Q1 Write a program to insert data of a customer in database. use customer data and perform database connectivity operation.

>

Database

CREATE DATABASE CustomerDB;

USE CustomerDB;

CREATE table customer( id INT PRIMARY KEY AUTO\_INCREMENT,

name VARCHAR(100),

email VARCHAR(100),

age INT

);  
  
JDBC

**package** customer;

**import** java.sql.\*;

**import** java.util.Scanner;

**public** **class** customer {

// Method to establish a connection with the database

**public** **static** Connection connect() {

Connection connection = **null**;

**try** {

// Database URL, username, and password

String url = "jdbc:mysql://localhost:3306/CustomerDB";

String user = "root"; // Replace with your database username

String password = "Raghav@123"; // Replace with your database password

// Registering JDBC driver

Class.*forName*("com.mysql.cj.jdbc.Driver");

connection = DriverManager.*getConnection*(url, user, password);

} **catch** (Exception e) {

System.***out***.println("Connection Failed! " + e.getMessage());

}

**return** connection;

}

// Method to insert customer data into the database

**public** **static** **void** insertCustomerData(String name, String email, **int** age) {

Connection connection = *connect*();

**if** (connection != **null**) {

String insertQuery = "INSERT INTO customer (name, email, age) VALUES (?, ?, ?)";

**try** (PreparedStatement preparedStatement = connection.prepareStatement(insertQuery)) {

preparedStatement.setString(1, name);

preparedStatement.setString(2, email);

preparedStatement.setInt(3, age);

**int** rowsAffected = preparedStatement.executeUpdate();

**if** (rowsAffected > 0) {

System.***out***.println("Customer data inserted successfully!");

} **else** {

System.***out***.println("Failed to insert customer data.");

}

} **catch** (SQLException e) {

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

} **finally** {

**try** {

connection.close();

} **catch** (SQLException e) {

System.***out***.println("Failed to close connection: " + e.getMessage());

}

}

}

}

**public** **static** **void** main(String[] args) {

Scanner scanner = **new** Scanner(System.***in***);

// Taking customer details from the user

System.***out***.print("Enter Customer Name: ");

String name = scanner.nextLine();

System.***out***.print("Enter Customer Email: ");

String email = scanner.nextLine();

System.***out***.print("Enter Customer Age: ");

**int** age = scanner.nextInt();

// Inserting data into the database

*insertCustomerData*(name, email, age);

scanner.close();

}

}

output

Enter Customer Name: ra

Enter Customer Email: rat@ag

Enter Customer Age: 12

Customer data inserted successfully!

Q2. Write a program to delete data of a customer from database.

use customer data and perform database connectivity operation.

delete records using customer ID.

>

package customer;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.SQLException;

import java.util.Scanner;

public class DeleteCustomerData {

// Method to establish a connection with the database

public static Connection connect() {

Connection connection = null;

try {

// Database URL, username, and password

String url = "jdbc:mysql://localhost:3306/CustomerDB";

String user = "root"; // Replace with your database username

String password = "Raghav@123"; // Replace with your database password

// Registering JDBC driver

Class.forName("com.mysql.cj.jdbc.Driver");

connection = DriverManager.getConnection(url, user, password);

} catch (Exception e) {

System.out.println("Connection Failed! " + e.getMessage());

}

return connection;

}

// Method to delete customer data from the database

public static void deleteCustomerById(int customerId) {

Connection connection = connect();

if (connection != null) {

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

try (PreparedStatement preparedStatement = connection.prepareStatement(deleteQuery)) {

preparedStatement.setInt(1, customerId);

int rowsAffected = preparedStatement.executeUpdate();

if (rowsAffected > 0) {

System.out.println("Customer data deleted successfully!");

} else {

System.out.println("Customer with ID " + customerId + " not found.");

}

} catch (SQLException e) {

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

} finally {

try {

connection.close();

} catch (SQLException e) {

System.out.println("Failed to close connection: " + e.getMessage());

}

}

}

}

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Taking customer ID from the user

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

int customerId = scanner.nextInt();

// Deleting data from the database

deleteCustomerById(customerId);

scanner.close();

}

}

OUTPUT

Enter Customer ID to delete: 1

Customer data deleted successfully!