

JukeBox

Introduction:

JukeBox Introduction The project aims to develop a music-based application called "JukeBox," providing users with an offline music streaming experience. JukeBox focuses on delivering a seamless and user-friendly interface for music enthusiasts who prefer to listen to their favorite tunes without an active internet connection.

User stories:

- **Song Import Folder**

As a user, I want to import songs from a specific folder so that I can listen to my favorite music in the app.

- **Select Folder:**

As a user, I want to be able to select a specific folder on my device from which to import songs, so that I can choose the music I want to listen to.

- **Update Song Library:**

As a user, I want the app to update my music library automatically when new songs are added to the selected folder, so that I always have access to the latest music.

- **Completion Criteria:**

As a user, I know I am done when I can see all the songs from the selected folder in my app's music library and play them

- **Pause/Play Song**

As a user, I want to be able to pause and play songs so that I can control when I listen to music.

- **Pause Song:**

As a user, I want to be able to pause a song while it is playing, so that I can temporarily stop playback.

- **Play Song:**

As a user, I want to be able to play a paused song, so that I can resume playback from where I left off.

- **Feedback for Playback:**

As a user, I want to receive visual feedback when a song is paused or resumed, so that I know the current playback status.

- **Completion Criteria:**

As a user, I know I am done when I can successfully pause and play songs in the app and see the playback status reflected in the user interface.

- **Previous/Next Song**

As a user, I want to skip to the next song or go back to the previous song so that I can navigate through my playlist easily.

- **Next Song:**

As a user, I want to be able to skip to the next song in the playlist, so that I can move on to the next track without interruption.

- **Previous Song:**

As a user, I want to be able to go back to the previous song in the playlist, so that I can replay a track or listen to it again.

- **Completion Criteria:**

As a user, I know I am done when I can easily navigate through my playlist by skipping to the next song or going back to the previous song, and see the changes reflected in the app's interface.

- **Volume Control**

As a user, I want to adjust the volume of the music so that I can listen at a comfortable level.

- **Visual Feedback for Volume Level:**

As a user, I want to see visual feedback indicating the current volume level, so that I can adjust it accurately.

- **Adjust Volume:**

As a user, I want to be able to adjust the volume of the music playback, so that I can set it to a level that is comfortable for me.

- **Volume Mute:**

As a user, I want the option to mute the music playback, so that I can quickly silence the audio when needed.

- **Looping a Single Song**

As a user, I want to have the ability to loop a single song continuously so that I can immerse myself in its melody without interruption.

- **Selecting Loop Option:**

As a user, I want to be able to activate the loop feature for a specific song with a simple tap or click, ensuring uninterrupted playback.

- **Confirmation of Loop Activation:**

As a user, I want visual confirmation, such as an icon or highlighted button, indicating that the loop feature is activated for the selected song.

- **Loop Playlist**

As a user, I want the option to loop an entire playlist so that I can enjoy my favorite songs in sequence without having to manually restart the playlist.

- **Activating Loop for Playlist:**

As a user, I want to be able to activate the loop feature for a playlist with a simple toggle switch or button.

- **Visual Confirmation:**

As a user, I expect to see a clear visual indicator, like an icon or highlighted button, when the loop feature is activated for a playlist.

- **Shuffle Song**

As a user, I want the ability to shuffle the order of songs within a playlist or album so that I can enjoy a fresh listening experience.

- **Song Information**

As a user, I want the app to automatically import song metadata such as title, artist, and album when importing songs from a specific folder so that the basic information is displayed alongside each song in my music library, making it organized and easy to navigate.

- **Search Song/Artist/Album**

As a user, I want to search for songs, artists, or albums so that I can quickly find and play the music I want.

- **Acceptance Criteria:**

- **Search Functionality:**

- The app should have a search bar where I can enter the name of a song, artist, or album.

- **Search Results:**

- The search results should display matching song based on my search query.

- **Play Song:**

- I should be able to play a song directly from the search results.

- **Completion Criteria:**

- I know I am done when I can search for a song, artist, or album and play the music I searched for.

- **Song Lyrics**

As a user, I want to view the lyrics of a song so that I can sing along or understand the lyrics better.

- **Acceptance Criteria:**

- The app should display the lyrics of the currently playing song.

- **Completion Criteria:**

- I know I am done when I can view the lyrics of a song, and they are synced (if applicable) and scrollable for easy reading.

- **Favorite Songs**

As a user, I want to be able to mark songs as favorites so that I can easily access and listen to them later.

- **Acceptance Criteria:**

- **Mark as Favorite:**

- I should be able to mark a song as a favorite from a dedicated "Favorite" button.

- **View Favorites:**

- There should be a section in the app where I can view all my favorite songs.

- **Remove from Favorites:**

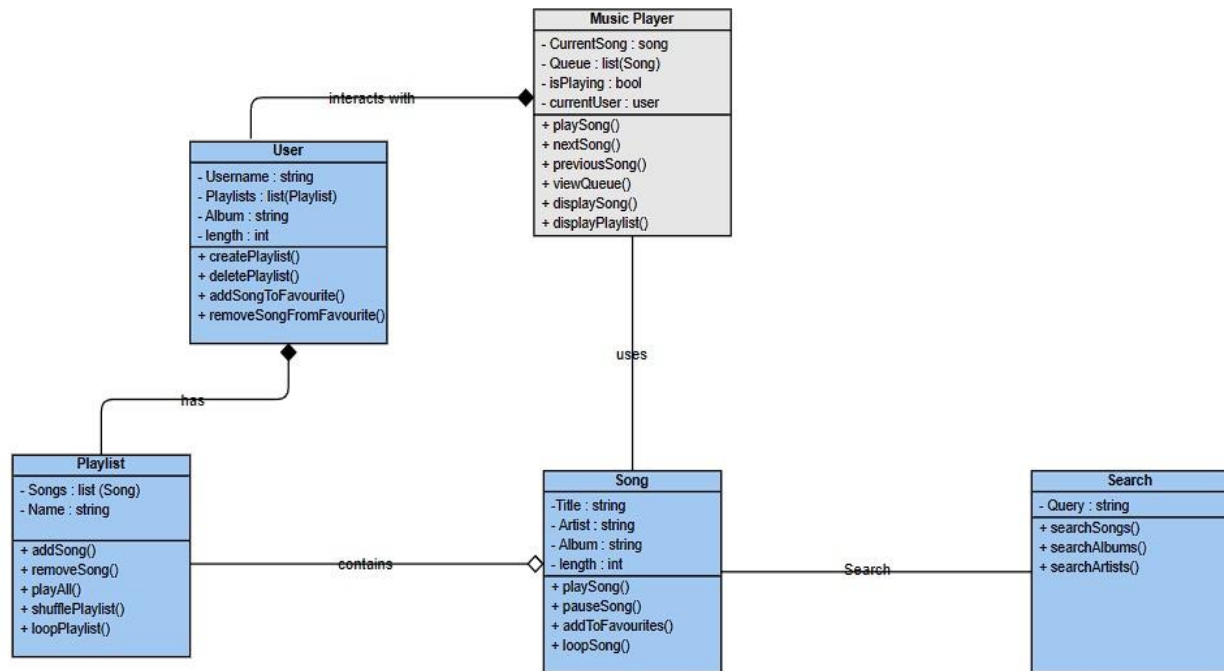
- I should be able to remove a song from my favorites list if I no longer want it saved.

- **Completion Criteria:**

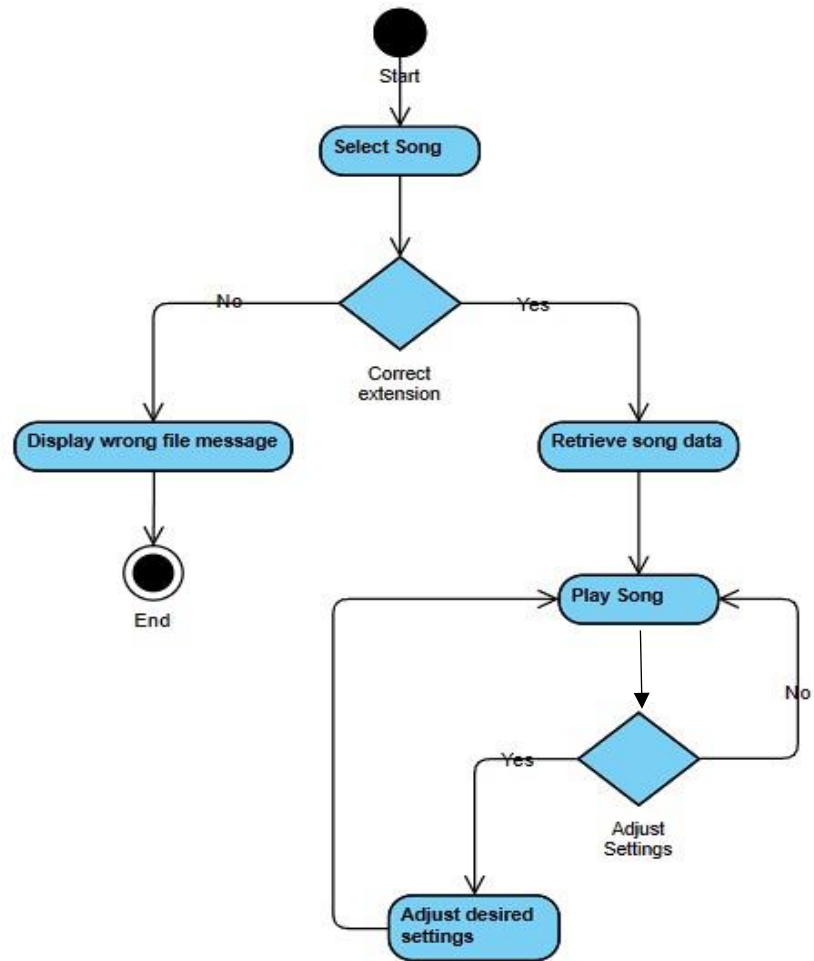
I know I am done when I can mark songs as favorites, view my list of favorite songs, and remove songs from my favorites list.

Design:

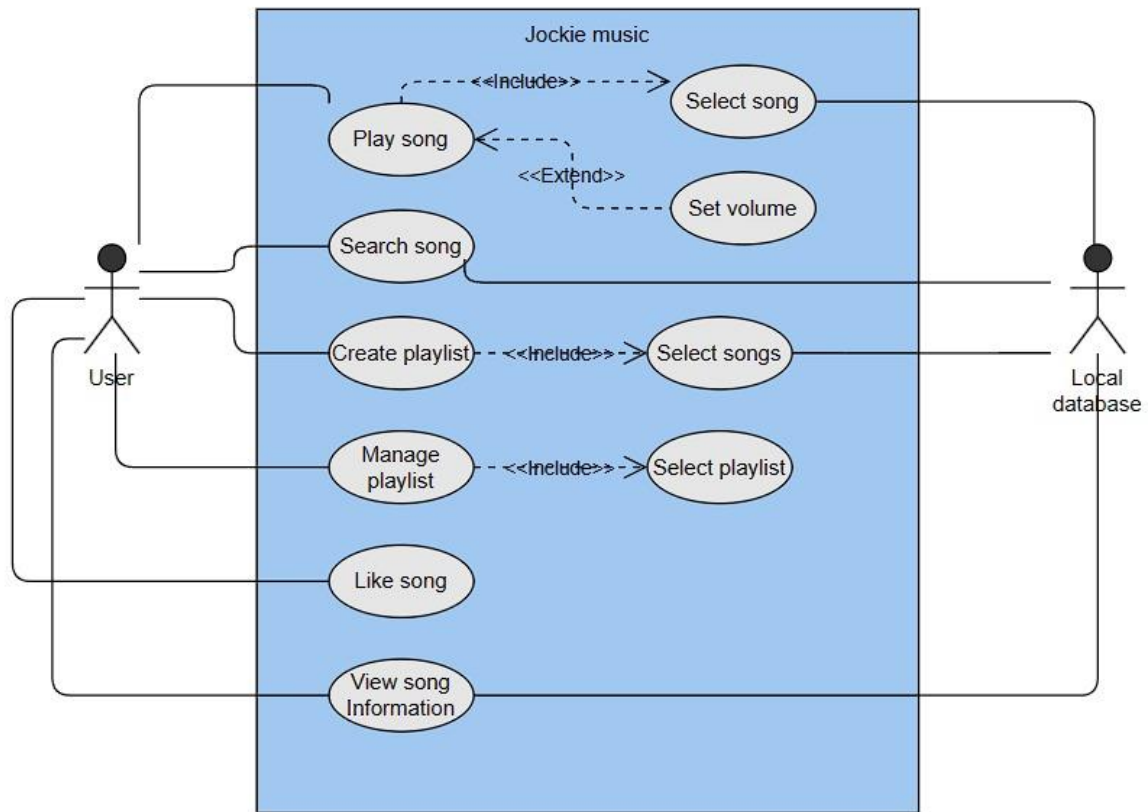
Class diagram



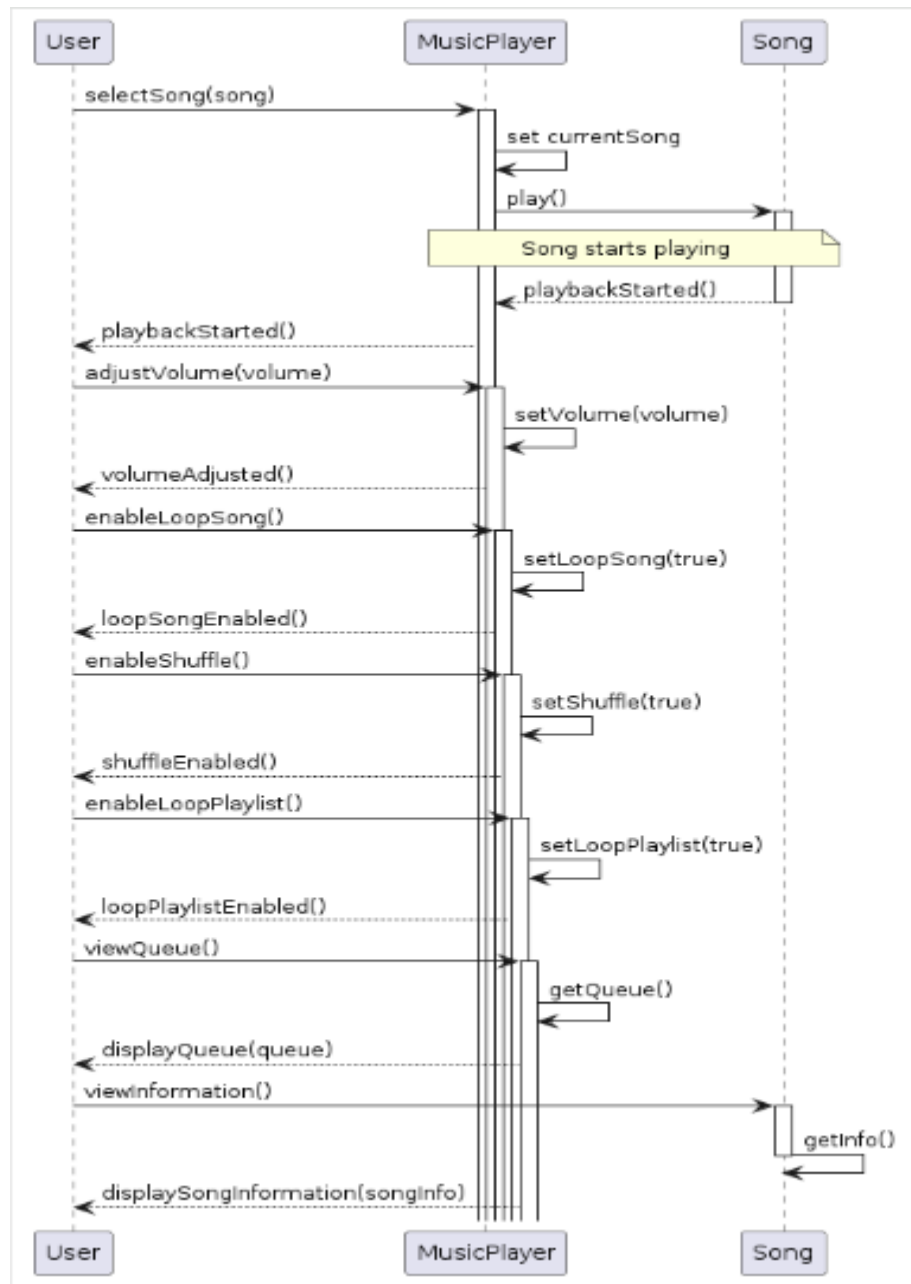
Activity Diagram



