**Case Study: Music Streaming Service Management System**

**Objective:**

Develop a menu-based console application to assess your proficiency in Core Java, MySQL, and JDBC. The application will simulate a music streaming service management system for a communications and media company, allowing users to manage music tracks, artists, and playlists.

**Functionalities:**

1. **Music Track Management:**
   * Add a new music track
   * View music track details
   * Update music track information
   * Delete a music track
2. **Artist Management:**
   * Add a new artist
   * View artist details
   * Update artist information
   * Delete an artist
3. **Playlist Management:**
   * Create a new playlist
   * View playlist details
   * Add music tracks to a playlist
   * Remove music tracks from a playlist
   * Delete a playlist

**Database Schema:**

* **Music Track Table:**
  + track\_id (Primary Key)
  + title
  + genre
  + release\_date
  + artist\_id (Foreign Key references Artist Table)
  + duration
* **Artist Table:**
  + artist\_id (Primary Key)
  + name
  + genre
  + country
* **Playlist Table:**
  + playlist\_id (Primary Key)
  + name
  + user\_id (Foreign Key references User Table)
  + creation\_date
* **Playlist\_Tracks Table:**
  + playlist\_id (Foreign Key references Playlist Table)
  + track\_id (Foreign Key references Music Track Table)
* **User Table:**
  + user\_id (Primary Key)
  + username
  + email
  + date\_of\_birth
  + registration\_date

**Requirements:**

* Develop a menu-based console application using Core Java.
* Use JDBC for interactions with the MySQL database.
* Implement menu options for managing music tracks, artists, and playlists.
* Ensure that the application updates playlist contents and handles user, music track, and artist data efficiently.
* Handle exceptions effectively and provide user-friendly error messages.
* Ensure the application code is clean, well-documented, and follows standard coding conventions.

**Submission:**

* Submit the complete source code along with a README file that provides setup and usage instructions.
* Share your project by uploading it to a public GitHub repository.
* Provide the link to the GitHub repository to the coaches.