

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

|               |                       |
|---------------|-----------------------|
| Date          | 31 January 2025       |
| Team ID       | SWTID1741163246146508 |
| Project Name  | Rhythmic Tunes        |
| Maximum Marks | 4 Marks               |

**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-3   | Reliability                | The app should ensure a consistent and uninterrupted music streaming experience, minimizing crashes and downtime.   |

|              |                     |   |
|--------------|---------------------|---|
| <b>NFR-4</b> | <b>Performance</b>  | Songs should load and stream with minimal buffering. The app should respond to user interactions (search, playback, playlist management) within 2 seconds.                      |
| <b>NFR-5</b> | <b>Availability</b> | The system should maintain an uptime of at least 99.9%, ensuring accessibility across different time zones.   |
| <b>NFR-6</b> | <b>Scalability</b>  | The app should handle increasing numbers of users and concurrent streams efficiently without performance degradation. The architecture should support future feature expansion. |