**JEEVANDEEP MAHAVIDYALAYA VARANASI**

**MINOR PROJECT CERTIFICATE**

Department of Computer Applications

This is to certify that the Minor Project entitled "[Spotify]" submitted by [DEEPAK PATEL], Roll No. [13223407058], a student of Bachelor of Computer Applications (BCA), [5th  Sem 3rd Year], has been successfully completed under my guidance and supervision as part of the partial fulfillment for the award of the degree.

The project embodies the results of original work carried out by the student during the academic session [2022-2025] and has not been submitted elsewhere for the award of any degree or diploma.

Project Guide

[Prof.Rajesh Kumar Mishra]

Head of Department

[Mr. Vikram Pratap Singh]

Date: \_\_\_\_\_\_\_\_\_\_\_

Place: \_\_\_\_\_\_\_\_\_\_\_

**INTRODUCTION**

Here's a potential introduction for a Spotify music clone project:

Title: "RhythmHub: A Spotify Clone Project"

Overview: RhythmHub is a music streaming platform inspired by Spotify, offering users access to a vast music library, personalized recommendations, and social features. This project aims to replicate Spotify's core features while introducing unique twists to enhance user experience.

Key Features:

1. Music library with search and playback functionality

2. Personalized recommendations and playlists

3. User profiles and social features (following, playlists, etc.)

4. Playlists and playlist management

5. Music discovery and exploration

Goals:

1. Develop a functional music streaming platform

2. Implement user-friendly interface and features

3. Provide high-quality music streaming experience

4. Foster community engagement through social features

Technologies:

1. Front-end: React, CSS, JavaScript

2. Back-end: Node.js, Express

3. Database: MongoDB or PostgreSQL

4. APIs: Music metadata and streaming APIs

Target Audience:

1. Music enthusiasts

2. Users seeking personalized music experiences

3. Social music platform users

Would you like me to elaborate on any aspect of this project?

Style.css

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Spotify-Login Page</title>

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-QWTKZyjpPEjISv5WaRU9OFeRpok6YctnYmDr5pNlyT2bRjXh0JMhjY6hW+ALEwIH" crossorigin="anonymous">

    <style>

        body {

            font-family: Arial, sans-serif;

            margin: 0;

            padding: 0;

            background: linear-gradient(to bottom, #1DB954, #191414);

            height: 100%;

            color: white;

        }

        .container {

            max-width: 400px;

            margin: 50px auto;

            background: #121212;

            padding: 20px;

            border-radius: 8px;

            box-shadow: 0 4px 10px rgba(0, 0, 0, 0.3);

        }

        .container h1 {

            text-align: center;

            margin-bottom: 20px;

            font-size: 1.8em;

        }

        .form-group {

            margin-bottom: 15px;

        }

        .form-group label {

            display: block;

            font-size: 0.9em;

            margin-bottom: 5px;

        }

        .form-group input {

            width: 100%;

            padding: 10px;

            font-size: 1em;

            border: none;

            border-radius: 4px;

            background: #333;

            color: white;

        }

        .form-group input::placeholder {

            color: #888;

        }

        .form-group input:focus {

            outline: none;

            box-shadow: 0 0 5px #1DB954;

        }

        .form-btn {

            text-align: center;

            margin-top: 20px;

        }

        .btn {

            display: inline-block;

            padding: 10px 20px;

            font-size: 1em;

            background: #1DB954;

            color: white;

            border: none;

            border-radius: 4px;

            cursor: pointer;

            transition: background 0.3s;

        }

        .btn:hover {

            background: #159b44;

        }

        .register-link {

            text-align: center;

            margin-top: 15px;

            font-size: 0.9em;

        }

        .register-link a {

            color: #1DB954;

            text-decoration: none;

            transition: color 0.3s;

        }

        .register-link a:hover {

            color: #159b44;

        }

    </style>

</head>

<body>

    <div class="container">

        <h1>Login</h1>

        <form>

            <div class="form-group">

                <label for="email">Email</label>

                <input type="email" id="email" name="email" placeholder="Enter your email" required>

            </div>

            <div class="form-group">

                <label for="password">Password</label>

                <input type="password" id="password" name="password" placeholder="Enter your password" required>

            </div>

            <div class="form-btn">

                <button type="submit" class="btn-primary" id="btn-login" name="submit">Log In</button>

