

S.M.B.S.T. COLLAGE OF SANGAMNER



**A
PROJECT REPORT
ON
“Spotify Web Application ”**

Submitted to

AT



SAVITRIBAI PHULE PUNE UNIVERSITY

IN PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE AWARD OF THE

Bachelor of Business Administration (Computer Application)

SUBMITTED BY,

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MR. SAWANT SAHIL ARUN

UNDER THE GUIDANCE OF

THROUGH

Sahakar Maharshi Bhausaheb Santuji Thorat College of Arts,

Science & Commerce

Tal. Sangamner,

Dist.A. Nagar.



Certificate

This is to certify that,

MR.SHINDE SAURABH ARUN

MR.SAWANT SAHIL ARUN

Has satisfactorily completed the work entitled.

“Spotify web application”

This work is being practical Requirement of T.Y.BBA (C.A). It is submitted in the partial Fulfilment of the prescribed syllabus Savitribai Phule University of Pune for the Academic Year:

2023-2024

Prof. Gunjal.R .S

(H.O.D)

Internal Examiner

Prof.Gunjal.R .S

(Project Guide)

External Examiner

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I would also want to thank the department of BBA(C.A) for accepting my project in my desired field of expertise. I'd also like to thank my friends and parents for their support and encouragement as I worked on this assignment.

It given me great pleasure to present my project report on “Spotify web applications ” , for “Sahakar Maharshi Bhausaheb Santuji Thorat College of Arts,Science & Commerce ” . As per requirement of the curriculum of the course of “Bachelor of Business Administration (Computer Application)” from the University of Pune .

Firstly, I amheartily thankful to project conductor and guide Prof.Gunjal.R.S For selecting this project.

I am also thankful to our coordinator of our BBA(CA) . Of our college Prof.Gunjal.R.S.

(H.O.D of BBA(CA) Department)

Your Sincerely,
Mr. Shinde Saurabh Arun
Mr. Sawant Sahil Arun



2)Documentation Certification of Project

This is to certify that, has successfully completed and submitted the project documentation for the project titled Study Center Management System conducted for real time chat application as part of the requirements for the completion of the project at **Sahakar Maharshi Bhausaheb Santuji Thorat College of Arts, Science, Commerce, Sangamner.**

The project was conducted at **“Spotify Web Application”** , and has been found to be a comprehensive and well documented representation of real time chat application. The student’s dedication and commitment to this project are commendable.

3) Declaration

I, the under Sign “**Mr.Shinde Saurabh Arun & Sawant Sahil Arun**”
Here by declare that the project report entitled. Is there search work made for
Department of BBA(CA), **Smbst College Sangamner**. Genuine and bonafied
work presented by me under she guidance of internal project guide.

The empirical finding in the project is based on the data collected by me.
The matter presented in the project is not copied from any source. I understand
that any such copy is liable to the punishment in way the university authority
deems fit.

The work is not submitted for award any degree or Diploma earlier to
the university of Pune or any other University.

The project report is submitted to (College name affiliated to)
Savitribai Phule Pune University in the partial fulfillment of degree of Bachelor
in Business Administration (Computer Application).

Yours sincerely

Mr. Sinda Saurabh Arun

Mr. Sawant Sahil Arun

4) Introduction

You know how Spotify lets you stream and discover all your favorite music, right? Well, my friend here is working on a web application that's just like Spotify, but with their own unique twist! It's gone have all the features you love, like creating playlists, exploring new music, and following your favorite artists. It's gone be a music lover's dream come true!

We want to make a web application like Spotify This application we made using the frontend languages 'HTML' and 'CSS' and for backend we use the 'JAVASCRIPT' to making this web application we use the 'VS CODE' software in this web application we create the song album and add the songs creating same user interface like Spotify add play pause forward and backward buttons.

1) Scope of system:

- ❖ The project has a wide scope, as it is not intended to a particular organization.
- ❖ This project is going to develop generic software, which can be applied by any businesses organization.
- ❖ More over it provides facility to its customer.
- ❖ Also the software is going to provide a huge amount of summary data.

