Software Requirement Specification (SRS) Document

For: MeloFi

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1.Introduction

This Software requirements Specification (SRS) document gives a comprehensive overview of a mobile and web based Music app named MeloFi. This document gives the app's overview, goals, target users, core features, and the basic tech stack required for this project to do.

1.1 Purpose

This purpose of this document is to describe the requirements and the required functionalities of this MeloFi music app. It acts as a guideline for sharing among developers, designers, and stakeholders involved in the project.

1.2 Scope

This MeloFi music app allows us to Explore, Play, and manage music across web and mobile. Users can discover tracks based on their listening experience, create playlists, can follow other users, mark their favorites, and enjoy a rich audio experience.

1.3 References

The references for this MeloFi music app project are Spotify music app and SoundCloud.

2.Overall Description

This MeloFi music app will be both web and mobile application. It connects to backend server for music storage, user authentications, and for seamless music streaming experience. This overall project will provide a smooth and engaging experience for the users.

2.1 Product Functionalities

User registration and login to the app; Search for the songs; Play, pause, and skip for the song; mark the favorite songs; creating playlists; showing the new tracks based on listening experience.

2.2 User Classes and characteristics

Registered user: Can get the all features for free

2.4 Operating environment

This app can operate in any system like desktop, mobile. It should have the latest software installed to work for the app in it properly.

3. Functional Requirements

- The app should allow all the users to register and login properly.
- The app should have a search bar where the related results should come along when typing in it
- The app should allow users to search according to the artist name and movie or song name from the search bar.
- The app should show the play, forward skip, backward skip, and pause button on the song which is playing in the app.
- The app should allow the users to mark their favorite songs by clicking on the song
- The app should allow the users to see the different tracks based on their listening experience
- The app should allow the user to create the playlist and delete the playlist that they want from their library

4. External Interface Requirements

4.1 User Interface

The MeloFi app user interface should be user friendly according to the GUI (Graphical User Interface) standards. Every button in the app or in a website should be clearly visible. And in desktop mode it should display the keyboard shortcuts for user friendly experience for this MeloFi music application.

5. Non-Functional Requirements

5.1 Basic Tech Stack requirements

5.1.1 For Website:

- Frontend (UI): React.js
- Backend: Flask
- Database: Firebase Realtime Database or MongoDB

- APIs: REST APIs

5.1.2 For Mobile:
- For Mobile App Development (Android): Kotlin and Jetpack Compose or XML UI

6. Future Enhancements

- Add lyrics synchronization
- Integrate voice search and song recognition by the sound like google sound.
- Cloud / Hosting: Google Cloud, or Firebase Hosting