

A Mini Project Synopsis on

# **MusicFy (Spotify Clone) Website**

Submitted to Manipal University, Jaipur

Towards the partial fulfillment for Web Technology Lab

In

**Computers Science and Engineering**

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## Introduction :-

In the ever-evolving landscape of digital music streaming, the MusicFy Clone project emerges as a testament to the fusion of creativity and technological prowess. This endeavor seeks to recreate the magic of the renowned Spotify platform, presenting users with a familiar yet personalized experience in the realm of online music consumption.

Utilizing a dynamic blend of HTML, CSS, JavaScript and PHP , MusicFy Clone is not just a mere replication but a unique venture to encapsulate the essence of seamless audio streaming. As technology enthusiasts, we delve into the intricacies of web development to craft an interface that is not only visually appealing but also intuitive, ensuring an immersive musical journey for every user.

## Aims and Objectives :-

### 1. Replication with a Purpose:

Aim: To replicate the core functionalities of Spotify with precision, ensuring a seamless and reliable music streaming experience.

Objectives:

Develop a user-friendly interface that mirrors the key features of Spotify.

Implement audio playback controls, playlist management, and user authentication to enhance functionality.

### 2. Personalization and Customization: Aim: To introduce a personalized touch, allowing users to tailor their music journey within the MusicFy Clone ecosystem.

Objectives: Provide customization options for playlists, themes, and user profiles.

### 3. Responsive Design for Accessibility:

Aim: To ensure a consistent and engaging user experience across various devices and screen sizes.

Objectives: Employ responsive design principles using HTML and CSS to adapt the interface to different devices. Optimize performance for a smooth and responsive user interaction.

### 4. Seamless Integration of Multimedia:

Aim: To enhance the multimedia experience by integrating additional features beyond basic audio streaming.

Objectives: Explore the possibility of incorporating album artwork, lyrics, and artist information. Implement multimedia controls for an immersive and comprehensive user experience.

## 5. Implementation of server side logic:

Aim: To implement efficient server-side logic that enhances the performance, reliability, and security of the application while ensuring seamless communication between clients and servers.

Objective:

Develop robust server-side logic that efficiently handles client requests and responses. Optimize server-side code to improve application performance and scalability. Implement server-side logic using PHP for user authentication, registration, and database interactions.

## 6. Database Implementation: Set up the MySQL database.

7. Deployment: Deploy the application on a local host, ensuring proper configuration and security measures, using XAMPP framework.

## **Software and Hardware Requirement:-**

Device name - HP Pavilion Gaming Laptop 15-dk1xxx

Processor - Intel(R) Core(TM) i5-10300H CPU @ 2.50GHz 2.50 GHz

Installed RAM - 8.00 GB (7.78 GB usable)

Device ID - D846F578-FE50-4D2A-9E0C-0E766AEFB0F1

Product ID - 00327-36293-65006-AAOEM

System type - 64-bit operating system, x64-based processor

Pen and touch - No pen or touch input is available for this display

## **Editor Used :-**

Version: 1.87.0 (user setup)