2) Need of system:

1) **Diverse Music Preferences:**

People have diverse tastes in music, and they seek platforms that can cater to their preferences by offering a wide range of music genres, artists, and playlists. A Spotify clone can fulfill this need by providing access to a vast catalog of songs and personalized recommendations tailored to individual tastes.

2) **Convenience and Accessibility:**

With the proliferation of internet-enabled devices, users expect seamless access to music anytime, anywhere. A Spotify clone web application offers the convenience of streaming music online, allowing users to listen to their favorite tracks on desktops, laptops, smartphones, and tablets with ease.

3) **Social Interaction:**

Music is often a social experience, and users enjoy sharing their favorite songs and discovering new music with friends and family. A Spotify clone with social features such as collaborative playlists, sharing options, and follower/following mechanisms enhances the social aspect of music listening, fostering a sense of community among users.

Objective of system:-

- a. **Provide Access to Vast Music Catalog:** Offer users access to a vast catalog of songs, albums, and playlists from various genres and artists, allowing them to discover new music and enjoy their favorite tracks on demand.
- b. **Personalization and Recommendations:** Implement algorithms to analyze user listening habits, preferences, and behavior to provide personalized recommendations, curated playlists, and tailored music suggestions based on individual tastes and interests.
- c. **User Engagement and Community Building:** Foster a sense of community among music enthusiasts by enabling users to create and share playlists, follow other users, collaborate on playlists, and engage in discussions about music-related topics.
- d. **Enhanced Playback Features:** Provide a seamless and intuitive playback experience with features such as customizable playlists, offline access for listening without an internet connection, cross-device synchronization, and high-quality audio streaming.
- e. **User-Friendly Interface:** Design a user-friendly and visually appealing interface that is easy to navigate, allowing users to effortlessly discover, play, and organize their music collection across various devices and platforms.
- f. **Social Integration:** Integrate social media features to allow users to connect their Spotify clone accounts with their social profiles, share their favorite songs and playlists with friends, and discover new music through social recommendations and interactions.
- g. **Continuous Innovation and Improvement:** Commit to ongoing innovation and improvement by regularly updating the application with new features, optimizations, and enhancements to enhance the user experience and stay ahead of evolving trends in the music streaming industry.

5) Feasibility study:

(1)Technical Feasibility :-

The system must be evaluated from the technical point of view first. The assessment of this feasibility must be base on outline design of system requirements in this term input, output and program procedure are concern. The project should be developing such that the necessary function and performance are achieved within the constraints. The project developed within latest technology available.

(2)Operational Feasibility :-

It is measure of hoe well a proposed system solved problems and taken advantage of the opportunity identified during bakery management system. How it satisfies the requirement and analysis of system development by checking system work cyclically such as purchase. It also prefers to the measure of solving problems with the help of new proposed system. It help if advantage to fulfill the requirement.

(3)Economical Feasibility :-

The proposed system must be justifying be const and benefits criteria to ensure that effort is concentrated project which will give best return earliest. since the system is developing as part of project work there is no mutual cost to spend for proposed system also all resources bare already available. It gives a conduct of system is economically possible for development

6)Analysis: Hardware & Software requirement

Software requirements:-

- Operating system : Microsoft windows 7 or above versions.
- Front end : Html ,css, javascript.
- Text editor : Visual studio code
- Web browser :Chrome, google , opera or above

Hardware requirements:-

- Processor : Intel(R) core™
- Installed ram :4.00 GB or above
- Hard disk :128 GB & more
- Monitor : VGA/SVGA
- Keyboard :104 keys
- Pendrive : 100GB or more

