**Case Study: Banking System**

**Objective:**

Develop a menu-based console application to assess your proficiency in Core Java, MySQL, and JDBC. The application will simulate a banking system, allowing users to manage accounts, transactions, and customers.

**Functionalities:**

1. **Account Management:**
   * Create a new account
   * View account details
   * Update account information
   * Close an account
2. **Transaction Management:**
   * Deposit funds into an account
   * Withdraw funds from an account
   * Transfer funds between accounts
   * View transaction history
3. **Customer Management:**
   * Register a new customer
   * View customer details
   * Update customer information
   * Delete a customer

**Database Schema:**

* **Account Table:**
  + account\_number (Primary Key)
  + customer\_id (Foreign Key references Customer Table)
  + balance
  + type (savings/checking)
* **Transaction Table:**
  + transaction\_id (Primary Key)
  + account\_number (Foreign Key references Account Table)
  + transaction\_type (deposit/withdrawal/transfer)
  + amount
  + transaction\_date
* **Customer Table:**
  + customer\_id (Primary Key)
  + name
  + email
  + phone\_number
  + address

**Requirements:**

* Develop a menu-based console application using Core Java.
* Use JDBC for interactions with the MySQL database.
* Implement menu options for managing accounts, transactions, and customers.
* Ensure that the application updates the balance in the Account table appropriately after a transaction is processed.
* 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.