

1) MVC Project

Employee Registration

First Name

Last Name

User Name

Password

Address

Contact

Submit

Employee Registration

First Name

Last Name

User Name

Password

Address

Contact

Submit

Employee Registered Successfully

```
SQL> select * from employeenew;
```

ID	FIRST_NAME	LAST_NAME	USERNAME
101	Swairik	Dey	swairik
aabc		home	1001

EmployeeServlet.java

```
1 package com.registration.controller;
2
3 import java.io.IOException;
4
14 @WebServlet("/register")
15 public class EmployeeServlet extends HttpServlet {
16     private static final long serialVersionUID = 1L;
17     private EmployeeDao employeeDao;
18
19     public void init() {
20         employeeDao=new EmployeeDao();
21     }
22
23     protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
24         // TODO Auto-generated method stub
25         response.getWriter().append("Served at: ").append(request.getContextPath());
26         RequestDispatcher dispatch=request.getRequestDispatcher("/WEB-INF/views/employeeeregistration.jsp");
27         dispatch.forward(request, response);
28     }
29
30     protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
31
32         String firstName=request.getParameter("firstname");
33         String lastName=request.getParameter("lastname");
34         String userName=request.getParameter("username");
35         String password=request.getParameter("password");
36         String address=request.getParameter("address");
37         String contact=request.getParameter("contact");
38
39         Employee employee=new Employee();
40         employee.setFirstname(firstName);
41         employee.setLastname(lastName);
42         employee.setUsername(userName);
43         employee.setPassword(password);
44         employee.setAddress(address);
45         employee.setContact(contact);
46
47         try {
48             employeeDao.registerEmployee(employee);
49         }catch(Exception e) {
50             e.printStackTrace();
51         }
52
53         RequestDispatcher dispatch=request.getRequestDispatcher("/WEB-INF/views/employeeeregister.jsp");
54         dispatch.forward(request, response);
55     }
56 }
57
58 }
```

EmployeeDao.java

```
1 package com.registration.Dao;
2
3 import java.sql.Connection;
4
9
10 public class EmployeeDao {
11     static int IdGen=100;
12     public int registerEmployee(Employee employee) throws ClassNotFoundException, SQLException {
13
14         String Insert_Emp_SQL = "insert into employeeew+" (id,first_name,last_name,username,password,address,contact) VALUES " + "(?, ?, ?, ?, ?, ?)";
15         int result=0;
16         Class.forName("oracle.jdbc.driver.OracleDriver");
17
18         try(
19             Connection connection=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521/orcl","system","Oracle_1");
20             PreparedStatement preparedStatement=connection.prepareStatement(Insert_Emp_SQL))
21         {
22             ++IdGen;
23             preparedStatement.setInt(1, IdGen);
24             preparedStatement.setString(2,employee.getFirstname() );
25             preparedStatement.setString(3,employee.getLastname() );
26             preparedStatement.setString(4,employee.getUsername() );
27             preparedStatement.setString(5,employee.getPassword() );
28             preparedStatement.setString(6,employee.getAddress() );
29             preparedStatement.setString(7,employee.getContact() );
30
31             System.out.println(preparedStatement);
32             result=preparedStatement.executeUpdate();
33         }catch(SQLException e) {
34             e.printStackTrace();
35         }
36
37         return result;
38     }
39 }
40
41 }
```

2) CRUD Project

Create Operation

```
50 public static void main(String[] args) {
51     try {
52         Class.forName("oracle.jdbc.driver.OracleDriver");
53         Connection con = DriverManager.getConnection(
54             "jdbc:oracle:thin:@localhost:1521/orcl",
55             "SYSTEM",
56             "Oracle_1"
57         );
58         PreparedStatement pstmt = con.prepareStatement("insert into emp values(?, ?, ?)");
59         BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
60
61         while(true) {
62             System.out.println("Enter Emp Id : ");
63             int empId = Integer.parseInt(br.readLine());
64
65             System.out.println("Enter Emp Name : ");
66             String empName = br.readLine();
67
68             System.out.println("Enter Emp Salary : ");
69             double empSalary = Double.parseDouble(br.readLine());
70
71             pstmt.setInt(1, empId);
72             pstmt.setString(2, empName);
73             pstmt.setDouble(3, empSalary);
74
75             int count = pstmt.executeUpdate();
76             if(count > 0) {
77                 System.out.println(count + " record inserted");
78             } else {
79                 System.out.println("No record inserted");
80             }
81
82             System.out.println("Do you want to insert more records?");
83             String ch = br.readLine();
84
85             if(ch.equalsIgnoreCase("no")) {
86                 break;
87             }
88         }
89     } catch (Exception e) {
90         e.printStackTrace();
91     }
92 }
```

