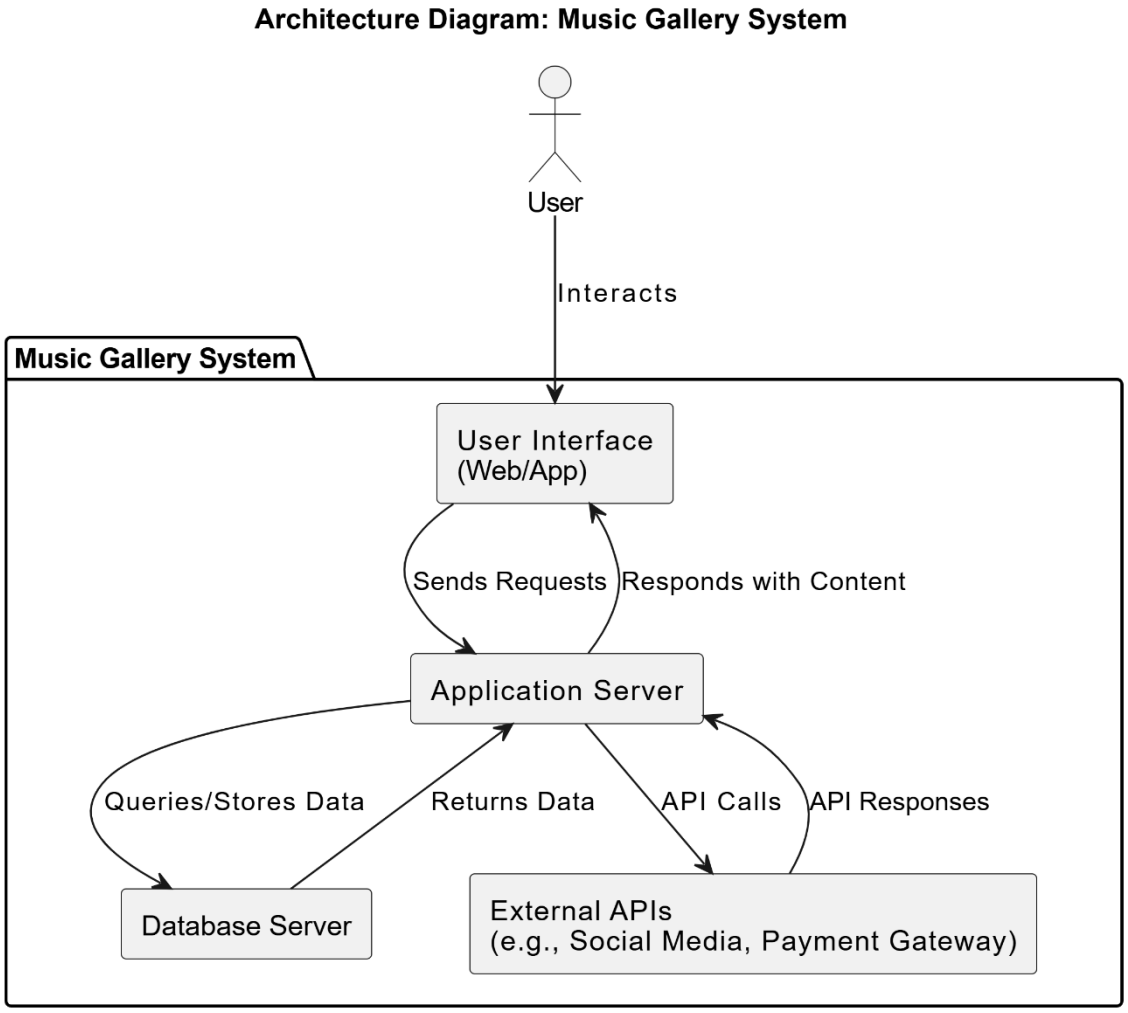
Processor	:	Pentium IV Or Higher
Memory Size	:	128 GB (Minimum)
HDD	:	40 GB (Minimum)

2.2 SOFTWARE SPECIFICATIONS

Operating System	:	WINDOWS 7 AND PLUS
Front – End	:	CSS, JAVASCRIPT
Back – End	:	PHP, MYSQL

CHAPTER 3

ARCHITECTURE DIAGRAM



CHAPTER 4

MODULE DESCRIPTION

Modules for Music Gallery System:

4.1. User Registration and Login Module:

This module allows users to register and create an account on the platform. Users can provide their basic information, such as name, email address, and password, to create an account. After successful registration, users can log in to the system using their email address and password, enabling personalized access to playlists, preferences, and settings.

4.2. Music Library Module:

The Music Library module enables users to browse, search, and explore a vast collection of music organized by genres, artists, albums, and moods. Users can view song details, including artist names, album titles, and duration. This module also provides curated recommendations based on user preferences and listening history.

4.3. Playlist Management Module:

This module allows users to create, edit, and delete playlists. Users can add or remove tracks from their playlists, organize songs by mood or occasion, and share their playlists with others. The system also supports auto-generated playlists based on frequently played or liked tracks.

4.4. About Module:

This module provides basic information about the Music Gallery System, its purpose, features, and the team or creators behind the platform. It serves as an introductory guide for new users.