Commit: 019f4d1419fbc8219a181fab7892ebccf7ee29a2

Date: 2024-02-27T23:41:44.469Z

Electron: 27.3.2

ElectronBuildId: 26836302

Chromium: 118.0.5993.159

Node.js: 18.17.1

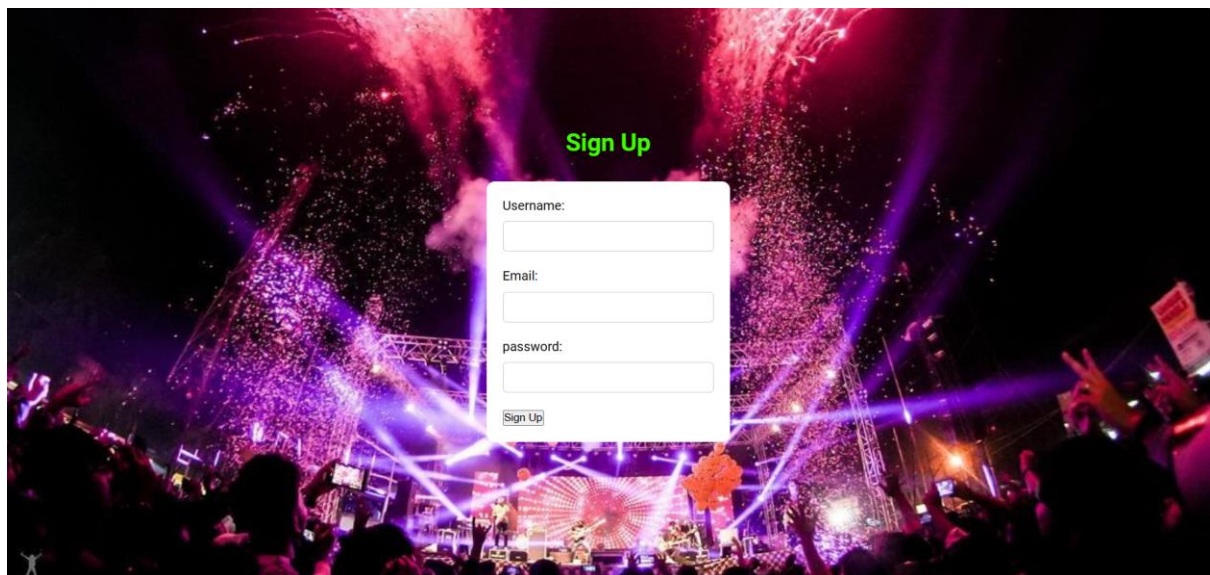
V8: 11.8.172.18-electron.0

OS: Windows\_NT x64 10.0.22621

## Design (home page layout/ user interface) :-

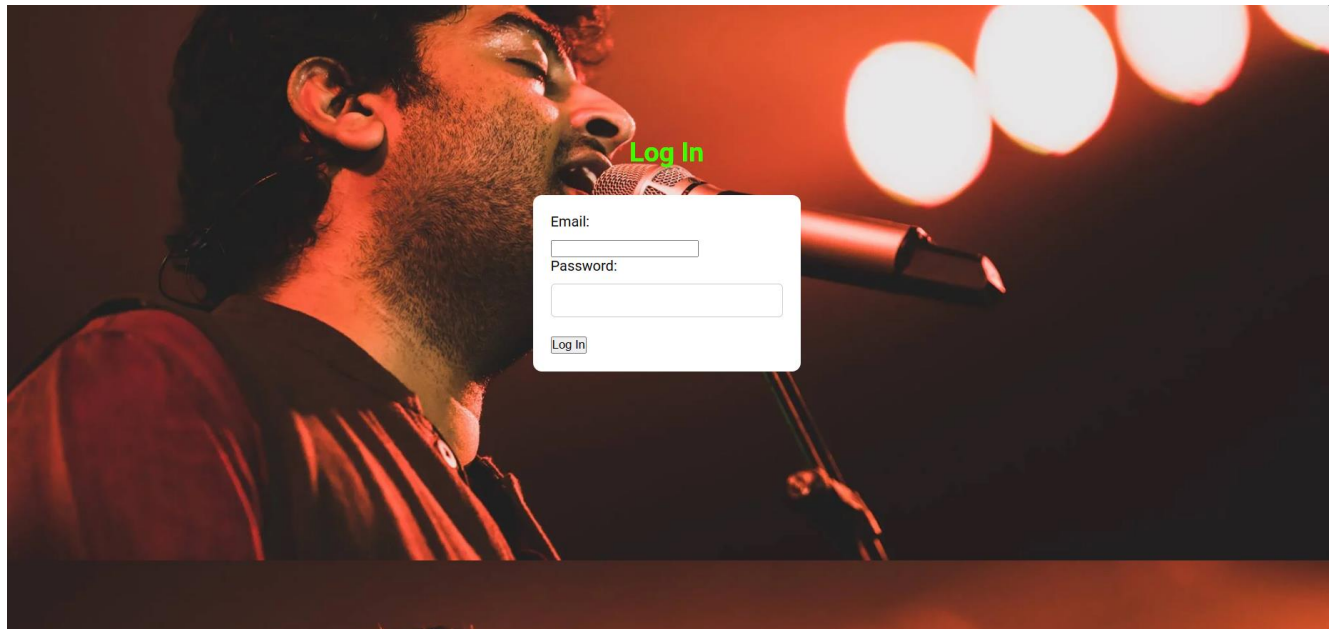
### Sign Up page :-

Allows users to create a new account by providing necessary details such as name, email, password, etc. Upon completion, users can submit the form to Sign Up by clicking the designated button, triggering the signup.php file to insert the provided information into the database. Upon successful sign up, users gain access to the website's features and functionalities. To ensure data integrity and prevent submission of incomplete forms, JavaScript validations are integrated. In the event of empty fields upon sign up attempt, users are promptly notified of the error, prompting them to fill in the required information before proceeding.



## Log in page :-

The login page features a user-friendly form comprising text fields for entering the Email ID and password. Upon submission, the provided credentials are verified by querying the customer table with the entered user ID and password, facilitated by the login file.



## Database :

```
mysql> select * from users;
```

username	email	password
Tathagata Ghosh	tathagata2008@gmail.com	musicfy@123
Soumitra	soumitra@yahoo.com	soum@123
molik	molik@123	123456

```
3 rows in set (0.00 sec)
```

## Home Page:

The homepage presents users with a sleek and intuitive interface designed for easy navigation and seamless music exploration. It showcases a user-friendly navigation bar prominently featuring the logo and a streamlined navbar, enabling users to effortlessly access key features and sections of the application.

index.html:-

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="css/style.css">
  <link rel="stylesheet" href="css/utility.css">
  <title>MusicFy - Music for Everyone</title>
  <link rel="icon" href="img/music_audio_7173.ico">
</head>

<body>
  <div class="container flex bg-black">
    <div class="left">
      <div class="close">
        
      </div>
      <div class="home bg-grey rounded m-1 p-1">
