

# **Institute of Computer Technology**

**B.Tech Computer Science and Engineering**

**Semester - III**

**Subject: Object Oriented Programming**

**FINAL MINI PROJECT ON**  
**“ HUMAN RESOURCE MANAGEMENT SYSTEM ”**  
**DEVELOPED IN**  
**JAVA**

**Submitted by:**

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## FULL CODE

### 1. SQL-JAVA CONNECTION

```
//package atharva
;
//
//import java.sql.Connection;
//import java.sql.DriverManager;
//
//public class ConnectionProvider {
//
//    static Connection con; // to store connection
//
//    public static Connection createC() {
//        try {
//            // to load driver
//            Class.forName("com.mysql.jdbc.Driver");
//
//            //to create connection
//
//
//
//            con=DriverManager.getConnection("jdbc:mysql://localhost:3306/atharva", "root","Diya@1808");
//            System.out.println("Connected to database 😊 ");
//
//        }
//        catch(Exception e) {
//            e.printStackTrace();
//        }
//        return con;
//    }
//}
```

## 2. .JAVA CODE

```
package atharva;

import java.io.Serializable;
import java.time.LocalDate;

public class Employee {

    private int id;
    private String name;
    private int age;
    private String designation;
    private String department;
    private double salary;

    public int getId() {
        return id;
    }
    public void setId(int id) {
        this.id = id;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public int getAge() {
        return age;
    }
    public void setAge(int age) {
        this.age = age;
    }
    public String getDesignation() {
        return designation;
    }
    public void setDesignation(String designation) {
        this.designation = designation;
    }
    public String getDepartment() {
```

```

        return department;
    }
    public void setDepartment(String department) {
        this.department = department;
    }
    public double getSalary() {
        return salary;
    }
    public void setSalary(double salary) {
        this.salary = salary;
    }
    @Override
    public String toString() {
        return "Employee [id=" + id + ", name=" + name + ", age="
+ age + ", designation=" + designation
        + ", department=" + department + ", salary=" +
salary + "]";
    }
    public Employee(int id, String name, int age, String designation,
String department, double salary) {
        super();
        this.id = id;
        this.name = name;
        this.age = age;
        this.designation = designation;
        this.department = department;
        this.salary = salary;
    }
}

```

### **3. Employee service code**

```

package aman;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.HashMap;
import java.util.HashSet;
import java.util.Scanner;

```

```
import java.util.TreeSet;

public class EmployeeService {

    HashSet<Employee> empset=new HashSet<Employee>();

    Employee emp1=new Employee(101, "Shital", 24, "Developer",
    "IT", 25000);
    Employee emp2=new Employee(102, "Meena", 26, "Tester","CO",
    57000);
    Employee emp3=new Employee(103, "Bob", 20, "DevOps
    Eng","Admin", 5000);
    Employee emp4=new Employee(104, "Max", 27, "System
    Eng","CO", 70000);

    Scanner sc=new Scanner(System.in);
    boolean found=false;
    int id;
    String name;
    int age;
    String department;
    String designation;
    String status;
    double sal;

    public EmployeeService() {

        empset.add(emp1);
        empset.add(emp2);
        empset.add(emp3);
        empset.add(emp4);

    }

    //view all employees
    public void viewAllEmps() {
        for(Employee emp:empset) {
            System.out.println(emp);
        }
    }
}
```

```

//view emp based on there id
public void viewEmp(){

    System.out.println("Enter id: ");
    id=sc.nextInt();
    for(Employee emp:empset) {
        if(emp.getId()==id) {
            System.out.println(emp);
            found=true;
        }

    }
    if(!found) {
        System.out.println("Employee with this id is not
present");
    }
}

//update the employee
public void updateEmployee() {
    System.out.println("Enter id: ");
    id=sc.nextInt();
    boolean found=false;
    for(Employee emp:empset) {
        if(emp.getId()==id) {
            System.out.println("Enter name: ");
            name=sc.next();
            System.out.println("Enter new Salary");
            sal=sc.nextDouble();
            emp.setName(name);
            emp.setSalary(sal);
            System.out.println("Updated Details of
employee are: ");

            System.out.println(emp);
            found=true;
        }
    }
    if(!found) {
        System.out.println("Employee is not present");
    }
    else {

```

```

        System.out.println("Employee details updated
successfully !!");
    }
}
//delete emp
public void deleteEmp() {
    System.out.println("Enter id");
    id=sc.nextInt();
    boolean found=false;
    Employee empdelete=null;
    for(Employee emp:empset) {
        if(emp.getId()==id) {
            empdelete=emp;
            found=true;
        }
    }
    if(!found) {
        System.out.println("Employee is not present");
    }
    else {
        empset.remove(empdelete);
        System.out.println("Employee deleted
successfully!!");
    }
}
//add emp
public void addEmp() {
    System.out.println("Enter id:");
    id=sc.nextInt();
    System.out.println("Enter name");
    name=sc.next();
    System.out.println("Enter age");
    age=sc.nextInt();
    System.out.println("enter Designation");
    designation=sc.next();
    System.out.println("Enter Department");
    department=sc.next();
    System.out.println("Enter sal");
    sc.nextDouble();
}