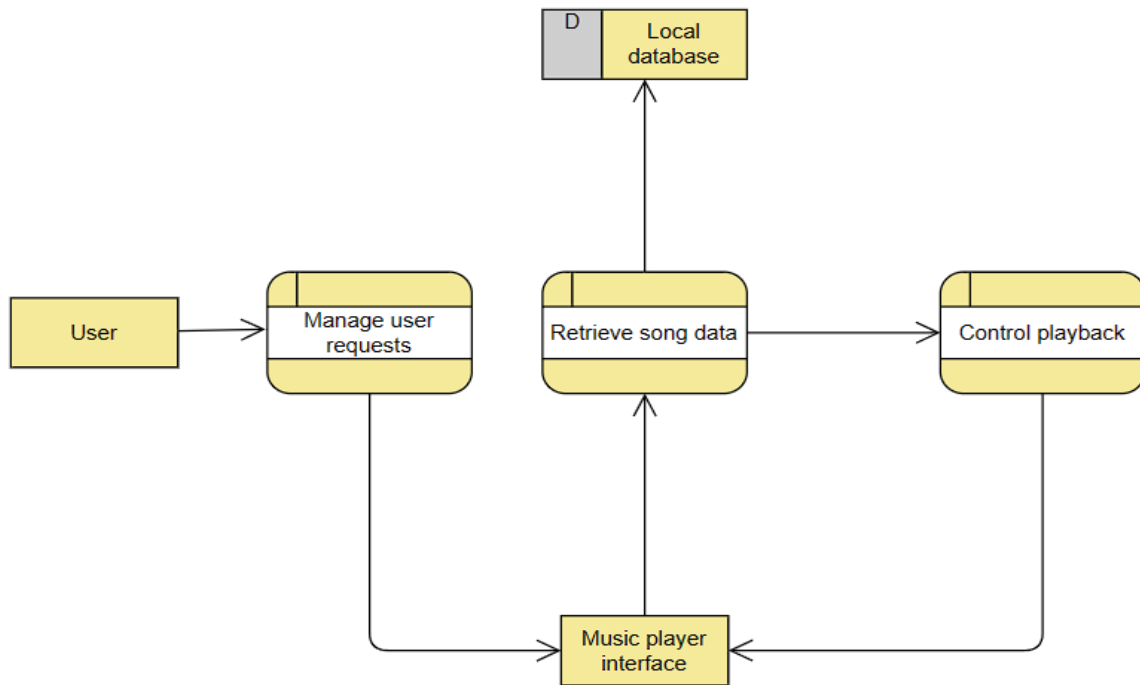
Use case Diagram



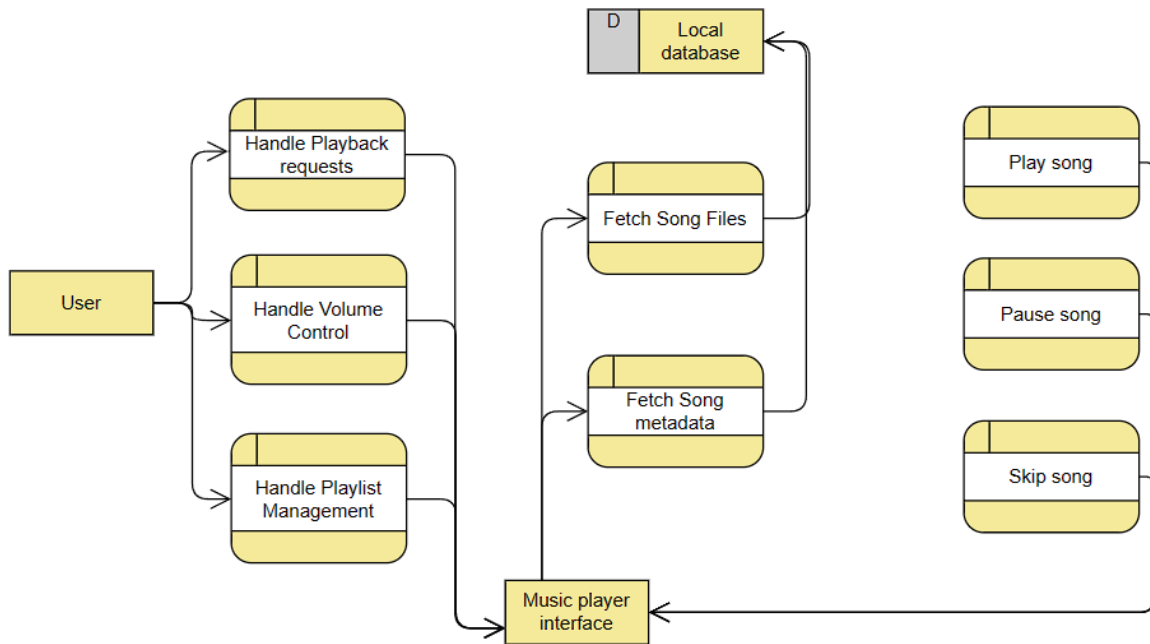