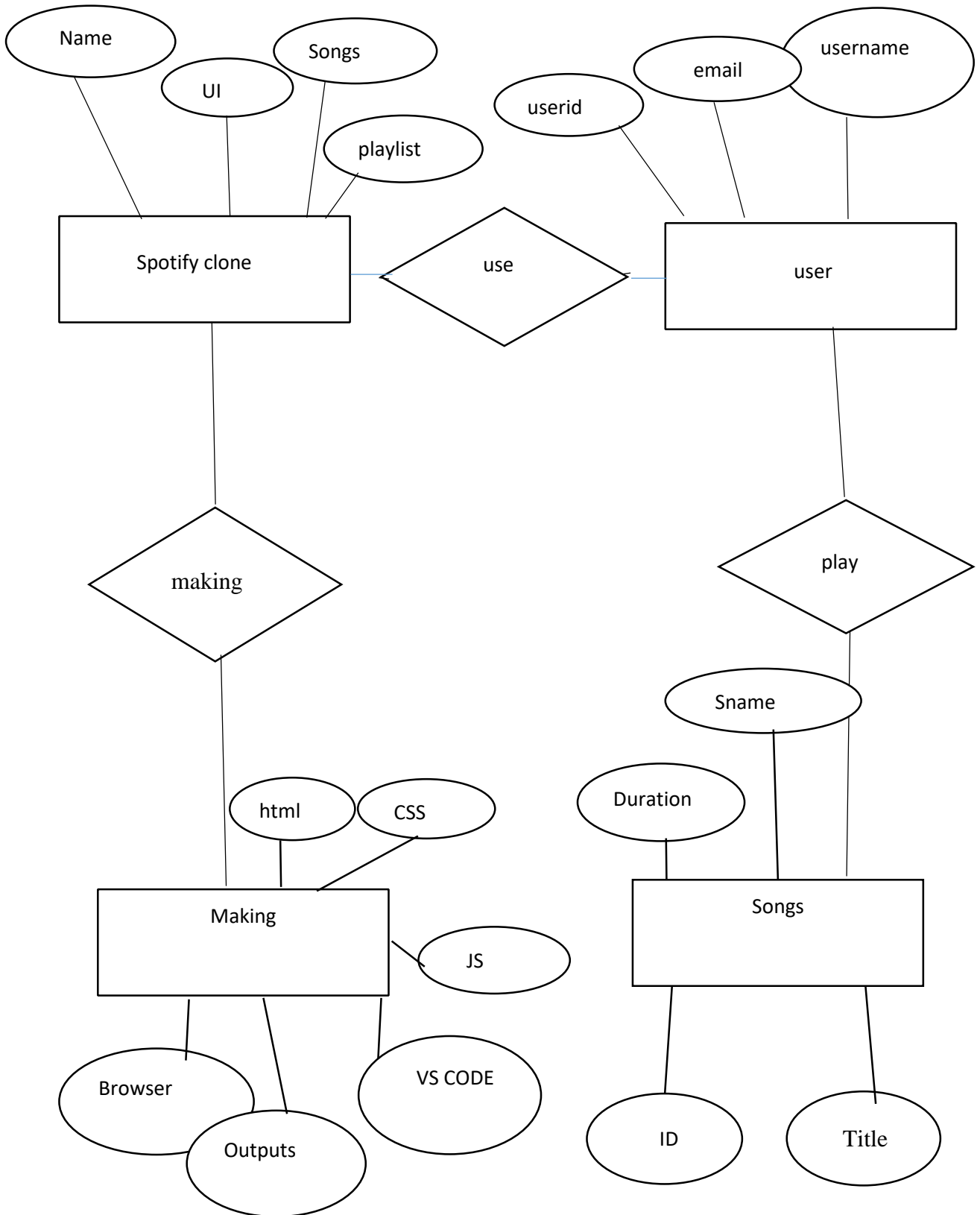
7) Fact Finding Tecnique:

❖ Interview Questions:

- ❖ Can you describe the overall architecture of the Spotify clone web application?
- ❖ What technologies and frameworks did you use to develop the application?
- ❖ How does the application handle user registration and login?
- ❖ How are social interactions and activities displayed in the application?
- ❖ What limitations or restrictions apply to offline access?
- ❖ How does the application ensure high performance and responsiveness, especially during peak usage times?
- ❖ What future features or enhancements are planned for the Spotify clone web application?
- ❖ How do you prioritize and implement new features based on user feedback and market trends?
- ❖ Can users create and manage playlists in the application?