        <div class="logo"></div>
        <ul>
          <li>Home</li>
          <li>Search</li>
        </ul>
      </div>

      <div class="library bg-grey rounded m-1 p-1">
        <div class="heading">
          
          <h2>
            Your Library
          </h2>
        </div>

        <div class="songList">

          <ul>

          </ul>

        </div>
      </div>
    </div>
  </div>
</body>
</html>
```

```

        </div>

        <div class="footer">
            <div><a
href="https://www.spotify.com/jp/legal/"><span>Legal</span></a></div>
            <div><a
href="https://www.spotify.com/jp/privacy/"><span>Privacy
Center</span></a></div>
            <div><a href="https://www.spotify.com/jp/legal/privacy-
policy/"><span>Privacy Policy</span></a>
            </div>
            <div><a href="https://www.spotify.com/jp/legal/cookies-
policy/"><span>Cookies</span></a></div>
            <div><a href="https://www.spotify.com/jp/legal/privacy-
policy/#s3"><span>About Ads</span></a></div>
            <div><a
href="https://www.spotify.com/jp/accessibility/"><span>Accessibility</span></a
></div>
        </div>
    </div>

    <div class="right bg-grey rounded">
        <div class="header">
            <div class="nav">
                <div class="hamburgerContainer">

                    
                    <svg width="24" height="24" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
                        <path
                            d="M15 6L9.70711 11.2929C9.37377 11.6262
9.20711 11.7929 9.20711 12C9.20711 12.2071 9.37377 12.3738 9.70711 12.7071L15
18"
                            stroke="#ffffff" stroke-width="1.5" stroke-
linecap="round" stroke-linejoin="round" />
                        </svg>
                        <svg width="24" height="24" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
                            <path
                                d="M9 18L14.2929 12.7071C14.6262 12.3738
14.7929 12.2071 14.7929 12C14.7929 11.7929 14.6262 11.6262 14.2929 11.2929L9
6"
                                stroke="#ffffff" stroke-width="1.5" stroke-
linecap="round" stroke-linejoin="round" />
                            </svg>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>

```



