**Case Study: E-commerce Platform**

**Objective:**

Develop a menu-based console application to assess your proficiency in Core Java, MySQL, and JDBC. The application will simulate an e-commerce platform, allowing users to manage products, orders, and customers.

**Functionalities:**

1. **Product Management:**
   * Add new products to the catalog
   * View product details
   * Update product information
   * Delete products from the catalog
2. **Order Management:**
   * Place new orders
   * View order details
   * Update order status
   * Cancel orders
3. **Customer Management:**
   * Register new customers
   * View customer details
   * Update customer information
   * Delete customers

**Database Schema:**

* **Product Table:**
  + product\_id (Primary Key)
  + name
  + description
  + price
  + quantity\_available
  + category
* **Order Table:**
  + order\_id (Primary Key)
  + customer\_id (Foreign Key references Customer Table)
  + product\_id (Foreign Key references Product Table)
  + quantity
  + order\_date
  + status
* **Customer Table:**
  + customer\_id (Primary Key)
  + name
  + email
  + address
  + phone\_number

**Requirements:**

* Develop a menu-based console application using Core Java.
* Use JDBC for interactions with the MySQL database.
* Implement menu options for managing products, orders, and customers.
* Ensure the application allows for placing orders, updating order status, and managing product inventory 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.