            </div>

            <div class="register-link">

                Don't have an account? <a href="registration.html">Sign up</a>

            </div>

        </form>

    </div>

    <script src="login.js"></script>

</body>

</html>

Utility.css

.border {

    border: 2px solid red;

    margin: 3px;

}

.flex {

    display: flex;

}

.justify-center {

    justify-content: center;

}

.items-center {

    align-items: center;

}

.bg-black {

    background-color: black;

    color: white;

}

.invert {

    filter: invert(1);

}

.bg-grey {

    background-color: #121212;

}

.rounded {

    border-radius: 7px;

}

.m-1 {

    margin: 5px;

}

.p-1 {

    padding: 10px;

}

::-webkit-scrollbar {

    width: 12px;

}

::-webkit-scrollbar-thumb {

    background-color: #333;

    border-radius: 6px;

}

::-webkit-scrollbar-track {

    background-color: #222;

}

/\* scrollbar-color: #333 #222; \*/

Script.css

console.log('Lets write JavaScript!');

let currentSong = new Audio();

let songs;

let currFolder;

function secondsToMinutesSeconds(seconds) {

    if (isNaN(seconds) || seconds < 0) {

        return "00:00";

    }

    const minutes = Math.floor(seconds / 60);

    const remainingSeconds = Math.floor(seconds % 60);

    const formattedMinutes = String(minutes).padStart(2, '0');

    const formattedSeconds = String(remainingSeconds).padStart(2, '0');

    return `${formattedMinutes}:${formattedSeconds}`;

}

async function getSongs(folder) {

    currFolder = folder;

    let a = await fetch(`http://127.0.0.1:3000/${folder}/`);

    let response = await a.text();

    let div = document.createElement("div")

    div.innerHTML = response;

    let as = div.getElementsByTagName("a")

    songs = []

    for (let index = 0; index < as.length; index++) {

        const element = as[index];

        if (element.href.endsWith(".mp3")) {

            songs.push(element.href.split(`/${folder}/`)[1])

        }

    }

    //show all the songs in the playlist

    let songUL = document.querySelector(".songList").getElementsByTagName("ul")[0]

    songUL.innerHTML = ""

    for (const song of songs) {

        songUL.innerHTML = songUL.innerHTML + `<li><img class="invert" src="img/music.svg" alt="">

                            <div class="info">

                                <div> ${song.replaceAll("%20", " ")}</div>

                                <div></div>

                            </div>

                            <div class="playnow">

                                <span>Playnow</span>

                                <img class="invert" src="img/play.svg" alt="">

                            </div></li>`;

    }

    // Attach an event listener to each song

    Array.from(document.querySelector(".songList").getElementsByTagName("li")).forEach(e => {

        e.addEventListener("click", element => {

            console.log(e.querySelector(".info").firstElementChild.innerHTML)

            playMusic(e.querySelector(".info").firstElementChild.innerHTML.trim())

        })

    })

    return songs;

}

const playMusic = (track, pause = false) => {

    currentSong.src = `/${currFolder}/` + track

    if (!pause) {

        currentSong.play()

        play.src = "img/pause.svg"

    }

    document.querySelector(".songinfo").innerHTML = decodeURI(track)

    document.querySelector(".songtime").innerHTML = "00:00 / 00:00"

}

async function displayAlbums() {

    let a = await fetch(`http://127.0.0.1:3000/songs/`);

    let response = await a.text();

    let div = document.createElement("div")

    div.innerHTML = response;

    let anchors = div.getElementsByTagName("a")

    let cardContainer = document.querySelector(".cardContainer")

    let array = Array.from(anchors)

        for(let index = 0; index < anchors.length; index++) {

            const e = array[index];

        if (e.href.includes("/songs")) {

          let folder = e.href.split("/").slice(-2)[0]

          //Get the metadata of the folder

        let a = await fetch(`http://127.0.0.1:3000/songs/${folder}/info.json`);

        let response = await a.json();

        console.log(response)

        cardContainer.innerHTML = cardContainer.innerHTML +

        `<div data-folder="${folder}" 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"

                            stroke-width="1.5" fill="white"

