**4. Employee Management System**

**Main.java**

import java.util.Scanner;  
  
public class Main {  
 public static void main(String[] args) {  
 Scanner io = new Scanner(System.*in*);  
 EmployeeManagementSystem ems = new EmployeeManagementSystem();  
  
 while (true) {  
 System.*out*.println("\nEmployee Management System:");  
 System.*out*.println("1. Add Employee");  
 System.*out*.println("2. Delete Employee");  
 System.*out*.println("3. Search Employee");  
 System.*out*.println("4. Display All Employees");  
 System.*out*.println("5. Exit");  
 System.*out*.print("Enter your choice: ");  
 int choice = io.nextInt();  
  
 switch (choice) {  
 case 1:  
 System.*out*.print("Employee ID: ");  
 int id = io.nextInt();  
 System.*out*.print("Name: ");  
 String name = io.next();  
 System.*out*.print("Position: ");  
 String position = io.next();  
 System.*out*.print("Salary: ");  
 double salary = io.nextDouble();  
  
 Employee newEmp = new Employee(id, name, position, salary);  
 ems.addEmployee(newEmp);  
 break;  
  
 case 2:  
 System.*out*.print("Employee ID: ");  
 int delId = io.nextInt();  
 ems.deleteEmployee(delId);  
 break;  
  
 case 3:  
 System.*out*.print("Employee ID: ");  
 int searchId = io.nextInt();  
 Employee found = ems.searchEmployee(searchId);  
 if (found != null) {  
 found.displayInfo();  
 } else {  
 System.*out*.println("Employee not found.");  
 }  
 break;  
  
 case 4:  
 ems.listEmployees();  
 break;  
  
 case 5:  
 System.*out*.println("Bye..");  
 System.*exit*(0);  
  
 default:  
 System.*out*.println("Invalid choice.");  
 }  
 }  
 }  
}

**Employee.java**

public class Employee {  
 int employeeId;  
 String name;  
 String position;  
 double salary;  
  
 public Employee(int employeeId, String name, String position, double salary) {  
 this.employeeId = employeeId;  
 this.name = name;  
 this.position = position;  
 this.salary = salary;  
 }  
  
 public void displayInfo() {  
 System.*out*.println("ID: " + employeeId + ", Name: " + name +  
 ", Position: " + position + ", Salary: " + salary);  
 }  
}

**EmployeeManagementSystem.java**

public class EmployeeManagementSystem {  
 Employee[] employees = new Employee[100];  
 int count = 0;  
 public void addEmployee(Employee emp) {  
 if (count < employees.length) {  
 employees[count++] = emp;  
 } else {  
 System.*out*.println("Employee array is full!");  
 }  
 }  
 public Employee searchEmployee(int id) {  
 for (int i = 0; i < count; i++) {  
 if (employees[i].employeeId == id) {  
 return employees[i];  
 }  
 }  
 return null;  
 }  
 public void listEmployees() {  
 for (int i = 0; i < count; i++) {  
 employees[i].displayInfo();  
 }  
 }  
 public void deleteEmployee(int id) {  
 for (int i = 0; i < count; i++) {  
 if (employees[i].employeeId == id) {  
 for (int j = i; j < count - 1; j++) {  
 employees[j] = employees[j + 1];  
 }  
 employees[--count] = null;  
 System.*out*.println("Employee deleted.");  
 return;  
 }  
 }  
 System.*out*.println("Employee not found.");  
 }  
}