Sequence Diagram



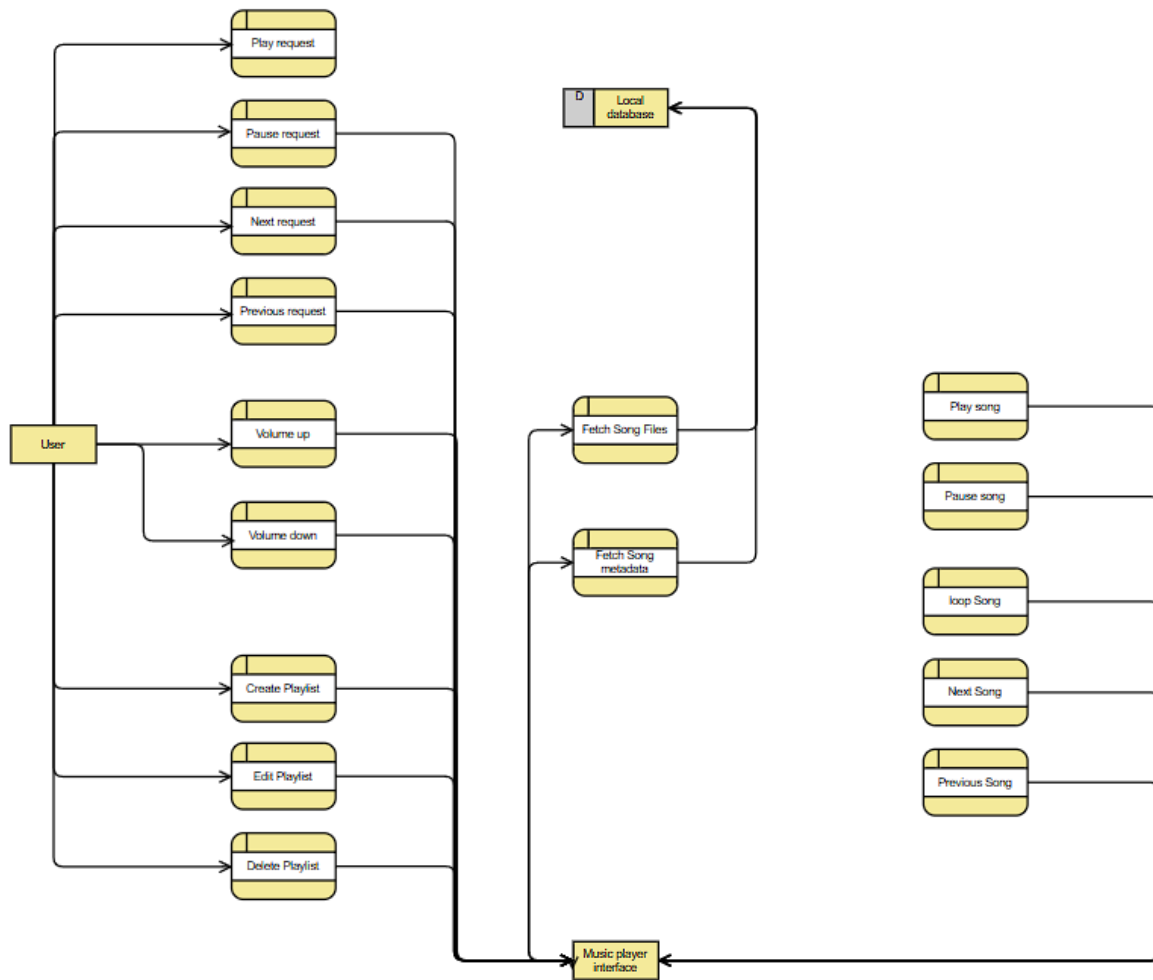
Data flow diagram



Level 0