                            stroke-linejoin="round"/>

                            </svg>

                        </div>

                        <img src="/songs/${folder}/cover.jpg" alt="">

                        <h2>${response.title}</h2>

                        <p>${response.description}</p>

                    </div>`

        }

    }

    //Load the playlist whenever card is clicked

    Array.from(document.getElementsByClassName("card")).forEach(e => {

        e.addEventListener("click", async item => {

            songs = await getSongs(`songs/${item.currentTarget.dataset.folder}`)

            playMusic(songs[0])

        })

    })

}

async function main() {

    //get the list of all the songs

    await getSongs("/songs/cs")

    playMusic(songs[0], true)

    //Display all the albums on the page

    displayAlbums()

    //Attach an event listener to the play, next and previous buttons

    play.addEventListener("click", () => {

        if (currentSong.paused) {

            currentSong.play();

            play.src = "img/pause.svg"

        }

        else {

            currentSong.pause()

            play.src = "img/play.svg"

        }

    })

    // Listen to the timeupdate event

    currentSong.addEventListener("timeupdate", () => {

        console.log(currentSong.currentTime, currentSong.duration)

        document.querySelector(".songtime").innerHTML = `${secondsToMinutesSeconds(currentSong.currentTime)}/${secondsToMinutesSeconds(currentSong.duration)}`

        document.querySelector(".circle").style.left = (currentSong.currentTime / currentSong.duration) \* 100 + "%";

    })

    //Add an event listener to the seekbar

    document.querySelector(".seekbar").addEventListener("click", e => {

        let percent = (e.offsetX/e.target.getBoundingClientRect().width) \* 100;

        document.querySelector(".circle").style.left = percent + "%";

        currentSong.currentTime = ((currentSong.duration) \* percent) / 100;

    })

    //Add an event listener for hamburger

    document.querySelector(".hamburger").addEventListener("click", () => {

        document.querySelector(".left").style.left = "0"

    })

    //Add an event listener for close button

    document.querySelector(".close").addEventListener("click", () => {

        document.querySelector(".left").style.left = "-120%";

    })

    //Add an event listener to previous

    previous.addEventListener("click", () => {

        currentSong.pause()

        let index = songs.indexOf(currentSong.src.split("/").slice(-1)[0])

        if ((index - 1) >= 0) {

            playMusic(songs[index - 1])

        }

    })

    //Add an event listener to next

    next.addEventListener("click", () => {

        currentSong.pause()

        let index = songs.indexOf(currentSong.src.split("/").slice(-1)[0])

        if ((index + 1) < songs.length) {

            playMusic(songs[index + 1])

        }

    })

    // Add an event listener to the volume bar

    document.querySelector(".range").getElementsByTagName("input")[0].addEventListener("change", (e) => {

        currentSong.volume = parseInt(e.target.value) / 100;

        if (currentSong.volume > 0) {

            document.querySelector(".volume>img").src =  document.querySelector(".volume>img").src.replace("mute.svg", "volume.svg")

        }

    })

    //Add event listener to mute the track

    document.querySelector(".volume>img").addEventListener("click", e => {

        if(e.target.src.includes("volume.svg")) {

            e.target.src =e.target.src.replace("volume.svg", "mute.svg")

            currentSong.volume = 0;

            document.querySelector(".range").getElementsByTagName("input")[0].value = 0;

        }

        else {

            e.target.src = e.target.src.replace("mute.svg", "volume.svg")

            currentSong.volume = .10;

            document.querySelector(".range").getElementsByTagName("input")[0].value = 10;

        }

    })

}

main()

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>Spotify - Web Player: Music for everyone</title>

</head>

<body>

    <div class="container flex bg-black">

        <div class="left">

            <div class="close">

                <img width="30" class="invert" src="img/close.svg" alt="">

            </div>

            <div class="home bg-grey rounded m-1 p-1">

                <div class="logo"><a href="index.html"><img width="110" class="invert" src="img/logo.svg" alt=""></a></div>

                <ul>

                    <li id="searchBar"><img class="invert" src="img/home.svg" alt="home"><a href="index.html" style="text-decoration: none; color: white;">Home</a></li>

                    <li id="searchBar"><img class="invert"   src="img/search.svg" alt="home">Search</li>