4.5. Privacy and Policy Module:

The Privacy and Policy module outlines how the platform collects, uses, discloses, and protects user data. It includes details on data security practices, user rights, and compliance with applicable privacy regulations, ensuring transparency and trust among users.

4.6. Review and Rating Module:

This module enables users to review and rate songs, albums, and playlists. Users can share their feedback, provide star ratings, and comment on their listening experience. This feedback helps others discover popular and well-reviewed tracks while supporting artist engagement.

4.7. Admin Dashboard Module:

The Admin Dashboard module gives the system administrator complete control over managing the platform's content and users. Admins can upload music files, update artist and album details, manage user accounts, monitor platform usage, and generate analytics reports to track performance and user engagement.

4.8. Audio Streaming Module:

This module provides seamless music playback for users. It includes features such as play, pause, shuffle, repeat, and volume control. The system ensures smooth streaming with adaptive bitrate based on network conditions for an uninterrupted listening experience.

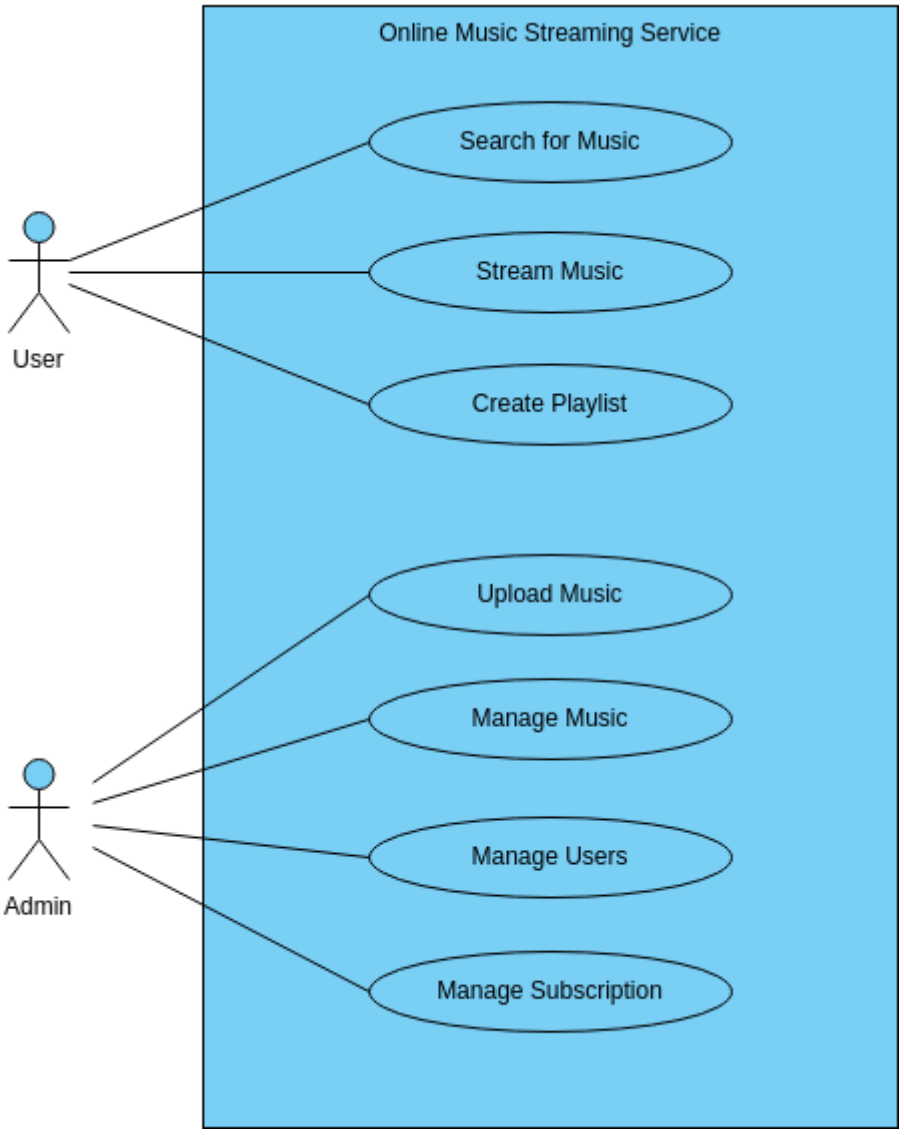
4.9. Social Integration Module:

This module allows users to connect their accounts to social media platforms for easy sharing of playlists and favorite tracks. It also supports collaborative playlists where multiple users can contribute songs.