```

        </div>
        <div class="buttons">
            <a href="imagegal.html" target="_blank"
class="imagegal">Image Gallery</a>
            <a href="signup.html" target="_blank"
class="signupbtn">Sign up</a>
            <a href="login.html" target="_blank" class="loginbtn">Log
in</a>

        </div>
    </div>
    <div class="spotifyPlaylists">
        <h1>MusicFy Playlists</h1>
        <div class="cardContainer">
            <div data-folder="Sounds Of Kolkata" class="card">
                <div class="play">
                    <svg width="16" height="16" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
                        <path d="M5 20V4L19 12L5 20Z" stroke="#141B34"
fill="#000" stroke-width="1.5" stroke-linejoin="round"></path>
                    </svg>
                </div>

                
                <h2>Sounds Of Kolkata</h2>
                <p>A MusicFy playlist dedicated to the City Of Joy</p>
            </div>

            <div data-folder="Jonoheen Rajpoth" class="card">
                <div class="play">
                    <svg width="16" height="16" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
                        <path d="M5 20V4L19 12L5 20Z" stroke="#141B34"
fill="#000" stroke-width="1.5" stroke-linejoin="round"></path>
                    </svg>
                </div>

                
                <h2>Jonoheen Rajpoth</h2>
                <p>Chapter 4 ▪ By Prithibi</p>
            </div>

            <div data-folder="Aalas Ka Pedh" class="card">
                <div class="play">
                    <svg width="16" height="16" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
                        <path d="M5 20V4L19 12L5 20Z" stroke="#141B34"
fill="#000" stroke-width="1.5" stroke-linejoin="round"></path>
                    </svg>
                </div>

```

```

        </div>

        
        <h2>Aalas Ka Pedh</h2>
        <p>Greatest hits by The Local Train</p>
    </div>

    <div data-folder="Kishore Kumar Hits" class="card">
        <div class="play">
            <svg width="16" height="16" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
                <path d="M5 20V4L19 12L5 20Z" stroke="#141B34"
fill="#000" stroke-width="1.5" stroke-linejoin="round"></path>
            </svg>
        </div>

        
        <h2>Golden Era of Music</h2>
        <p>Evergreen songs by Kishore Kumar Ganguly</p>
    </div>

    <div data-folder="Anjan Dutta" class="card">
        <div class="play">
            <svg width="16" height="16" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
                <path d="M5 20V4L19 12L5 20Z" stroke="#141B34"
fill="#000" stroke-width="1.5" stroke-linejoin="round"></path>
            </svg>
        </div>

        
        <h2>Purono Guitar Adhunik Gaan</h2>
        <p>From on eof the greatest composers of new
generation Bengali Songs.</p>
    </div>

    <div data-folder="Piku" class="card">
        <div class="play">
            <svg width="16" height="16" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
                <path d="M5 20V4L19 12L5 20Z" stroke="#141B34"
fill="#000" stroke-width="1.5" stroke-linejoin="round"></path>
            </svg>
        </div>

        
        <h2>Piku(Original Motion Picture Soundtrack)</h2>
        <p>Anupam Roy, Manoj Yadav</p>
    </div>

```

```

</div>

<div data-folder="Dawshom Awbotaar" class="card">
  <div class="play">
    <svg width="16" height="16" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
      <path d="M5 20V4L19 12L5 20Z" stroke="#141B34"
fill="#000" stroke-width="1.5" stroke-linejoin="round"></path>
    </svg>
  </div>

  
  <h2>Dawshom Awbotaar(Original Motion Picture
Soundtrack)</h2>

  <p>Anupam Roy</p>
</div>

<div data-folder="Bhaag Milkha Bhaag" class="card">
  <div class="play">
    <svg width="16" height="16" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
      <path d="M5 20V4L19 12L5 20Z" stroke="#141B34"
fill="#000" stroke-width="1.5" stroke-linejoin="round"></path>
    </svg>
  </div>