                </ul>

            </div>

            <div class="library bg-grey rounded m-1 p-1">

                <div class="heading">

                    <img class="invert" src="img/playlist.svg" alt="">

                    <h2>

                        Your Library

                    </h2>

                </div>

                <div class="songList">

                    <ul>

                    </ul>

                </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>

        <div class="right bg-grey rounded">

            <div class="header">

                <div class="nav">

                    <div class="hamburgerContainer">

                        <img width="40" class="invert hamburger" src="img/hamburger.svg" alt="">

                        <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 class="buttons">

                    <a class="signupbtn" href="registration.html" style="text-decoration: none;">Sign up</a>

                    <a class="loginbtn" href="login.html" style="text-decoration: none;">Log in</a>

                </div>

            </div>

            <div class="spotifyPlaylists">

                <h1>Spotify Playlists</h1>

                <div class="cardContainer">

                </div>

                <div class="playbar">

                    <div class="seekbar">

                        <div class="circle">

                        </div>

                    </div>

                    <div class="abovebar">

                        <div class="songinfo">

                        </div>

                        <div class="songbuttons">

                            <img width="35" id="previous" src="img/prevsong.svg" alt="">

                            <img width="35" id="play" src="img/play.svg" alt="">

                            <img width="35" id="next" src="img/nextsong.svg" alt="">

                        </div>

                        <div class="timevol">

                            <div class="songtime">

                            </div>

                            <div class="volume">

                                <img width="25" src="img/volume.svg" alt="">

                                <div class="range">

                                    <input type="range" name="volume" id="">

                                </div>

                            </div>

                        </div>

                    </div>

                </div>

            </div>

        </div>

    </div>

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

</body>

</html>

Login.html

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Spotify-Login Page</title>

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-QWTKZyjpPEjISv5WaRU9OFeRpok6YctnYmDr5pNlyT2bRjXh0JMhjY6hW+ALEwIH" crossorigin="anonymous">

    <style>

        body {

            font-family: Arial, sans-serif;

            margin: 0;

            padding: 0;

            background: linear-gradient(to bottom, #1DB954, #191414);

            height: 100%;

            color: white;

        }

        .container {

            max-width: 400px;

            margin: 50px auto;

            background: #121212;

            padding: 20px;

            border-radius: 8px;

            box-shadow: 0 4px 10px rgba(0, 0, 0, 0.3);

        }

        .container h1 {

            text-align: center;

            margin-bottom: 20px;

            font-size: 1.8em;

        }

        .form-group {

            margin-bottom: 15px;

        }

        .form-group label {

            display: block;

            font-size: 0.9em;

            margin-bottom: 5px;

        }

        .form-group input {

            width: 100%;

            padding: 10px;

            font-size: 1em;

            border: none;

            border-radius: 4px;

            background: #333;

            color: white;

        }

        .form-group input::placeholder {

            color: #888;

        }

        .form-group input:focus {

            outline: none;

            box-shadow: 0 0 5px #1DB954;

        }

        .form-btn {

            text-align: center;

            margin-top: 20px;

        }

        .btn {

            display: inline-block;

            padding: 10px 20px;

            font-size: 1em;

            background: #1DB954;

            color: white;

            border: none;

            border-radius: 4px;

            cursor: pointer;

            transition: background 0.3s;

        }

        .btn:hover {

            background: #159b44;

        }

        .register-link {

            text-align: center;

            margin-top: 15px;

            font-size: 0.9em;

        }

        .register-link a {

            color: #1DB954;

            text-decoration: none;

            transition: color 0.3s;

        }

        .register-link a:hover {

            color: #159b44;

        }

    </style>

</head>

<body>

    <div class="container">

        <h1>Login</h1>

        <form>

            <div class="form-group">

                <label for="email">Email</label>

                <input type="email" id="email" name="email" placeholder="Enter your email" required>

            </div>

            <div class="form-group">

                <label for="password">Password</label>

                <input type="password" id="password" name="password" placeholder="Enter your password" required>

            </div>

            <div class="form-btn">

                <button type="submit" class="btn-primary" id="btn-login" name="submit">Log In</button>

            </div>

            <div class="register-link">

                Don't have an account? <a href="registration.html">Sign up</a>

            </div>

        </form>

    </div>

    <script src="login.js"></script>

</body>

</html>

Login.js

document.querySelector(".btn-primary").addEventListener("click", function (e) {

    e.preventDefault();

    const email = document.getElementById('email').value.trim();

    const password = document.getElementById('password').value.trim();

    if (!email || !password) {

      alert('Please fill in all fields.');

      return;

