TRAIN RESERVATION SYSTEM

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import java.util.Scanner;

public class TT {

private static final String DB\_URL = "jdbc:mysql://localhost:3306/train\_reserve";

private static final String DB\_USER = "root";

private static final String DB\_PASSWORD = "mahi";

public static void main(String[] args) {

try {

Connection connection = DriverManager.getConnection(DB\_URL, DB\_USER, DB\_PASSWORD);

Scanner scanner = new Scanner(System.in);

int choice;

do {

System.out.println("\n1. Insert Reservation");

System.out.println("2. Retrieve Reservation");

System.out.println("3. Update Reservation");

System.out.println("4. Delete Reservation");

System.out.println("5. Exit");

System.out.print("Enter your choice: ");

choice = scanner.nextInt();

scanner.nextLine(); // Consume newline character

switch (choice) {

case 1:

insertReservation(connection, scanner);

break;

case 2:

retrieveReservation(connection);

break;

case 3:

updateReservation(connection, scanner);

break;

case 4:

deleteReservation(connection, scanner);

break;

case 5:

System.out.println("Exiting...");

break;

default:

System.out.println("Invalid choice. Please try again.");

}

} while (choice != 5);

scanner.close();

connection.close();

} catch (SQLException e) {

System.out.println("Error: " + e.getMessage());

}

}

private static void insertReservation(Connection connection, Scanner scanner) {

try {

System.out.print("Enter passenger name: ");

String passengerName = scanner.nextLine();

System.out.print("Enter train number: ");

int trainNumber = scanner.nextInt();

String insertQuery = "INSERT INTO reservation (passenger\_name, train\_number) VALUES (?, ?)";

PreparedStatement insertStatement = connection.prepareStatement(insertQuery);

insertStatement.setString(1, passengerName);

insertStatement.setInt(2, trainNumber);

int rowsInserted = insertStatement.executeUpdate();

if (rowsInserted > 0) {

System.out.println("New reservation inserted.");

} else {

System.out.println("No new reservation inserted.");

}

} catch (Exception e) {

System.out.println("Error: " + e.getMessage());

}

}

private static void retrieveReservation(Connection connection) {

try {

String selectQuery = "SELECT \* FROM reservation";

Statement selectStatement = connection.createStatement();

ResultSet resultSet = selectStatement.executeQuery(selectQuery);

System.out.println("\nReservation ID\tPassenger Name\tTrain Number");

while (resultSet.next()) {

int id = resultSet.getInt("id");

String passengerName = resultSet.getString("passenger\_name");

int trainNumber = resultSet.getInt("train\_number");

System.out.println(id + "\t\t" + passengerName + "\t\t" + trainNumber);

}

} catch (Exception e) {

System.out.println("Error: " + e.getMessage());

}

}

private static void updateReservation(Connection connection, Scanner scanner) {

try {

System.out.print("Enter reservation ID to update: ");

int reservationId = scanner.nextInt();

System.out.print("Enter new train number: ");

int newTrainNumber = scanner.nextInt();

String updateQuery = "UPDATE reservations SET train\_number = ? WHERE id = ?";

PreparedStatement updateStatement = connection.prepareStatement(updateQuery);

updateStatement.setInt(1, newTrainNumber);

updateStatement.setInt(2, reservationId);

int rowsUpdated = updateStatement.executeUpdate();

if (rowsUpdated > 0) {

System.out.println("Reservation updated.");

} else {

System.out.println("No reservation updated.");

}

} catch (Exception e) {

System.out.println("Error: " + e.getMessage());

}

}

private static void deleteReservation(Connection connection, Scanner scanner) {

try {

System.out.print("Enter reservation ID to delete: ");

int reservationId = scanner.nextInt();

String deleteQuery = "DELETE FROM reservation WHERE id = ?";

PreparedStatement deleteStatement = connection.prepareStatement(deleteQuery);

deleteStatement.setInt(1, reservationId);

int rowsDeleted = deleteStatement.executeUpdate();

if (rowsDeleted > 0) {

System.out.println("Reservation deleted.");

} else {

System.out.println("No reservation deleted.");

}

} catch (Exception e) {

System.out.println("Error: " + e.getMessage());

}

}

}  
  
  
  
OUT PUT:

