Project Design Phase-II Solution Requirements (Functional & Non-functional)

Date	31 January 2025
Team ID	154977
Project Name	Rhythmic Tunes
Maximum Marks	4 Marks
Team Leader	R. Manikandan
Mail id	11996cs22@princescience.in
Team Member	R. Bharath Kumar
Mail id	12050cs22@princescience.in
Team Member	C. Satheeshkumar
Mail id	12018cs22@princescience.in
Team Member	S. Jayaprakash
Mail id	12464cs22@princescience.in
Team Member	R. Arunachalam
Mail id	11964cs22@princescience.in

Functional Requirements:

Following are the functional requirements of the proposed solution.

Functional Requirements – Music Streaming App

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Music Search & Discovery	Search for Songs, Albums, and Artists
		View Trending and Recommended Music
FR-2	Playback & Streaming	Play, Pause, and Skip Songs
		Display Album Art and Song Details
FR-3	Playlist & Favorites	Create and Manage Playlists
		Add or Remove Songs from Playlists
		Like / Favorite Songs
FR-4	Audio Streaming	Stream High-Quality Audio

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR- 1	Usability	The app should have an intuitive and user-friendly interface, ensuring smooth navigation and accessibility for users of all demographics.
NFR- 2	Security	User authentication and data must be secured using encryption (e.g., HTTPS, OAuth for third-party logins). The app should prevent unauthorized access and follow best security practices.
NFR-	Reliability	The app should ensure a consistent and uninterrupted music streaming experience, minimizing crashes and downtime.
NFR- 4	Performance	Songs should load and stream with minimal buffering. The app should respond to user interactions (search, playback, playlist management) within 2 seconds.
NFR- 5	Availability	The system should maintain an uptime of at least 99.9%, ensuring accessibility across different time zones.
NFR-	Scalability	The app should handle increasing numbers of users and concurrent streams efficiently without performance degradation. The architecture should support future feature expansion.