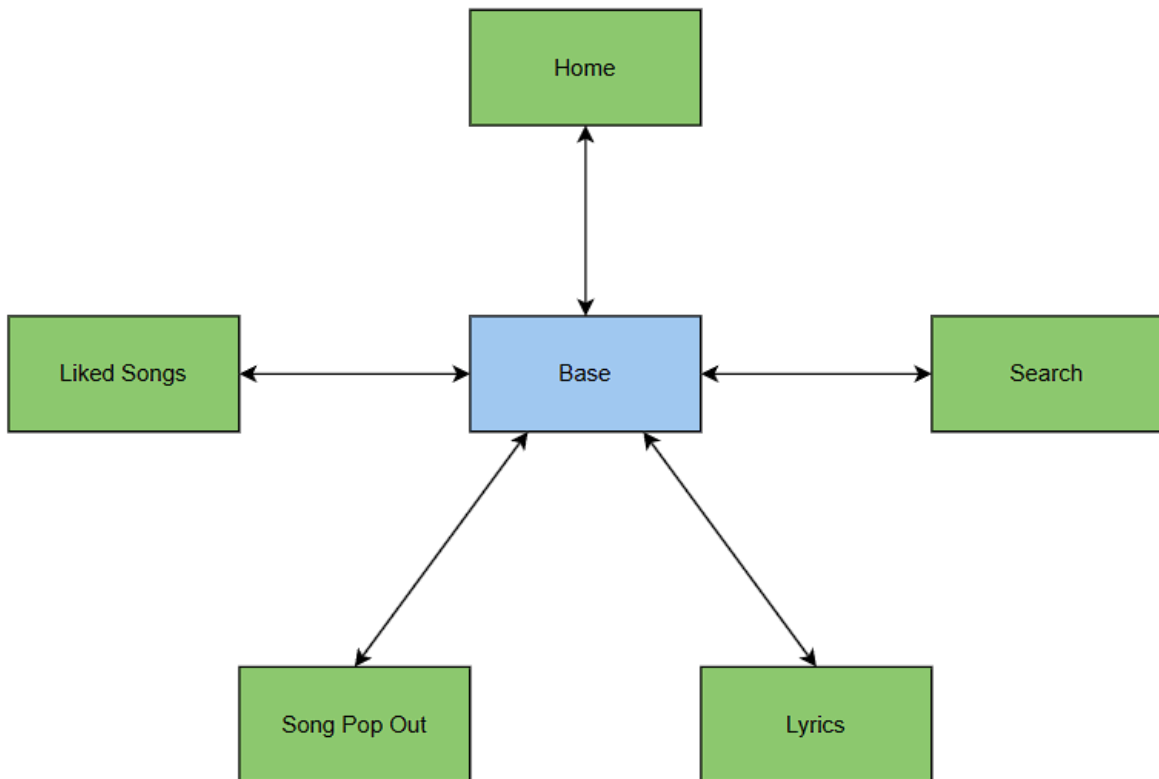
Level 1



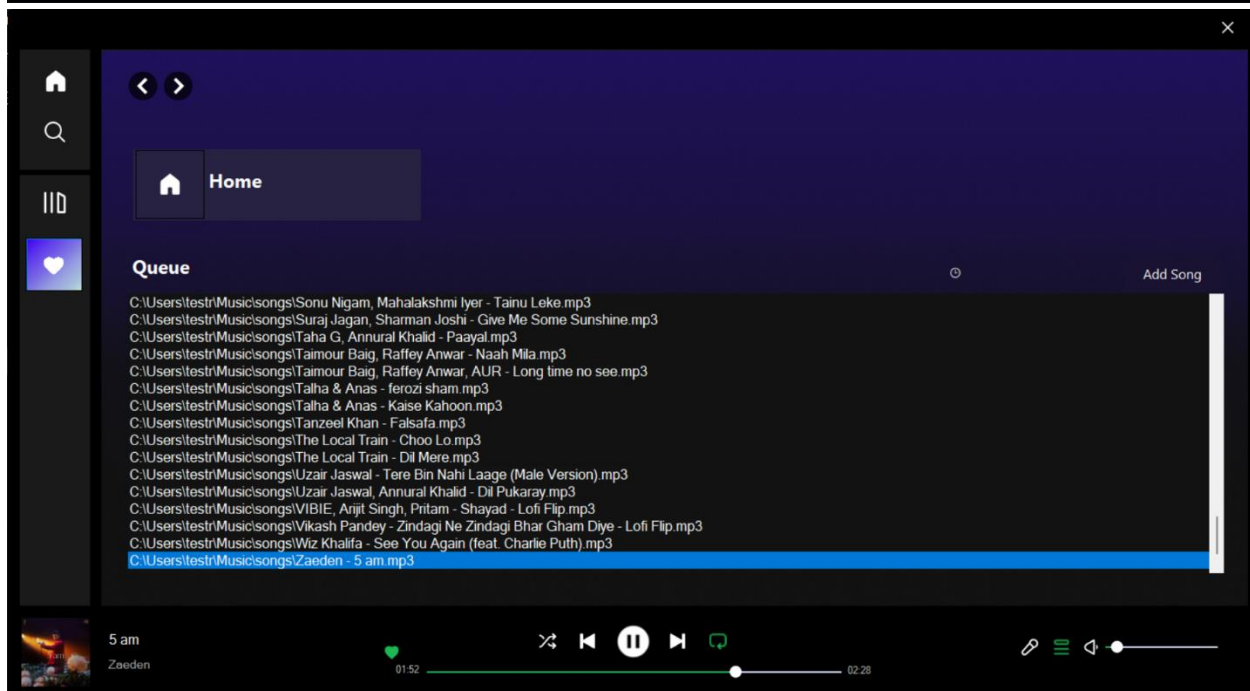
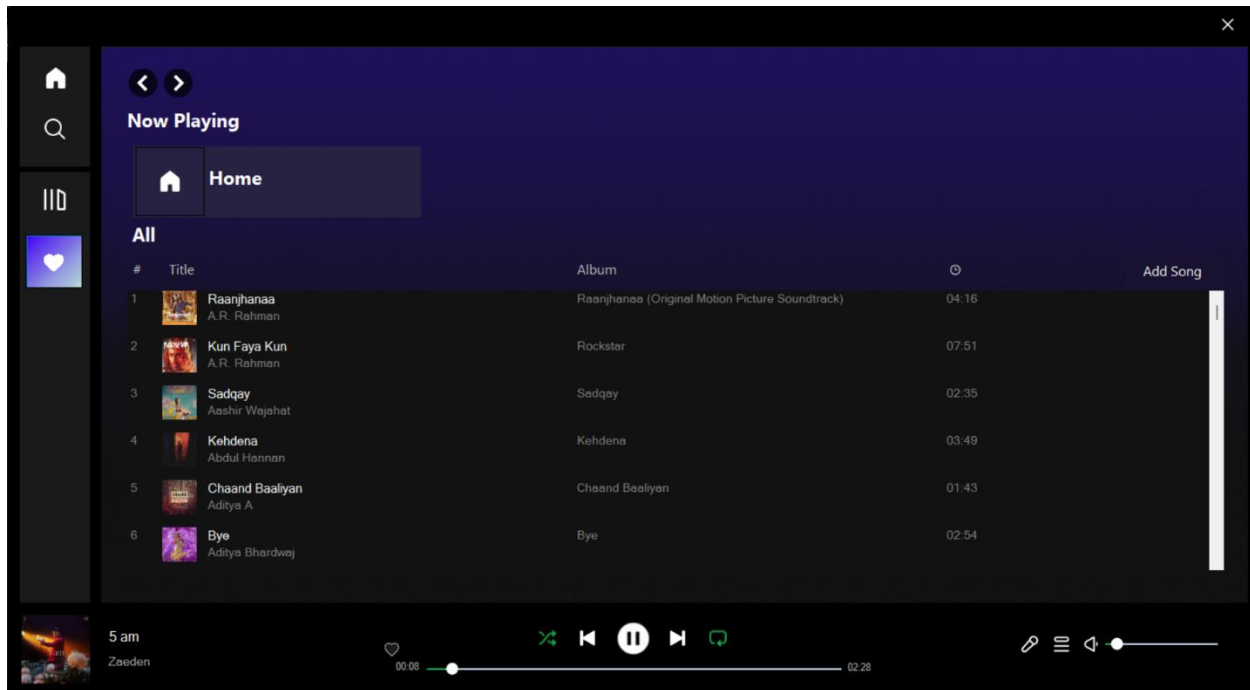