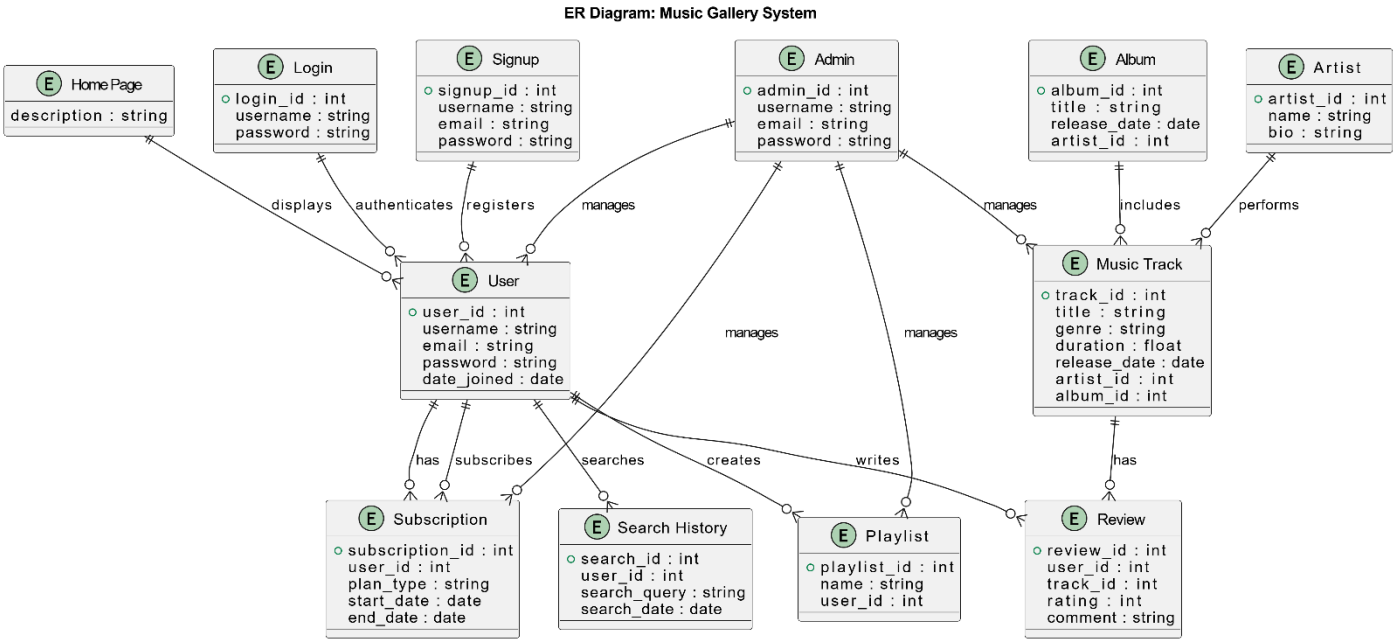
CHAPTER 5

SYSTEM DESIGN

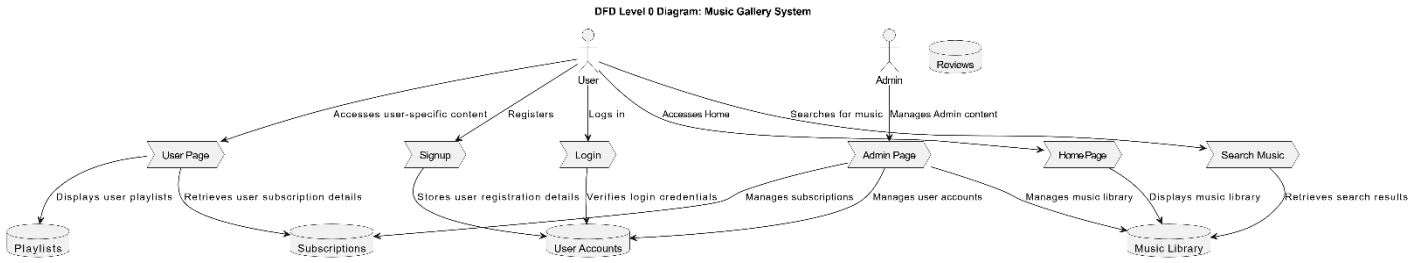
5.1. USE CASE DIAGRAM



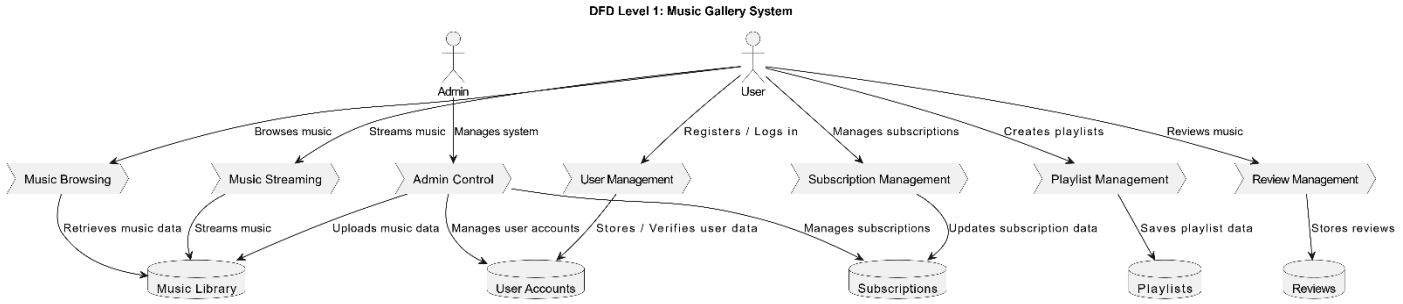
5.2. ER DIAGRAM



5.3 DFD DIAGRAM

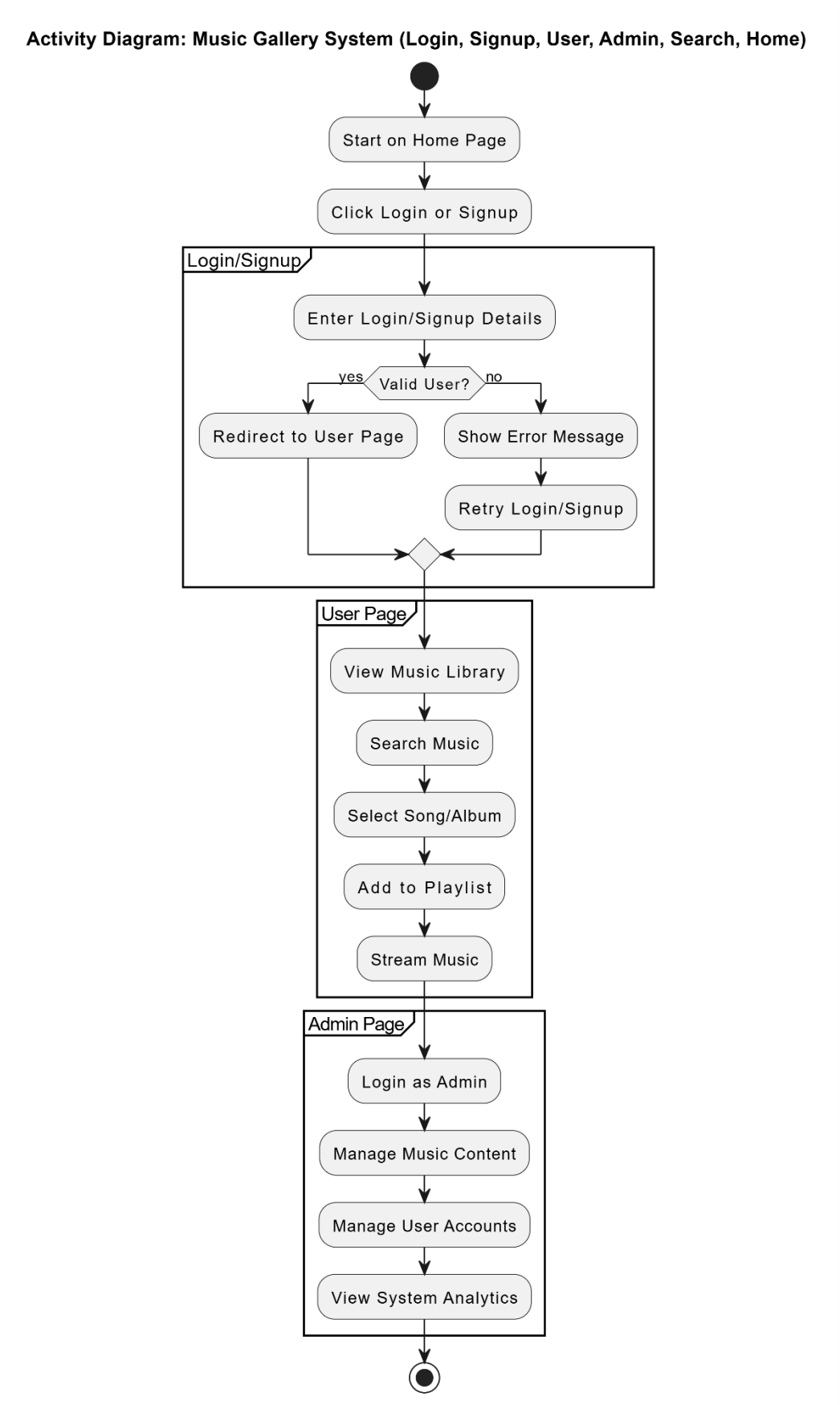


DFD Level-0 Diagram



DFD Level-1 Diagram

5.4 ACTIVITY DIAGRAM



CHAPTER 6

SAMPLE CODING

Index.php

```
<?php
include("./utils/getUrl.php");
include("./utils/dbConnection.php");
include("./auth/auth.php");
function redirect($url)
{
   echo "<script type='text/javascript'>document.location.href='{$url}';</script>";
   echo '<META HTTP-EQUIV="refresh" content="0;URL=' . $url . '">';
}
$getAllSongsQuery = "SELECT songs.id, songs.title title,
                        songs.filePath audio, songs.imgPath img,
                        singers.name singerName, singers.id singerID
                    FROM songs
                    LEFT JOIN singers on singers.id = songs.singerID
                    ORDER BY songs.dateAdded DESC";
$result = mysqli_query($conn, $getAllSongsQuery);
$songs = mysqli_fetch_all($result, MYSQLI_ASSOC);
// Generate random songs
$randomKeys = (count($songs) >= 3) ? array_rand($songs, 3) : $songs;
$formatSongs = array();
foreach ($songs as $song) {
   $formatSongs[$song["id"]] = $song;
