**Case Study: Borrowing and Returning Books**

**Objective:**

Develop a menu-based console application to assess your proficiency in Core Java, MySQL, and JDBC. The application will manage a library catalog system, allowing users to perform operations related to managing books, authors, and library members.

**Functionalities:**

1. **Book Management:**
   * Add a new book
   * View book details
   * Update book information
   * Delete a book
2. **Author Management:**
   * Add a new author
   * View author details
   * Update author information
   * Delete an author
3. **Library Member Management:**
   * Register a new library member
   * View member details
   * Update member information
   * Delete a member
4. **Borrowing and Returning Books:**
   * Issue a book to a member
   * Return a book from a member
   * View borrowing history of a member

**Database Schema:**

* **Book Table:**
  + book\_id (Primary Key)
  + title
  + author\_id (Foreign Key references Author Table)
  + ISBN
  + quantity\_available
* **Author Table:**
  + author\_id (Primary Key)
  + name
  + biography
* **Library Member Table:**
  + member\_id (Primary Key)
  + name
  + address
  + phone\_number
  + email
* **Borrowing History Table:**
  + borrowing\_id (Primary Key)
  + book\_id (Foreign Key references Book Table)
  + member\_id (Foreign Key references Library Member Table)
  + issue\_date
  + return\_date

**Requirements:**

* Develop a menu-based console application using Core Java.
* Use JDBC for interactions with the MySQL database.
* Implement menu options for managing books, authors, and library members, as well as for borrowing and returning books.
* Ensure that the application updates the quantity\_available in the Book table appropriately after a book is borrowed or returned.
* 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.