Level 2

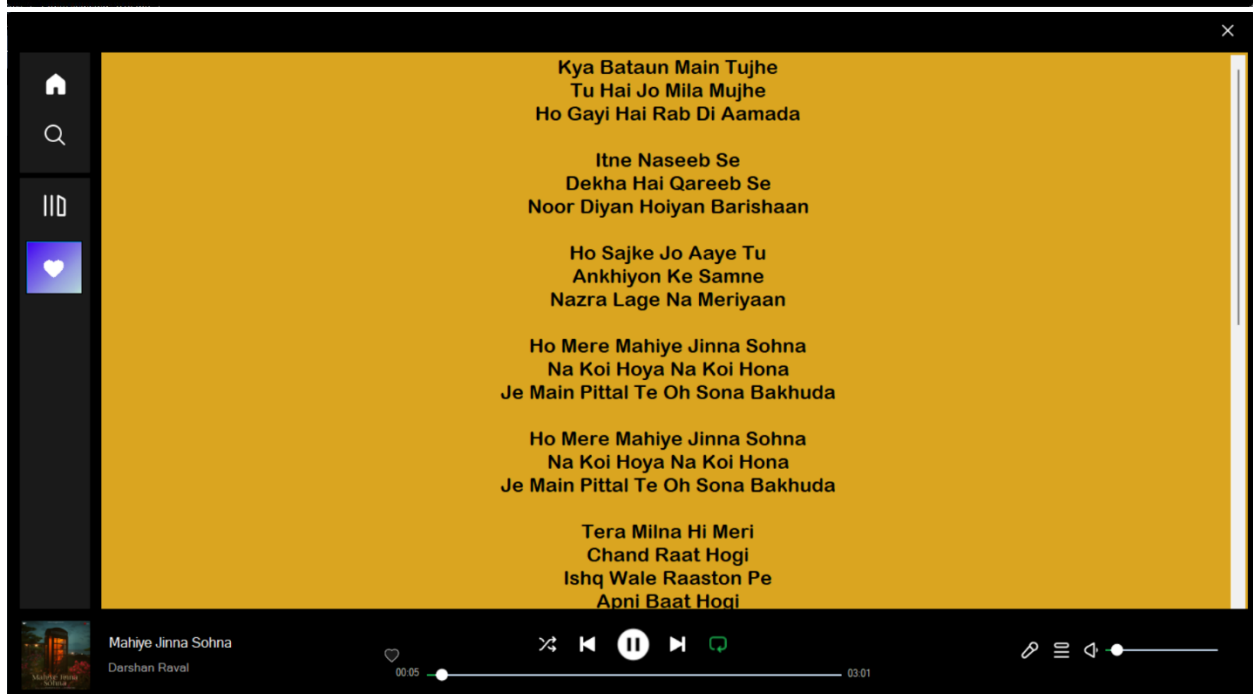
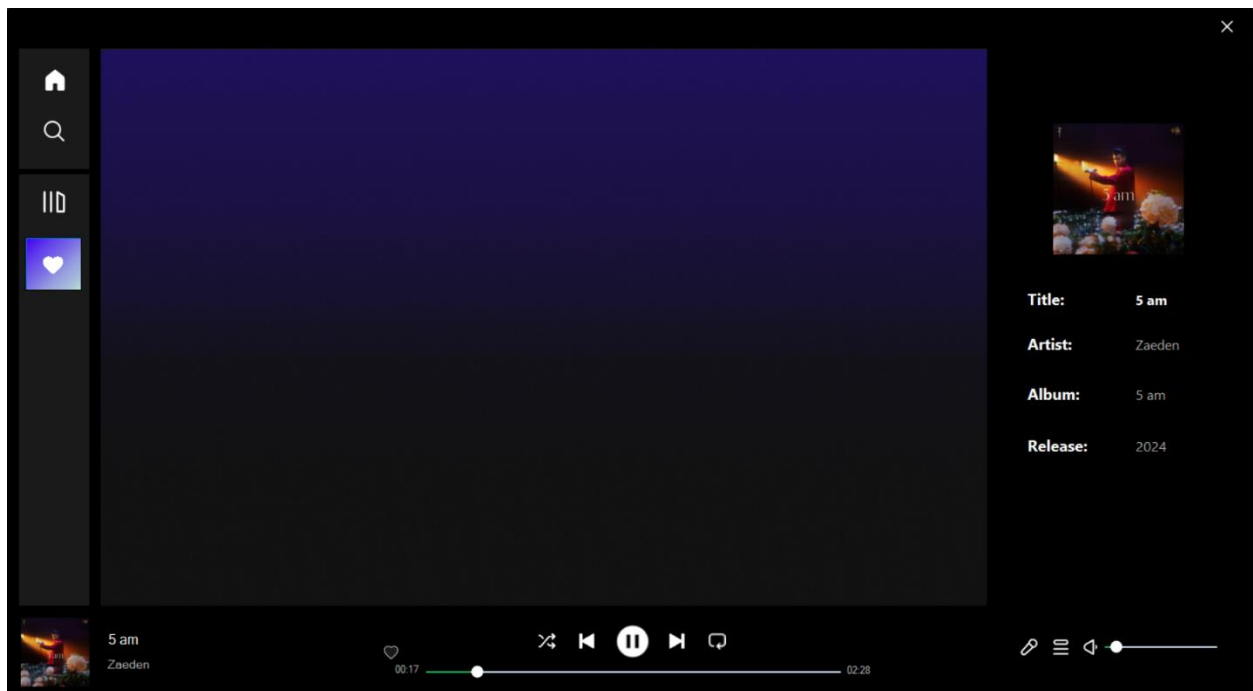
Architecture:

Repository architecture



Actual screen shots






Home

Search

Library

Heart


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Title: Kun Faya Kun

Artist: A.R. Rahman

Album: Rockstar

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Zeeden

01:28

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02:28

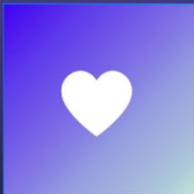
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Home







Search


Library

Heart



Playlist
Liked Songs
22 Songs

#	Title	Album	⌵
1	 Kabhi Jo Baadal Barse Arijit Singh	Jackpot	04:14
2	 Mahiye Jinna Sohna Darshan Raval	Mahiye Jinna Sohna	03:01
3	 Jashn-E-Bahaaraa - Lofi Remake DJ Bassevil	Jashn-E-Bahaaraa (Lofi Remake)	02:51
4	 Chaand Baaliyan Aditya A	Chaand Baaliyan	01:43
5	 Kabhi Na Kabhi Aditya Narayan	Sheapit: The Cursed	06:16
6	 Tera Mera Hai Pyar (From "Ishq Murshid")	Tera Mera Hai Pyar (From "Ishq Murshid")	02:37

 5 am
Zeeden

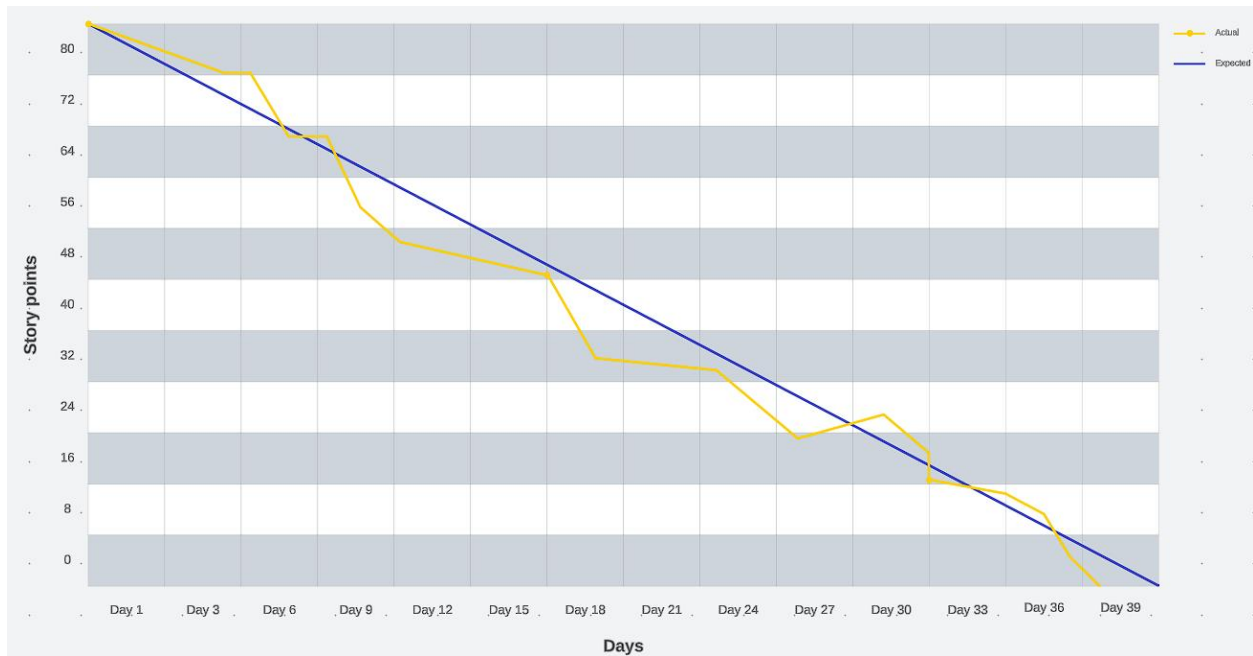
00:17

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02:28

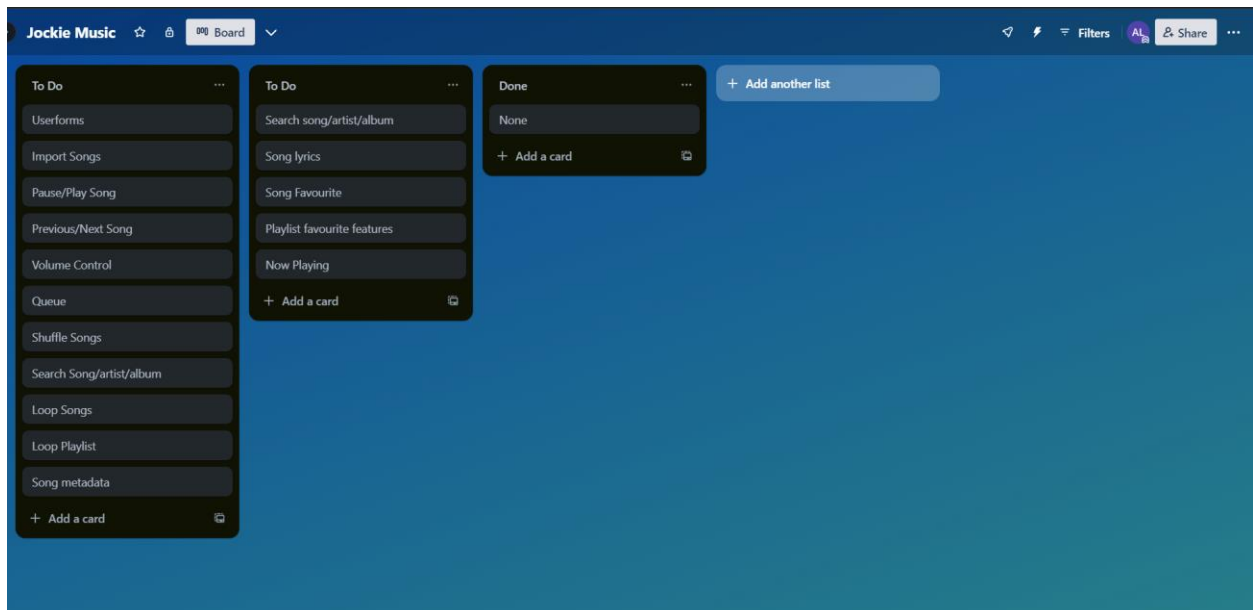
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Product Burn down chart

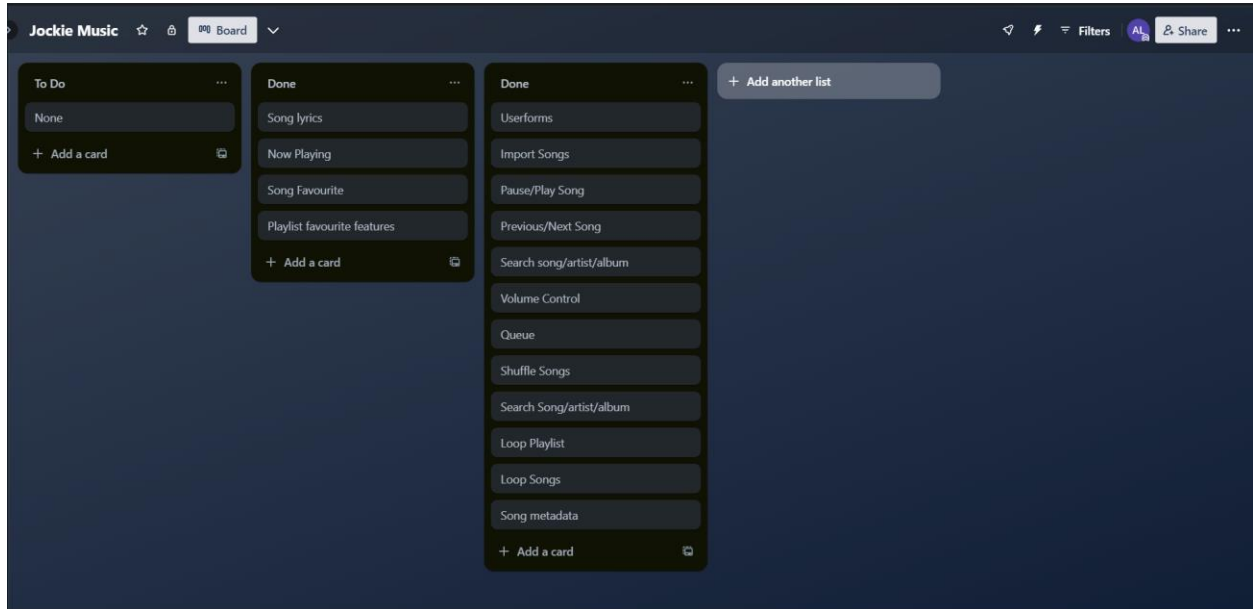


Trello board screen shots

Before:



After:



Work division:

Name	Work division
Abdul Moiz	Development
Affan Malik	Testing
Nouveen Leghari	Software design
Fahad Riaz	Requirement Elicitation

Lesson learnt:

- **Effective Communication:**

Regular communication and updates within the team helped in coordinating tasks and resolving issues promptly. Clear communication also ensured everyone was on the same page regarding project requirements and status.

- **Collaboration:**

Working collaboratively allowed team members to support each other's strengths and expertise, leading to a more efficient development process.

- **Time Management:**

Managing time effectively, setting realistic deadlines, and prioritizing tasks were crucial in meeting project milestones. Adhering to a timeline helped in completing the project within the planned timeframe.