SQL Plus

```
SQL> select * from emp;
-----
      EMPID      EMPNAME      ESAL
-----
      101      Bruce      234
```

SQL>

```
Enter Emp Id : 101
Enter Emp Name : Bruce
Enter Emp Salary : 234
1 record inserted
Do you want to insert more records?
no
```

Read Operation

```
1 import java.sql.*;
2
3 public class JDBC_Select {
4
5     public static void main(String[] args) {
6         try {
7             Connection con = DriverManager.getConnection(
8                 "jdbc:oracle:thin:@localhost:1521/orcl",
9                 "SYSTEM",
10                "Oracle_1"
11            );
12
13            Statement stmt = con.createStatement();
14            ResultSet rs = stmt.executeQuery("select * from emp");
15            while(rs.next()) {
16                int empId = rs.getInt(1);
17                String empName = rs.getString(2);
18                double empSalary = rs.getDouble(3);
19
20                System.out.print("EmpId : " + empId);
21                System.out.print(" EmpName : " + empName);
22                System.out.print(" EmpSalary : " + empSalary);
23
24                System.out.println();
25            }
26        } catch (Exception e) {
27            e.printStackTrace();
28        }
29    }
30 }
31 }
32 }
```

```
terminated: JDBC_Select [Java Application] C:\Program Files\Java\jdk-17.0.4\bin\java.exe (11-Feb-2023 11:27:01 pm - 11:27:03 pm) [pid: 13776]
EmpId : 101 EmpName : Bruce EmpSalary : 234.0
```

Update Operation:

```
import java.io.*;

public class JDBC_Update {
    public static void main(String[] args) {
        try {
            Class.forName("oracle.jdbc.driver.OracleDriver");
            Connection con = DriverManager.getConnection(
                "jdbc:oracle:thin:@localhost:1521/orcl",
                "scott",
                "scott"
            );

            Statement stmt = con.createStatement();

            BufferedInputStream br = new BufferedInputStream(new InputStreamReader(System.in));

            System.out.println("Enter empid : ");
            int empid = Integer.parseInt(br.readLine());

            System.out.println("Enter new salary : ");
            double esal = Double.parseDouble(br.readLine());

            int count = stmt.executeUpdate("update emp set esal = " + esal + " where emp = " + empid);
            if(count > 0) {
                System.out.println(count + " row updated");
            }
            else {
                System.out.println("No records found");
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

```
SQL> select * from emp;

   EMPNO  ENAME      ESAL
-----
    1813  Bruce       999

SQL>
```

```
Enter empid :
181
Enter new salary :
999
1 row updated
```

Delete Operation :

```
public class JDBC_Delete {
    public static void main(String[] args) {
        try {
            Class.forName("oracle.jdbc.driver.OracleDriver");
            Connection con = DriverManager.getConnection(
                "jdbc:oracle:thin:@localhost:1521/orcl",
                "scott",
                "scott"
            );

            Statement stmt = con.createStatement();

            BufferedInputStream br = new BufferedInputStream(new InputStreamReader(System.in));

            while(true) {
                System.out.println("Enter deletion empid : ");
                int emp = Integer.parseInt(br.readLine());

                int count = stmt.executeUpdate("delete from emp where emp = " + emp);
                if(count > 0) {
                    System.out.println(count + " row deleted");
                }
                else {
                    System.out.println("No records deleted");
                }

                System.out.println("Do you want to delete more records?");
                String ch = br.readLine();

                if(ch.equalsIgnoreCase("no")) {
                    break;
                }
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

```
SQL> select * from emp;

no rows selected

SQL>
```

```
Enter deletion empid :
181
1 row deleted
Do you want to delete more records?
no
```