8)System Design

Data Model: ER DIAGRAM



9) Data-dictionary:

User account :-

| Field _Name | Datatype | Size | Constraint |
|-------------|----------|------|-------------|
| User_id | int | 10 | Primary_key |
| User_name | varchar | 20 | Not_null |
| Email | varchar | 20 | Not_null |
| Password | varchar | 20 | Not_null |

album:-

| Field _Name | Datatype | Size | Constraint |
|-------------|----------|------|-------------|
| Album_id | int | 10 | Primary_key |
| Album_title | varchar | 20 | Not_null |
| Relese_year | varchar | 20 | Not_null |
| Artist_id | int | 20 | Not_null |

song:-

| Field _Name | Datatype | Size | Constraint |
|-------------|----------|------|-------------|
| Song_id | int | 10 | Primary_key |
| Song_title | varchar | 20 | Not_null |
| Duration | number | 20 | Not_null |
| Albun_id | int | 20 | Not_null |

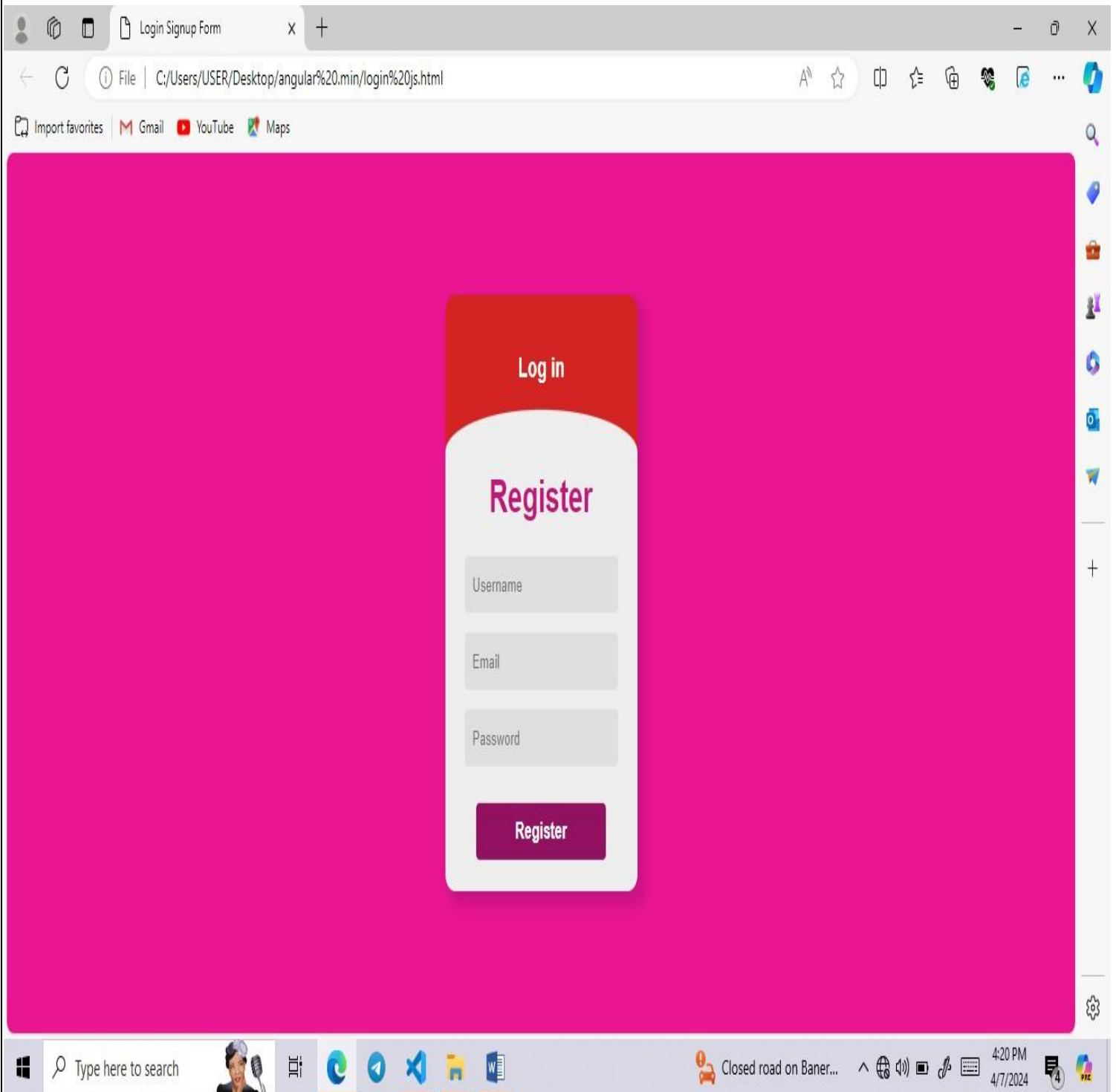
playlist:-

| Field _Name | Datatype | Size | Constraint |
|---------------|----------|------|-------------|
| Playlist_id | int | 10 | Primary_key |
| Playlist_name | varchar | 20 | Not_null |
| User_id | int | 20 | Foregin_key |

Userintraction :-

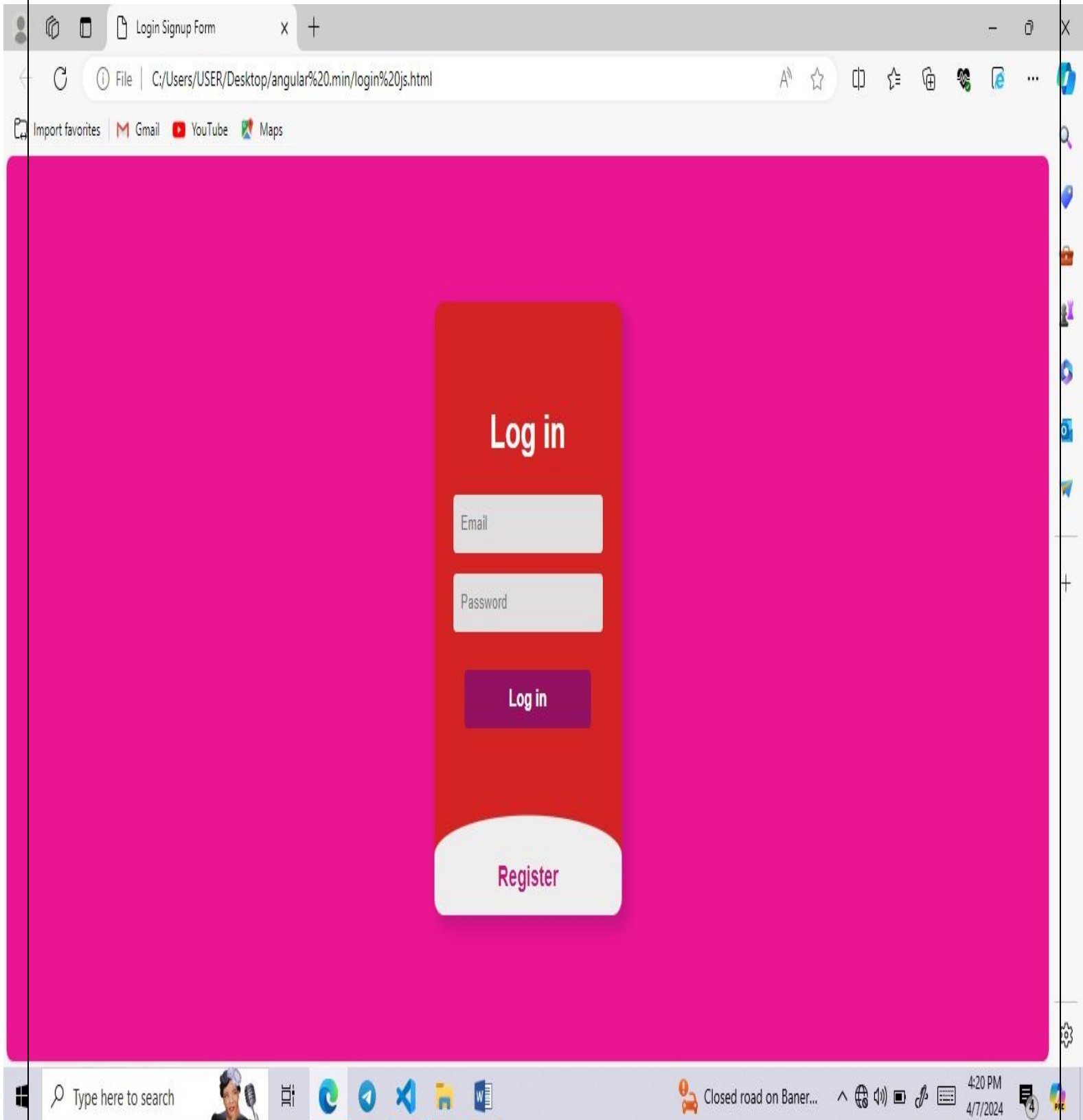
| Field _Name | Datatype | Size | Constraint |
|-----------------|----------|------|-------------|
| Intraction_id | int | 10 | Primary_key |
| User_id | varchar | 20 | Not_null |
| Song_id | varchar | 20 | Not_null |
| Timestamp | int | 20 | Foregin_key |
| Intraction_type | varchar | 20 | Not null |