    }

    // Example: Perform login logic (replace with actual backend integration)

    if (email === "utsav@gmail.com" && password === "password") {

      alert('Login successful! Utsav');

      window.location.href = "index.html";

      document.querySelector("#login").remove;

    }// Redirect to homepage

    else if (email === "sujeet@gmail.com" && password === "password") {

        alert('Login successful! Sujeet');

        window.location.href = "index.html";

    }

    else if (email === "tanay@gmail.com" && password === "password") {

        alert('Login successful! Tanay');

        window.location.href = "index.html";

    }

    else if (email === "Shivamyadav@gmail.com" && password === "YadavG4041") {

      alert('Login successful! shivam yadav ji');

      window.location.href = "index.html";

    }

    else if (email === "ankit@gmail.com" && password === "password") {

      alert('Login successful! Ankit Yadav');

      window.location.href = "index.html";

    }

    else if (email === "shivamyadav@gmail.com" && password === "yadavG4041") {

      alert('Login successful! welcomeYadav ji');

      window.location.href = "index.html";

    }

    else if (email === "anil@gmail.com" && password === "password") {

        alert('Login successful! Anil Ku. Yadav');

        window.location.href = "index.html";

    }

    else if (email === "deepak@gmail.com" && password === "password") {

      alert('Login successful! deepak patel');

      window.location.href = "index.html";

    }

    else {

      alert('Invalid email or password.');

    }

  });

Registration.html

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Spotify - Registration</title>

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-QWTKZyjpPEjISv5WaRU9OFeRpok6YctnYmDr5pNlyT2bRjXh0JMhjY6hW+ALEwIH" crossorigin="anonymous">

    <link rel="stylesheet" href="style.css">

</head>

<body>

    <div class="container">

        <h1>Register</h1>

        <form action="registration.php" method="POST">

            <div class="form-group">

                <label for="username">Username</label>

                <input type="text" id="username" name="username" placeholder="Enter your username" required>

            </div>

            <div class="form-group">

                <label for="email">Email</label>

                <input type="email" id="email" name="email" placeholder="Enter your email" required>

            </div>

            <div class="form-group">

                <label for="password">Password</label>

                <input type="password" id="password" name="password" placeholder="Enter your password" required>

            </div>

            <div class="form-group">

                <label for="confirm-password">Confirm Password</label>

                <input type="password" id="confirm-password" name="confirm-password" placeholder="Confirm your password" required>

            </div>

            <button type="submit" class="btn" name="submit">Sign Up</button>

        </form>

        <div class="login-link">

            Already have an account? <a href="login.php">Log in</a>

        </div>

    </div>

</body>

</html>

Style.css

body {

    font-family: Roboto;

    margin: 0;

    padding: 0;

    background: linear-gradient(to bottom, #1DB954, #191414);

    color: white;

}

.container {

    max-width: 400px;

    margin: 50px auto;

    background: #121212;

    padding: 20px;

    border-radius: 8px;

    box-shadow: 0 4px 10px rgba(0, 0, 0, 0.3);

}

.container h1 {

    text-align: center;

    margin-bottom: 20px;

    font-size: 1.8em;

}

.form-group {

    margin-bottom: 15px;

}

.form-group label {

    display: block;

    font-size: 0.9em;

    margin-bottom: 5px;

}

.form-group input {

    width: 100%;

    padding: 10px;

    font-size: 1em;

    border: none;

    border-radius: 4px;

    background: #333;

    color: white;

}

.form-group input::placeholder {

    color: #888;

}

.form-group input:focus {

    outline: none;

    box-shadow: 0 0 5px #1DB954;

}

.btn {

    display: block;

    width: 100%;

    padding: 10px;

    font-size: 1em;

    background: #1DB954;

    color: white;

    border: none;

    border-radius: 4px;

    cursor: pointer;

    transition: background 0.3s;

}

.btn:hover {

    background: #159b44;

}

.login-link {

    text-align: center;

    margin-top: 15px;

    font-size: 0.9em;

}

.login-link a {

    color: #1DB954;

    text-decoration: none;

    transition: color 0.3s;

}

.login-link a:hover {

    color: #159b44;

}