  
  <h2>Bhaag Milkha Bhaag(Original Motion Picture
Soundtrack)</h2>

  <p>Shankar-Eshan-Loy • 2013</p>
</div>

<div data-folder="Dwitiyo Purush" class="card">
  <div class="play">
    <svg width="16" height="16" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
      <path d="M5 20V4L19 12L5 20Z" stroke="#141B34"
fill="#000" stroke-width="1.5" stroke-linejoin="round"></path>
    </svg>
  </div>

  
  <h2>Dwitiyo Purush</h2>
  <p>Anupam Roy• 2013</p>
</div>

<div data-folder="3 idiots" class="card">
  <div class="play">

```

```

        <svg width="16" height="16" viewBox="0 0 24 24"
fill="none" xmlns="http://www.w3.org/2000/svg">
            <path d="M5 20V4L19 12L5 20Z" stroke="#141B34"
fill="#000" stroke-width="1.5" stroke-linejoin="round"></path>
        </svg>
    </div>

    
    <h2>3 idiots(Original Motion Picture Soundtrack)</h2>
    <p>Shantanu Moitra • 2009</p>
</div>

</div>
<div class="playbar">
    <div class="seekbar">
        <div class="circle">

        </div>
    </div>
    <div class="abovebar">

        <div class="songinfo">
            <p>No Track/Playlist chosen to play</p>
        </div>
        <div class="songbuttons">
            
            
            
        </div>
        <div class="timevol">

        <div class="songtime">

        </div>
        <div class="volume">
            
            <div class="range">
                <input type="range" name="volume" id="">
            </div>
        </div>
    </div>
</div>
</div>
</div>
</div>