10)input and output screen:-



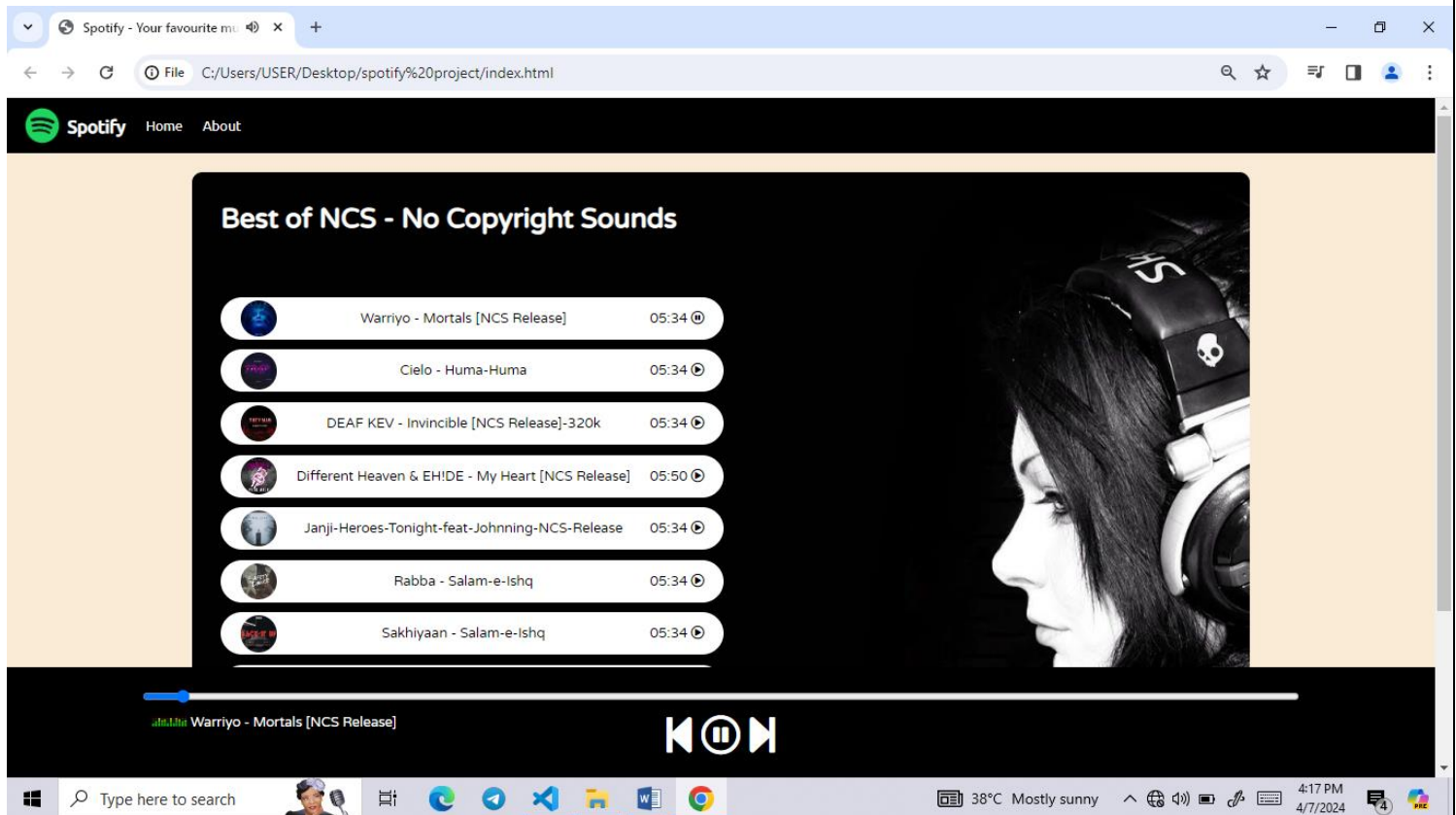
login page:- -

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Spotify - Your favourite music

File C:/Users/USER/Desktop/spotify%20project/index.html

- Warriyo - MORTALS [NCS Release] 05:34
- Cielo - Huma-Huma 05:34
- DEAF KEV - Invincible [NCS Release]-320k 05:34
- Different Heaven & EH!DE - My Heart [NCS Release] 05:50
- Janji-Heroes-Tonight-feat-Johnning-NCS-Release 05:34
- Rabba - Salam-e-Ishq 05:34
- Sakhiyaan - Salam-e-Ishq 05:34
- Bhula Dena - Salam-e-Ishq 05:34
- Tumhari Kasam - Salam-e-Ishq 05:34
- Na Jaana - Salam-e-Ishq 05:34

Warriyo - MORTALS [NCS Release]

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Spotify Web Application

11) Advantages of a Spotify Clone Web Application:

- 1) **Music Variety:** Users can access a vast library of music across genres, ensuring a diverse and enjoyable listening experience.
- 2) **Personalized Playlists:** The application allows users to create personalized playlists tailored to their preferences, moods, and activities.
- 3) **Discoverability:** Smart algorithms suggest new tracks based on users' listening history, promoting music discovery and exploration.
- 4) **Social Interaction:** Users can connect with friends, share playlists, and see what others are listening to, fostering a sense of community around music.
- 5) **Artist Exposure:** Emerging and established artists can showcase their work, gaining exposure and connecting with a broader audience.
- 6) **Ease of Use:** A user-friendly interface simplifies navigation, making it easy for users to find, play, and organize their favorite music.
- 7) **Cross-Platform Access:** The application is accessible across various devices and platforms, providing a consistent experience to users.
- 8) **Offline Listening:** Premium features may include the ability to download music for offline listening, catering to users with limited internet access.
- 9) **Premium Subscriptions:** A subscription model offers additional features such as ad-free listening, higher audio quality, and exclusive content.

