

Software Requirements Specification (SRS)

AI Music Recommender System

Snapshot 4 - Final Release and Future Work

Project Group 5

December 7, 2025

Version Description

Version	Description	Date
4.0	Final SRS for Snapshot 4. Adds quick-mix feature, refinement requirements, and explicit future work.	December 7, 2025

1 Introduction

1.1 Purpose

This SRS finalizes requirements for Snapshot 4 by adding a quick-mix feature and documenting refinement, quality, and future work for the AI Music Recommender System.[web:13][web:14]

1.2 Scope

Snapshot 4 focuses on polishing existing functionality, adding a lightweight new feature, and clarifying requirements that improve usability and performance.

2 New Functional Requirements

2.1 Quick Mix Feature

- FR-F1: The system shall provide a “Quick Mix” button that generates a mixed playlist using the user’s recent history, current mood (if any), and social signals.
- FR-F2: The system shall start playing the first track of the Quick Mix playlist automatically after it is generated.

2.2 Refinement and Quality

- FR-F3: The system shall allow users to refresh a recommendation section (e.g., mood playlist, friends' picks) to request a new set of songs.
- FR-F4: The system shall provide basic error messages and feedback when recommendation or network requests fail.

3 Non-Functional Requirements (Snapshot 4)

3.1 Performance and Reliability

- NFR-F1: Generating a Quick Mix playlist shall complete within a few seconds under normal usage.
- NFR-F2: The system shall handle typical concurrent usage scenarios without noticeable degradation, within project constraints.

3.2 Usability

- NFR-F3: Key actions (play, like, skip, mood change, Quick Mix) shall require at most a few taps or clicks from the main screen.

4 Future Work

Potential future improvements include:

- Integration of more advanced machine learning models for music recommendation and mood detection.[web:13][web:16]
- Support for richer context signals such as time of day, activity, or device location.
- Deeper social features such as collaborative playlist editing and comments.
- Enhanced explainability for recommendations (e.g., showing why a song was recommended).