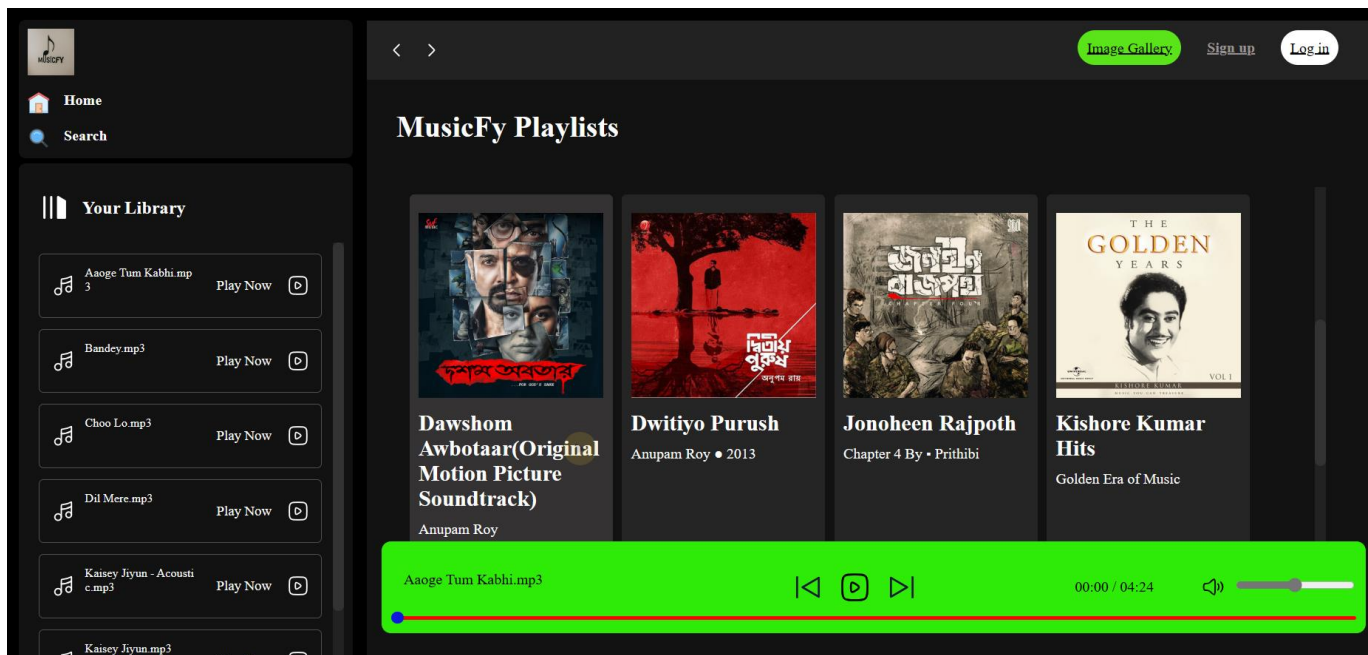
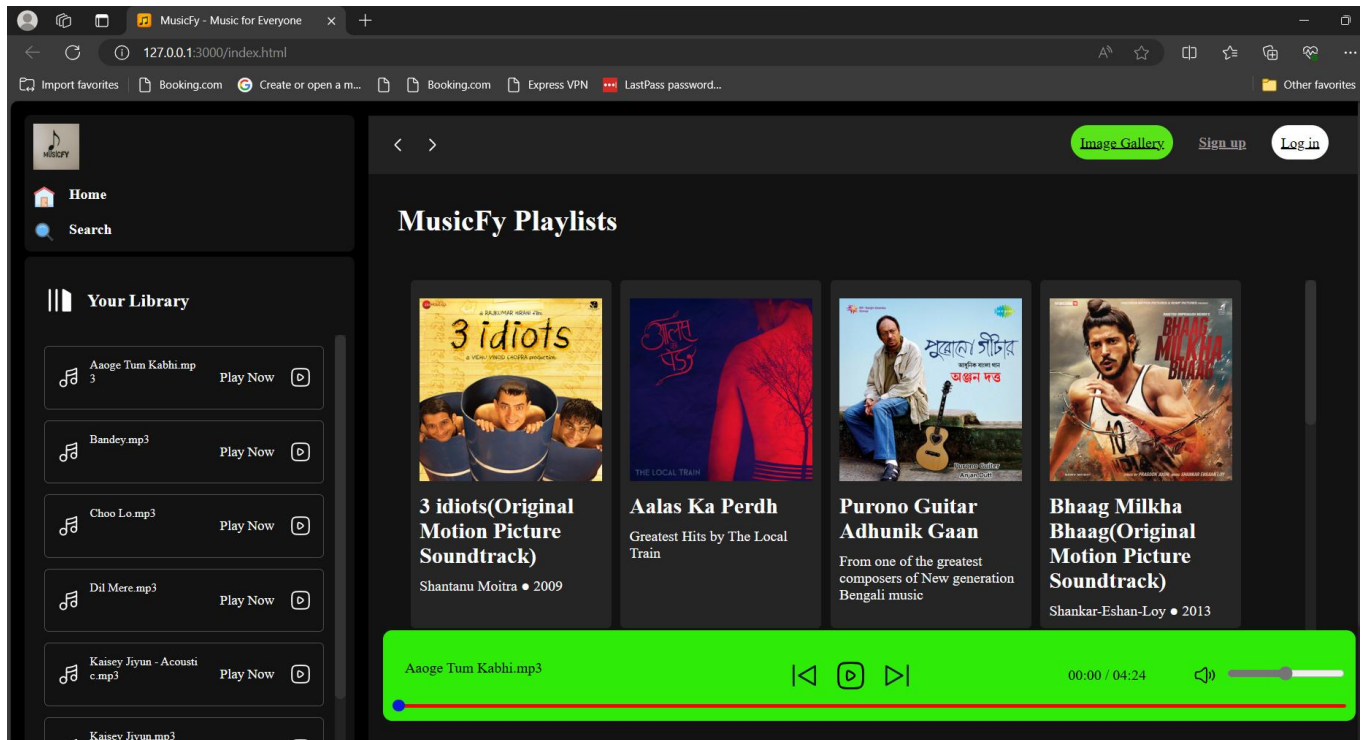
```