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.15.3/css/all.min.css"
integrity="sha512-
iBBXm8fW90+nuLcSKlbmrPcLa0OT92xO1BIsZ+ywDWZCvqsWgccV3gFoRBv0z+8dLJgyAHIhR35VZc2
oM/gI1w==" crossorigin="anonymous" />
   <link rel="stylesheet" href="./css/style.css">
   <link rel="stylesheet" href="./css/homePage.css">
   <link rel="stylesheet" href="./css/singerPage.css">
   <link rel="stylesheet" href="./css/searchPage.css">
   <link rel="stylesheet" href="./css/favourite.css">
```

```
    <link href='https://css.gg/home.css' rel='stylesheet'>
    <title>Spotify</title>
</head>
<body>
    <div class="login-modal">
        <div class="login-modal__logo">
            <i class="fab fa-spotify"></i>
            <h2>Not Spotify</h2>
        </div>
        <div class="login-modal__info">
            <p>You have to login to use this feature.</p>
            <a href="./auth/login.php" class="login">Login</a>
            <a href="./auth/signup.php" class="signup">Haven't create an account yet?</a>
            <div class="close">+</div>
        </div>
    </div>
    <div class="container">
        <div class="content">
            <!-- Sidebar -->
            <?php include("./components/sidebar.php"); ?>
            <!-- End sidebar -->
            <!-- Music UI -->
            <div class="musicContainer" id="home">
                <?php include("./pages/homeContent.php"); ?>
            </div>
            <div class="musicContainer hide" id="favourites">
                <?php if ($authenticated) : ?>
                    <?php include("./pages/favContent.php"); ?>
                <?php endif; ?>
            </div>
            <div class="musicContainer hide" id="search">
                <?php include("./pages/searchContent.php"); ?>
            </div>
            <div class="musicContainer hide" id="singer">
                <?php include("./pages/singerContent.php"); ?>
            </div>
            <!-- End Music UI -->
        </div>
        <!-- Music Player -->
        <?php include("./components/musicPlayer.php"); ?>
    </div>
</body>
<script>
    let songDetails = JSON.parse('<?php echo json_encode($formatSongs); ?>');
```

```
    let authenticated = JSON.parse('<?php echo json_encode($authenticated); ?>');
</script>
<script src="./js/songTile.js"></script>
<script src="./js/playingQueue.js"></script>
<script src="./js/loginRequired.js"></script>
<script src="./js/main.js"></script>
<?php if ($authenticated) : ?>
    <script src="./js/favourite.js"></script>
<?php endif; ?>
<?php include("./utils/changePageJs.php"); ?>
</html>
```

