

Abstract:

This project focuses on developing a simple music player app designed to provide users with an intuitive and seamless music listening experience on their mobile devices. The app will support basic playback functionalities including play, pause, next, previous, repeat, and shuffle. It will automatically scan and organize music files stored on the device, allowing users to browse their library by songs, artists, albums, and playlists.

The user interface will be clean and user-friendly, with essential information such as track details and album art prominently displayed. The app will offer playlist management features, enabling users to create, edit, and customize playlists. It will also support background playback, with controls accessible through the notification bar for convenience.

The app will support common audio formats like MP3 ensuring compatibility with most music files. Performance optimization will be a key focus, ensuring low battery consumption and smooth operation.

Additional features such as a built-in search function and basic customization options, including equalizer presets and theme settings, will further enhance the user experience. This music player app aims to provide a reliable, efficient, and enjoyable music listening solution for everyday use.

Objectives:

1. Basic Playback Controls

- Play, pause, stop, next, and previous track functionalities.
- Seek bar to navigate within a track.
- Repeat and shuffle options.

2. Background Playback

- Display playback controls in the notification bar.

3. Settings and Customization

- Theme options (light, dark mode).

4. Media Library Access

- Scan and display all audio files stored on the device.
- Organize music by songs, artists, albums, and playlists.

5. User Interface (UI)

- Simple and intuitive user interface with easy navigation.
- Display album art, track details (title, artist, album).
- Lightweight and responsive design suitable for all screen sizes.

6. Playlists Management

- Ability to create, edit, and delete playlists.
- Add or remove songs from playlists.