```

    </div>
  </div>
  <script src="js/script.js"></script>
</body>

</html>

```



## XAMPP Control Panel :-

XAMPP Control Panel v3.3.0 [ Compiled: Apr 6th 2021 ]

**XAMPP Control Panel v3.3.0**

Modules

Service	Module	PID(s)	Port(s)	Actions
<input type="checkbox"/>	Apache	46288	80, 443	Stop Admin Config Logs
<input type="checkbox"/>	MySQL	51548	3310	Stop Admin Config Logs
<input type="checkbox"/>	FileZilla			Start Admin Config Logs
<input type="checkbox"/>	Mercury			Start Admin Config Logs
<input type="checkbox"/>	Tomcat			Start Admin Config Logs

Config Netstat Shell Explorer Services Help Quit

21:01:08 [main] Initializing Control Panel  
21:01:08 [main] Windows Version: Home 64-bit  
21:01:08 [main] XAMPP Version: 8.2.12  
21:01:08 [main] Control Panel Version: 3.3.0 [ Compiled: Apr 6th 2021 ]  
21:01:08 [main] You are not running with administrator rights! This will work for most application stuff but whenever you do something with services there will be a security dialogue or things will break! So think about running this application with administrator rights!  
21:01:08 [main] XAMPP Installation Directory: "c:\\xampp\\"  
21:01:08 [main] Checking for prerequisites

## Planning Of Work :-

### 1. Project Initiation -

- Define Project Scope and Objectives
- Set up Development Environment (IDE, Version Control)
- Research Spotify's Features and User Interface
- Create Project Documentation (Overview, Aims, Objectives)

### 2. Front-End Development –

- Develop HTML Structure for main page home, where playlists are displayed and songs are loaded upon click on the left side of the webpage, sign up and login buttons are also included.
- Implement CSS for Styling and JavaScript for responsiveness

### 3. Audio Playback and Controls –

- Implement Play, Pause, Next buttons and Volume Controls
- Develop Seekbar for Track Duration
- Ensure responsiveness across devices.

### 4. Multimedia Integration –

- Display Album Artwork
- Test and Optimize Multimedia Features

### 5. Responsive Design and Testing –

- Optimize CSS for Responsive Design and usage of JavaScript
- Test Compatibility Across Devices (Desktop, Mobile, Tablet)
- Address and Resolve Responsive Design Issues
- Conduct User Testing for Front-End Functionality

### 6. User Authentication and Profiles –

- Design User Authentication Flow
- Implement User Sign Up and Login

### 7. PHP and MySQL database connectivity –

- PHP – Develop server-side scripting logic using PHP to handle user authentication, data processing and service requests.
- Integrate PHP scripts with HTML pages to create dynamic web applications.
- MySQL Database: Set up a MySQL database to store user data.
- Design database tables, establish connections, and implement CRUD (Create, Read, Update, Delete) operations.

### 8. Documentation and Finalization –

- Create Comprehensive Project Documentation

Conduct Final Testing and Debugging  
Prepare Deployment Plan, Ensure All Code and Assets are Well-Documented

## **Conclusion :-**

The journey of developing the MusicFy Clone has been a testament to the fusion of creativity, technology, and unwavering commitment. From the inception of the project, where the scope and objectives were defined, to the meticulous planning and execution of each development phase, I embarked on a transformative exploration of web technology.

As the front-end unfolded, I sculpted a user interface that not only mirrored the sleek design of Spotify but also encapsulated a unique identity. The integration of audio playback and controls brought life to the platform, ensuring a harmonious experience for music enthusiasts across different browsers and devices.

The MusicFy Clone project serves as a testament to our unwavering dedication to furnishing users with a seamless, personalized, and secure musical sanctuary. Its development has been a synthesis of technological prowess and artistic sensibility.

In summary, the culmination of the MusicFy Clone project underscores its significance as more than a mere technical endeavor; it represents a meticulous orchestration of passion, innovation, and a steadfast commitment to user-centric design principles.

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