CHAPTER 7

SCREEN SHOTS

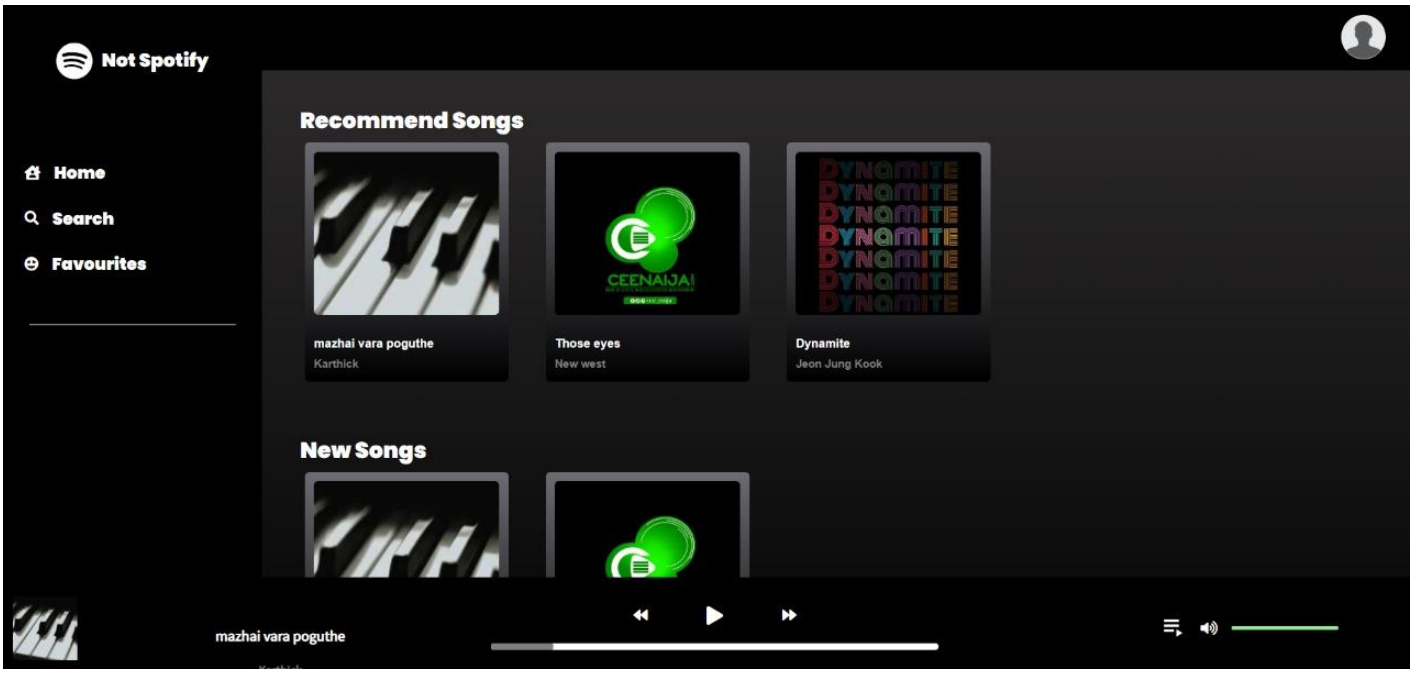


Fig. 7.1. Home Page

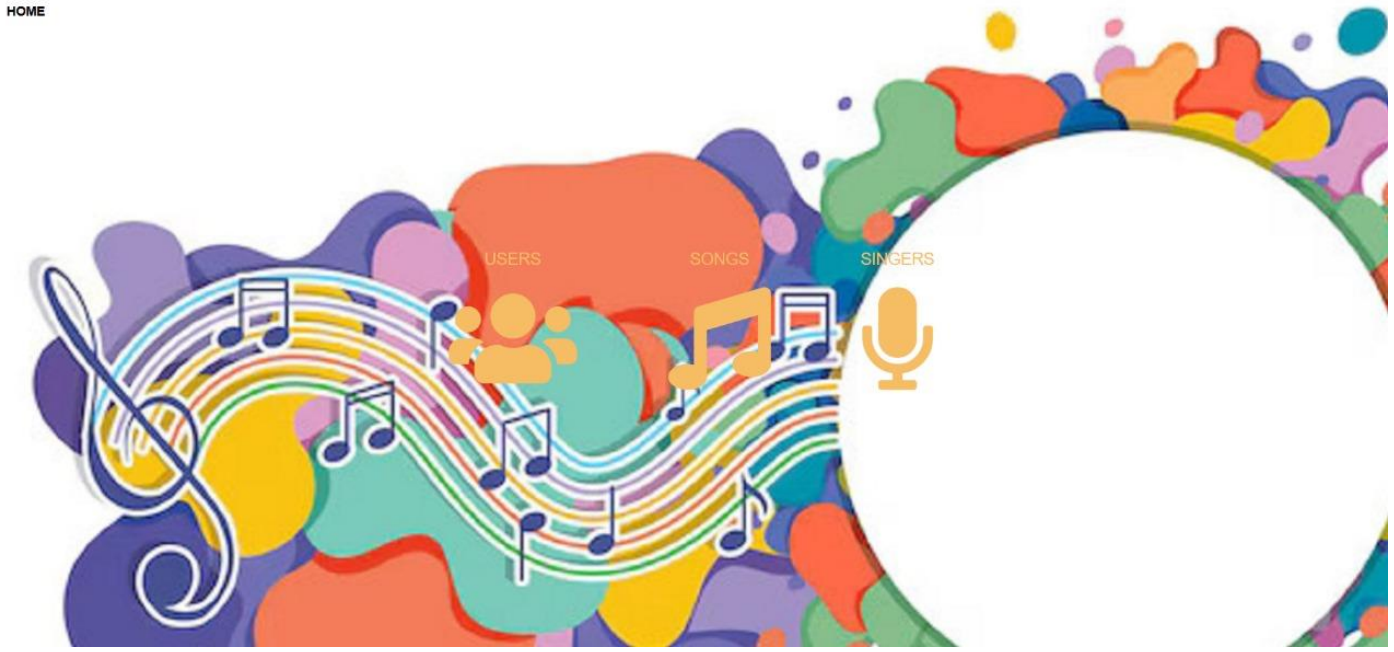


Fig. 7.2. Dashboard

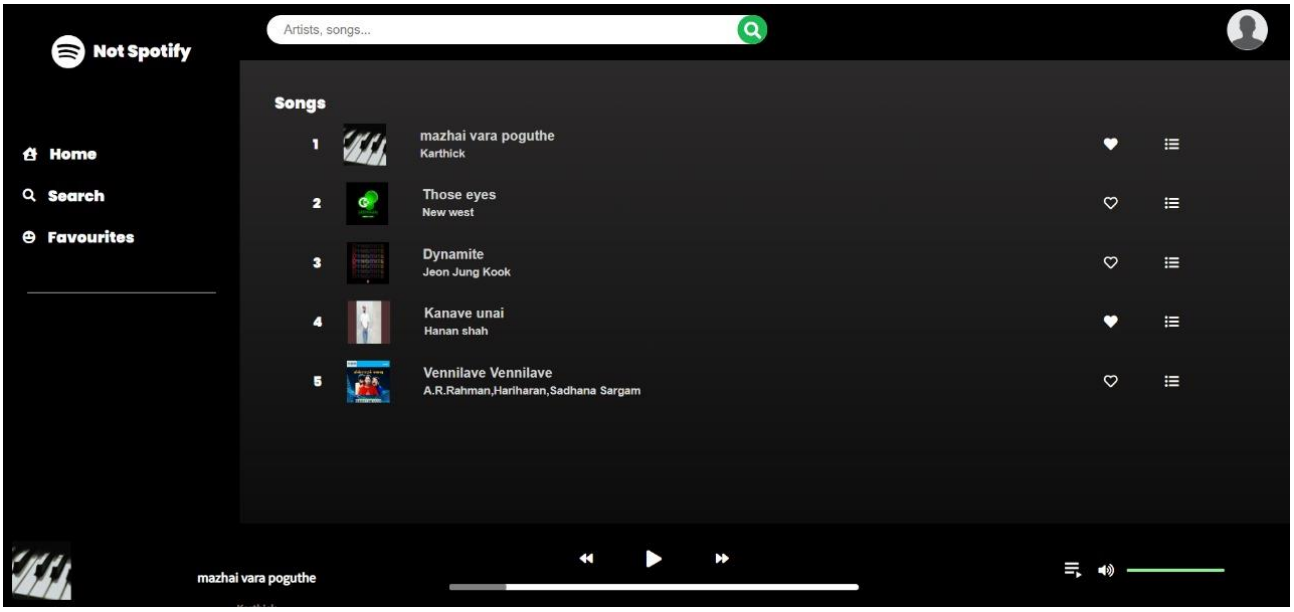


Fig. 7.3. Search page

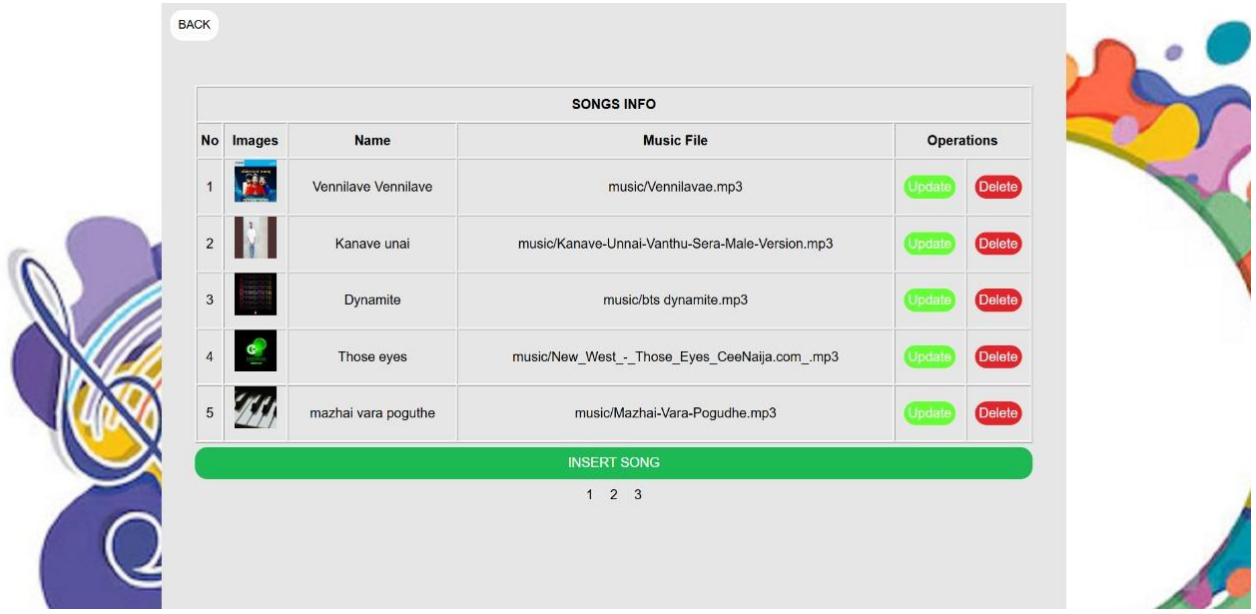


Fig. 7.4. Songs Info

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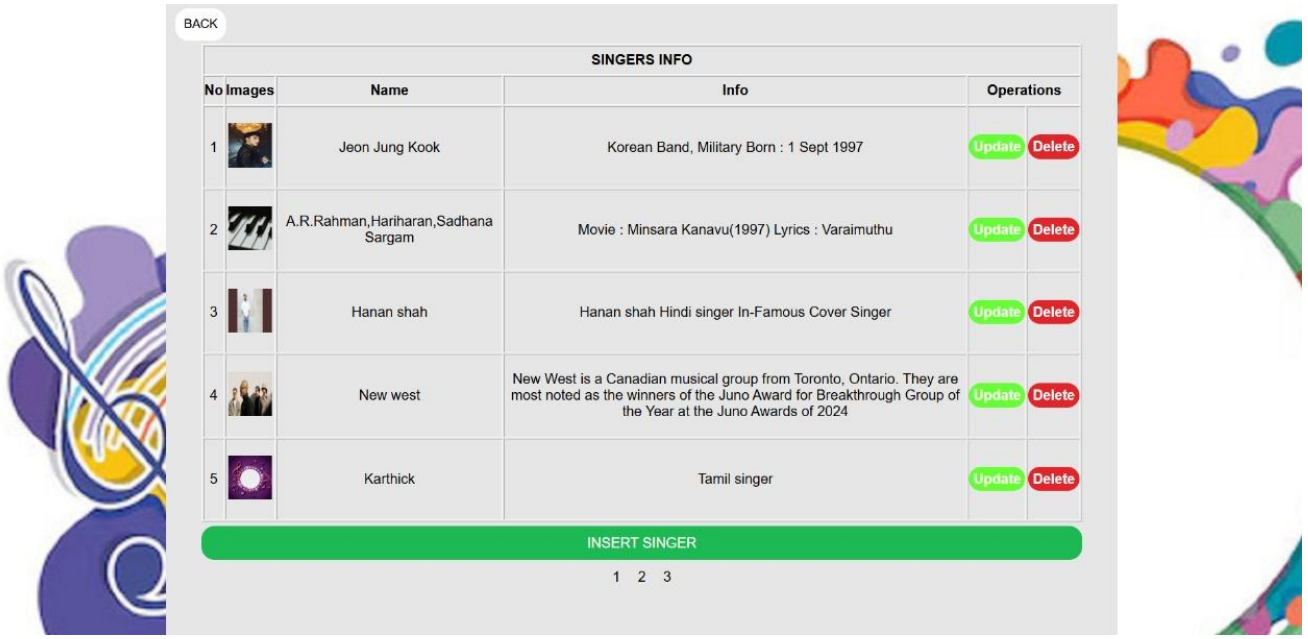

Fig. 7.5. Singers Info

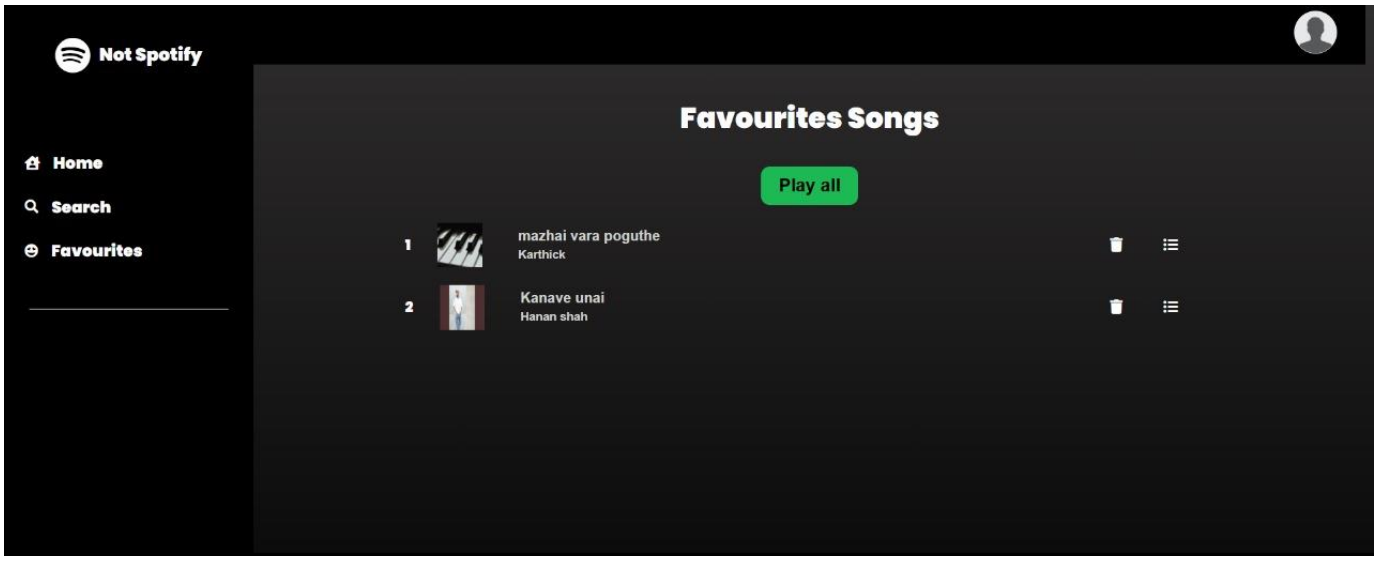

Fig. 7.6. Favorites

CHAPTER 8

CONCLUSION

In conclusion, a Music Gallery System is an essential tool for modern music platforms, providing a streamlined and efficient way to manage and access a wide range of music content. It enhances the music listening experience for users, improves the organization and categorization of music tracks, albums, and playlists, and enables better interaction between users and music creators.

By implementing a Music Gallery System, platforms can increase user engagement, provide personalized content recommendations, and improve the overall user experience. The system allows for seamless browsing, streaming, and reviewing of music, creating a more interactive and enjoyable environment for music enthusiasts.

Looking towards the future, the Music Gallery System could be enhanced with advanced features such as artificial intelligence and machine learning algorithms to deliver personalized music recommendations based on user preferences and listening history. Integration of virtual and augmented reality could provide immersive music experiences, allowing users to explore music in new ways. Additionally, blockchain technology could be used to ensure secure and transparent management of music rights, royalties, and user data. These innovations would not only improve the efficiency of music platforms but also offer an enriched and engaging experience for music lovers in the years to come.

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