12) Limitations of a Spotify Clone Web Application:

- 1) **Copyright and Licensing Issues:** Ensuring proper licensing for the music library is essential to avoid legal complications and copyright infringement.
- 2) **Competition:** The music streaming market is highly competitive, and standing out may be challenging without unique features or partnerships.
- 3) **Dependency on Internet:** Users need a stable internet connection to stream music, limiting accessibility in areas with poor connectivity.
- 4) **Monetization Challenges:** Generating revenue through ads or premium subscriptions may be challenging, especially if users are accustomed to free alternatives.
- 5) **Data Security Concerns:** Handling user data, including personal information and payment details, requires robust security measures to protect against potential breaches.
- 6) **Platform Compatibility:** Ensuring compatibility with various devices and operating systems requires continuous testing and development efforts.
- 7) **Resource Intensive:** Managing a large music library and user base demands significant server resources, impacting operational costs.
- 8) **User Acquisition and Retention:** Attracting and retaining users in a competitive market requires effective marketing strategies and continuous engagement efforts.
- 9) **Technical Challenges:** Maintaining a responsive and bug-free application, especially as the user base grows, poses technical challenges that need constant attention.

13)Future Enhancement

- 1) **Improved Recommendation Algorithms:** Continuously refine and enhance recommendation algorithms to provide even more personalized and accurate music suggestions based on user preferences, listening history, and behavior patterns.
- 2) **Enhanced Social Features:** Introduce new social features such as collaborative playlists, group listening sessions, real-time chat functionality within the app, and the ability to follow and connect with other users who share similar musical interests.
- 3) **Interactive Music Discovery:** Implement interactive features for music discovery, such as interactive maps showing local music scenes and events, integration with concert ticketing platforms, and virtual tours of artists' studios or music venues.
- 4) **Expanded Content Types:** Expand beyond traditional music content to include podcasts, audiobooks, live performances, and exclusive artist interviews, providing users with a diverse range of audio content to explore and enjoy.
- 5) **Integration with Smart Devices:** Integrate with smart home devices and voice assistants to enable handsfree control and playback of music, seamless integration with smart speakers, and personalized voice commands for music discovery and playback.
- 6) **Enhanced Offline Mode:** Improve offline mode functionality to allow users to download entire playlists or albums for offline listening, schedule automatic downloads of new releases or favorite tracks, and seamlessly sync offline content across multiple devices.
- 7) **Customizable User Profiles:** Allow users to create customizable profiles with unique avatars, cover images, and bio sections, enabling self-expression and personalization of their music listening experience.

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- 8) Live Music Streaming: Introduce live music streaming capabilities, allowing users to tune into live performances, concerts, and music festivals from around the world in real-time, and providing interactive features such as live chat with other listeners and virtual merchandise booths.
- 9) Augmented Reality (AR) Integration: Explore AR technology to enhance the music listening experience, such as AR-enabled album covers, immersive virtual concerts, and interactive visualizations that respond to the rhythm and mood of the music.
- 10) Accessibility Features: Improve accessibility features such as text-to-speech support, customizable color schemes and font sizes, and voice commands for navigation and playback control, ensuring that the application is inclusive and accessible to users of all abilities.

14) Conclusion and Recommendation

In conclusion, the development of a Spotify clone web application represents an exciting opportunity to create a platform that celebrates the universal language of music and fosters a sense of community among music enthusiasts. By replicating the core features of the original Spotify platform while adding unique enhancements and innovations, we aim to provide users with a seamless and immersive music streaming experience that caters to their diverse tastes and preferences. Through personalized recommendations, social features, and continuous improvements, our Spotify clone seeks to redefine the way people discover, enjoy, and share music, ultimately inspiring joy, connection, and creativity in the lives of our users. As we embark on this journey, we remain committed to delivering a best-in-class music streaming platform that brings people together through the power of music.

15)Bibliography and References

Most of My project Information came out of my previous Knowledge but some information taken from the Websites

Website

- ❖ www.goggle.com
- ❖ <https://www.wikipedia.org>
- ❖ <https://www.codeproject.com>
- ❖ <https://www.w3schools.com>