1. Program to update, insert and remove required data:
2. View table
3. Update data
4. Insert data
5. Remove data
6. View updated table
7. Exit

Sol:

package com.pack;

import java.util.Scanner;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.SQLException;

import java.sql.Statement;

import java.sql.ResultSet;

public class Assessment2 {

public static void main(String[] args) throws ClassNotFoundException, SQLException {

// TODO Auto-generated method stub

Scanner sc= new Scanner(System.in);

System.out.println("Choose menu:");

System.out.println("1.View Employee Data\r\n"+ "2.Update Employee Data\r\n"

+ "3.Add Employee\r\n"+ "4.Delete Employee Data\r\n"+"5.View Updated Employee Table|r\n"+"6.Exit");

int choice = sc.nextInt();

Class.forName("org.apache.derby.client.ClientAutoloadedDriver");//loading drivers

Connection conn= DriverManager.getConnection("jdbc:derby://localhost:1527/training;create=true","derby","derby");

Statement st = conn.createStatement();

ResultSet rs;

PreparedStatement ps;

switch(choice) {

case 1:

rs=st.executeQuery("SELECT \* FROM app.employee");

System.out.println("EmpId\t "+"EmpName\t\t "+"EmpSal\t");

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

while(rs.next()) {

System.out.println(rs.getInt(1)+"\t "+rs.getString(2)+"\t\t "+rs.getInt(3));

}

break;

case 2:

System.out.println("Enter id to update the data:");

int id=sc.nextInt();

System.out.println("Enter employee name:");

String nm=sc.next();

System.out.println("Enter employee salary:");

int sal= sc.nextInt();

ps=conn.prepareStatement("UPDATE app.employee SET emp\_name,emp\_sal WHERE emp\_id=?");

ps.setInt(1, id);

ps.setString(2, nm);

ps.setInt(3, sal);

ps.executeUpdate();

System.out.println("Data updated successfully.");

break;

case 3:

System.out.println("Enter employee id to insert:");

int id1=sc.nextInt();

System.out.println("Enter employee name:");

String nm1=sc.nextLine();

System.out.println("Enter employee salary:");

int sal1=sc.nextInt();

ps=conn.prepareStatement("INSERT INTO app.employee(emp\_id,emp\_name,emp\_sal)VALUES(?,?,?)");

ps.setInt(1, id1);

ps.setString(2, nm1);

ps.setInt(3, sal1);

ps.executeUpdate();

System.out.println("Employee data added successfully.");

break;

case 4:

System.out.println("Enter empid whose data to be removed:");

int id2=sc.nextInt();

ps=conn.prepareStatement("DELETE FROM app.employee WHERE emp\_id=?");

ps.setInt(1, id2);

rs=ps.executeQuery();

int rid=rs.getInt("emp\_id");

if(rid == id2) {

System.out.println("Data deleted successfully.");

}

else {

System.out.println(id2+" id is not found in database.");

}

break;

case 5:

System.out.println("EmpId\t "+"EmpName\t\t "+"EmpSal\t");

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

ps=conn.prepareStatement("SELECT \* FROM app.employee");

rs=ps.executeQuery();

while(rs.next()) {

System.out.println(rs.getInt(1)+"\t "+rs.getString(2)+"\t\t "+rs.getInt(3));

}

break;

case 6:

System.exit(0);

default:

System.out.println("Invalid input.");

break;

}

System.out.println("Do you want to continue (Y/N)");

char ch4 = sc.next().charAt(0);

while (ch4 == 'Y' || ch4 == 'y');

System.out.println("Bye");

sc.close();

}

}

1. Create a java application as mentioned above flow:

C: Check Student Result

A: Add student result

X: Exit

**package** com.pack;

**import** java.util.\*;

**public** **class** Student {

Scanner sc1 = **new** Scanner(System.***in***);

**boolean** choice() {

System.***out***.println("Do you want to continue?"+'\n'+"true or false");

**boolean** option = sc1.nextBoolean();

**return** option;

}

**void** display() {

System.***out***.println("Welcome to College Management" );

System.***out***.println("A: Add Student Result"+'\n'+"C:Check Student Result"+'\n'+"X:Exit");

}

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

Student input = **new** Student();

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

List<Integer> id = **new** ArrayList<Integer>();

List<String> name = **new** ArrayList<String>();

List<Integer> eng = **new** ArrayList<Integer>();

List<Integer> hin = **new** ArrayList<Integer>();

List<Integer> math = **new** ArrayList<Integer>();

List<Integer> sci = **new** ArrayList<Integer>();

List<Integer> sst = **new** ArrayList<Integer>();

List<Integer> tot = **new** ArrayList<Integer>();

List<Float> per = **new** ArrayList<Float>();

**boolean** option = input.choice();

**if**(option == **true**) {

input.display();

String choice = sc.nextLine();

**switch**(choice) {

**case** "A":

System.***out***.println("Enter the student id:");

**int** id1 = sc.nextInt();

id.add(id1);

System.***out***.println("Enter student's name:");

String name1 = sc.next();

name.add(name1);

System.***out***.println("Enter marks of English:");

**int** eng1 = sc.nextInt();

eng.add(eng1);

System.***out***.println("Enter marks of Hindi:");

**int** hin1 = sc.nextInt();

hin.add(hin1);

System.***out***.println("Enter marks of Maths:");

**int** math1 = sc.nextInt();

math.add(math1);

System.***out***.println("Enter marks of Science:");

**int** sci1 = sc.nextInt();

sci.add(sci1);

System.***out***.println("Enter marks of Social Studies:");

**int** sst1 = sc.nextInt();

sst.add(sst1);

**int** total=0;

total=eng1+hin1+math1+sci1+sst1;

tot.add(total);

**float** percentage=0;

percentage = (total\*100) / 500;

per.add(percentage);

**break**;

**case** "C":

System.***out***.println("Enter id to check result:");

**int** idc = sc.nextInt();

**if**(idc <= id.size()) {

System.***out***.println("id="+id.get(idc)+'\n'+"Name="+name.get(idc));

System.***out***.println("English="+eng.get(idc));

System.***out***.println("Hindi="+hin.get(idc));

System.***out***.println("Maths="+math.get(idc));

System.***out***.println("Science="+sci.get(idc));

System.***out***.println("Social Studies="+sst.get(idc));

System.***out***.println("Total="+tot.get(idc));

System.***out***.println("Percentage="+per.get(idc));

**if**(per.get(idc) >= 50) {

System.***out***.println("Result= PASS");

}

**else** {

System.***out***.println("Result= FAIL");

}

}

**else** {

System.***out***.println("Student Id not found");

}

**break**;

**case** "X":

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

**break**;

**default**:

System.***out***.println("Invalid Input");

input.choice();

}

}

**else** {

System.***out***.println("Bye");

}

}

}

Sol: Do you want to continue?

true or false

true

Welcome to College Management

A: Add Student Result

C:Check Student Result

X:Exit

A

Enter the student id:

01

Enter student's name:

Raju

Enter marks of English:

45

Enter marks of Hindi:

78

Enter marks of Maths:

89

Enter marks of Science:

89

Enter marks of Social Studies:

90