```

```
Employee emp=new Employee(id, name, age, designation,  
department, sal);
```

```
empset.add(emp);  
System.out.println(emp);  
System.out.println("Employee addeed successsfully");  
Statement stmt = null;  
Connection conn = null;  
try {
```

```
    conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/  
astik", "root","Diya@1808");
```

```
        stmt = conn.createStatement();  
        String sql = "INSERT INTO Employees  
values("+id+", '"+name+"', '"+age+"', '"+department+"', '"+designation+"', "  
+sal+"");";
```

```
        stmt.executeUpdate(sql);  
    } catch(SQLException e) {  
        e.printStackTrace();  
    } catch(Exception e) {  
        e.printStackTrace();  
    } finally {  
        try {  
            if(stmt!=null) {  
                conn.close();  
            }  
        } catch(SQLException se) {  
        }  
    }  
    try {  
        if(conn!=null) {  
            conn.close();  
        }  
    } catch(SQLException se){  
        se.printStackTrace();  
    }  
}
```

```
}  
public void attendance() {
```



```

        System.out.println("Enter id:");
        id=sc.nextInt();
        System.out.println("Enter emp_dept: ");
        String dept = sc.next();
        System.out.println("Enter Attendance date: ");
        String date = sc.next();
        System.out.println("Enter emp_Attendance");
        status = sc.next();
        Statement stmt = null;
        Connection conn = null;
        try {

            conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/
astik", "root","Diya@1808");
            stmt = conn.createStatement();
            String sql = "INSERT INTO Attendance
values("+id+", '"+dept+"', '"+date+"', '"+status+"')";
            stmt.executeUpdate(sql);
        } catch(SQLException e) {
            e.printStackTrace();
        } catch(Exception e) {
            e.printStackTrace();
        } finally {
            try {
                if(stmt!=null) {
                    conn.close();
                }
            } catch(SQLException se) {

            }
            try {
                if(conn!=null) {
                    conn.close();
                }
            } catch(SQLException se){
                se.printStackTrace();
            }
        }
    }
}

```

#### 4. MAIN.JAVA CODE

```
package atharva;

import java.util.Scanner;
public class Main {

    EmployeeService service=new EmployeeService();
    static boolean ordering = true;
    public static void menu() {
        System.out.println("*****Welcome To Human Resource
Managment System ***** "
        + "\n1. Add Employee "
        + "\n2.View Employee"
        + "\n3.Update Employee"
        + "\n4. Delete Employee"
        + "\n5.View All Employee"
        + "\n6.Employee Attendance"
        + "\n7. Exit ");
    }

    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        EmployeeService service=new EmployeeService();

        do {
            menu();
            System.out.println("Enter your Choice");
            int choice=sc.nextInt();
            switch(choice) {

                case 1:
                    System.out.println("Add Employee");
                    service.addEmp();
                    break;
                case 2:
                    System.out.println("View Employee");
                    service.viewEmp();
                    break;
                case 3:
```

```
        System.out.println("Update Employee");
        service.updateEmployee();
        break;
    case 4:
        System.out.println("Delete Employee");
        service.deleteEmp();
        break;
    case 5:
        System.out.println("view All Employee");
        service.viewAllEmps();
        break;
    case 6:
        System.out.println("Employee Attendance");
        service.attendance();
        break;
    case 7:
        System.out.println("Thank you for using
application!!");
        System.exit(0);

    default:
        System.out.println("Please enter valid choice");
        break;

    }

}while(ordering);

}
```

## OUTPUT SCREENSHOTS

```
1. Add Employee
2.View Employee
3.Update Employee
4. Delete Employee
5.View All Employee
6.Employee Attendance
7. Exit
Enter your Choice
1
Add Employee
```

```
Main [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (27-Nov-2022, 2:03:35 p
3.Update Employee
4. Delete Employee
5.View All Employee
6.Employee Attendance
7. Exit
Enter your Choice
2
View Employee
Enter id:
9898
Employee with this id is not present
```

3

Update Employee

Enter id:

9897

Employee is not present

4

Delete Employee

Enter id

001

Employee is not present

```
7. Exit
Enter your Choice
5
view All Employee
Employee [id=101, name=Shital, age=24, designation=Developer, department=IT, salary=25000.0]
Employee [id=104, name=Max, age=27, designation=System Eng, department=CO, salary=70000.0]
Employee [id=102, name=Meena, age=26, designation=Tester, department=CO, salary=57000.0]
Employee [id=103, name=Bob, age=20, designation=DevOps Eng, department=Admin, salary=5000.0]
```

Result Grid						
		Filter Rows:		Export:		Wrap Cell Content:
emp_id	emp_name	emp_age	emp_designation	emp_dept	emp_salary	
9898	amal	20	CS	MANAGER	0	