

Requirement Gathering and Analysis Phase
Solution Requirements (Functional & Non-functional)

Date	06-07-2024
Team ID	PNT2022TMIDxxxxxx
Project Name	Project – Tune Trails
Maximum Marks	

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	<ul style="list-style-type: none">Registration through Form
FR-2	Song Listings	<ul style="list-style-type: none">Detailed list of songs, including title, artist, album, genre, and release date.Enabling users to filter songs by genre, artist, album, and release date.
FR-3	Playlist Creation	<ul style="list-style-type: none">Allows users to create, name, and delete playlists.Allows users to add and remove songs from playlists.Allows users to reorder songs within playlists.
FR-4	Playback Control	<ul style="list-style-type: none">Contains play, pause, skip, rewind, and volume adjustment controls.Includes a progress bar showing the current position in the song.Implement shuffle and repeat modes.
FR-5	Offline Listening	<ul style="list-style-type: none">Allows users to download songs for offline playback.
FR-6	Personalized Recommendations	<ul style="list-style-type: none">Provides personalized music recommendations based on users' listening history, preferences, and interactions with the app.
FR-7	Search Functionality	<ul style="list-style-type: none">Provide a search bar for finding songs, artists, albums, and playlists.Display search results with relevant details and playback options.
FR-8	User Profile	<ul style="list-style-type: none">Allow users to upload profile pictures and write a bio.Enable customization of profile settings (e.g., privacy, notification preferences).Provide a history of recently played songs and playlists.
FR-9	Song and Artist Details	<ul style="list-style-type: none">Show detailed information about songs, including lyrics, genre, and duration.

		<ul style="list-style-type: none"> • Provide artist profiles with biographies, discographies, and related artists.
FR-10	Freaky Trail	<ul style="list-style-type: none"> • Maintain count of number of plays and pauses • View and share sticker of Freaky Trail streak

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none"> • Design an intuitive and user-friendly interface with easy navigation. • Implement accessibility features like light mode and dark mode.
NFR-2	Security	<ul style="list-style-type: none"> • Implement secure data transmission (e.g., HTTPS, SSL/TLS). • Use encryption for sensitive data (e.g., user credentials, payment information). • Regularly update and patch the system to mitigate security vulnerabilities.
NFR-3	Reliability	<ul style="list-style-type: none"> • Design for consistent and uninterrupted service, with mechanisms to detect and recover from failures. • Regularly monitor system performance and error logs to identify and address issues promptly.
NFR-4	Performance	<ul style="list-style-type: none"> • Ensure fast load times for the user interface and minimal latency in playback. • Optimize search functionality to handle large volumes of data efficiently
NFR-5	Availability	<ul style="list-style-type: none"> • Ensure high availability with minimal downtime through redundant servers and failover mechanisms. • Provide a robust backup and recovery strategy to handle data loss scenarios.
NFR-6	Scalability	Design the system to handle a growing number of users and content without degradation in performance.