**Case Study: Inventory Management System**

**Objective:**

Develop a menu-based console application to assess your proficiency in Core Java, MySQL, and JDBC. The application will simulate an inventory management system for a pharmaceutical company, allowing users to manage medications, suppliers, and inventory levels.

**Functionalities:**

1. **Medication Management:**
   * Add a new medication
   * View medication details
   * Update medication information
   * Delete a medication
2. **Supplier Management:**
   * Add a new supplier
   * View supplier details
   * Update supplier information
   * Delete a supplier
3. **Inventory Management:**
   * Update inventory levels
   * View inventory levels
   * Generate low-stock alerts

**Database Schema:**

* **Medication Table:**
  + medication\_id (Primary Key)
  + name
  + description
  + price
  + quantity\_in\_stock
* **Supplier Table:**
  + supplier\_id (Primary Key)
  + name
  + email
  + phone\_number
  + address
* **Inventory Table:**
  + inventory\_id (Primary Key)
  + medication\_id (Foreign Key references Medication Table)
  + supplier\_id (Foreign Key references Supplier Table)
  + quantity\_received
  + date\_received

**Requirements:**

* Develop a menu-based console application using Core Java.
* Use JDBC for interactions with the MySQL database.
* Implement menu options for managing medications, suppliers, and inventory levels.
* Ensure that the application updates the quantity\_in\_stock in the Medication table appropriately after inventory updates.
* 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.