**Case Study: Real Estate Management System**

**Objective:**

Develop a menu-based console application to assess your proficiency in Core Java, MySQL, and JDBC. The application will simulate a real estate management system, allowing users to manage properties, clients, and transactions.

**Functionalities:**

1. **Property Management:**
   * Add a new property listing
   * View property details
   * Update property information
   * Delete a property listing
2. **Client Management:**
   * Register a new client
   * View client details
   * Update client information
   * Delete a client
3. **Transaction Management:**
   * Record a new transaction (buy/sell/rent)
   * View transaction details
   * Update transaction information
   * Cancel a transaction

**Database Schema:**

* **Property Table:**
  + property\_id (Primary Key)
  + address
  + type (residential/commercial)
  + price
  + status (available/sold/rented)
* **Client Table:**
  + client\_id (Primary Key)
  + name
  + email
  + phone\_number
  + address
* **Transaction Table:**
  + transaction\_id (Primary Key)
  + property\_id (Foreign Key references Property Table)
  + client\_id (Foreign Key references Client Table)
  + transaction\_type (buy/sell/rent)
  + transaction\_date
  + amount

**Requirements:**

* Develop a menu-based console application using Core Java.
* Use JDBC for interactions with the MySQL database.
* Implement menu options for managing properties, clients, and transactions.
* Ensure that the application updates the status in the Property table appropriately after a transaction is recorded.
* 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.