

Solution Requirements - TuneTrails

Date	Team ID	Project Name	Marks
17 April 2025	SWTID1744376795	TuneTrails	4

Functional Requirements

FR No	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Email-based Registration, Google OAuth (Future)
FR-2	User Confirmation	Confirmation via Email
FR-3	User Login	Email & Password Login
FR-4	Music Browsing	Browse Trending Tracks, Search by Genre/Artist
FR-5	Playlist Management	Create, Edit, Delete Playlists
FR-6	Music Streaming	Stream selected songs
FR-7	Favorites	Like/Unlike Songs
FR-8	Admin Panel	Manage Songs, Genres, User Reports

Non-Functional Requirements

NFR No	Non-Functional Requirement	Description
NFR-1	Usability	Modern, mobile-first responsive interface
NFR-2	Security	Encrypted passwords, JWT sessions, RBAC for Admin/User
NFR-3	Reliability	Handles music API and DB errors with fallback messages
NFR-4	Performance	Lazy loading music files, optimized streaming
NFR-5	Availability	Hosted on cloud services with continuous access
NFR-6	Scalability	Microservices architecture ready for multi-region traffic