**Case Study: Car Service Appointment Scheduling System**

**Objective:**

Develop a menu-based console application to assess your proficiency in Core Java, MySQL, and JDBC. The application will simulate a car service appointment scheduling system for an automobile service center, allowing users to manage appointments, customers, and services.

**Functionalities:**

1. **Appointment Management:**
   * Schedule new service appointments
   * View appointment details
   * Update appointment information
   * Cancel appointments
2. **Customer Management:**
   * Register new customers
   * View customer details
   * Update customer information
   * Delete customer accounts
3. **Service Management:**
   * Add new services offered by the service center
   * View service details
   * Update service information
   * Delete services

**Database Schema:**

* **Appointment Table:**
  + appointment\_id (Primary Key)
  + customer\_id (Foreign Key references Customer Table)
  + service\_id (Foreign Key references Service Table)
  + appointment\_date
  + appointment\_time
* **Customer Table:**
  + customer\_id (Primary Key)
  + customer\_name
  + email
  + phone\_number
* **Service Table:**
  + service\_id (Primary Key)
  + service\_name
  + description
  + duration
  + price

**Requirements:**

* Develop a menu-based console application using Core Java.
* Use JDBC for interactions with the MySQL database.
* Implement menu options for managing appointments, customers, and services.
* Ensure that the application allows for scheduling appointments, viewing appointment details, managing customer information, and updating service information.
* 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.