**Case Study: Customer Order Management System**

**Objective:**

Develop a menu-based console application to assess your proficiency in Core Java, MySQL, and JDBC. The application will simulate a customer order management system for a retail business, allowing users to manage customers, orders, and products.

**Functionalities:**

1. **Customer Management:**
   * Add a new customer
   * View customer details
   * Update customer information
   * Delete a customer
2. **Product Management:**
   * Add a new product
   * View product details
   * Update product information
   * Delete a product
3. **Order Management:**
   * Place a new order
   * View order details
   * Update order status
   * Cancel an order

**Database Schema:**

* **Customer Table:**
  + customer\_id (Primary Key)
  + name
  + email
  + phone
  + address
* **Product Table:**
  + product\_id (Primary Key)
  + name
  + category
  + price
  + stock\_quantity
* **Order Table:**
  + order\_id (Primary Key)
  + customer\_id (Foreign Key references Customer Table)
  + order\_date
  + status (pending/confirmed/cancelled)
* **Order\_Item Table:**
  + order\_item\_id (Primary Key)
  + order\_id (Foreign Key references Order Table)
  + product\_id (Foreign Key references Product Table)
  + quantity
  + price

**Requirements:**

* Develop a menu-based console application using Core Java.
* Use JDBC for interactions with the MySQL database.
* Implement menu options for managing customers, products, and orders.
* Ensure that the application updates order statuses and handles customer and product 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.