part A: microproject proposal

**Employee Record Management System**

1. Aims/Benefits of the micro-project

To develop employee record management system which will be able to add, update, display and search employee related information.

1. Course outcomes Addressed
2. Develop programs using object oriented methodology in java
3. Apply concept of inheritance for code reusability
4. Implement exception handing
5. Proposed Methodology

Employee record management system, we accept display search and update the data which is given below.

Step 1:- firstly, Enter he number of records that you want to store.

Step 2:- Display the menu. 1. Accept 2. Display 3. Search 4. Update 5. Exit

Step 3:- Enter your choice.

Step 4:- If choice 1 then enter the details of employee that you enter the

number of records.

If choice 2 then display the all records in tabular format. If choice 3 then enter the employee id whose you to search the record

If choice 4 then enter the employee id you want to update.

If choice 5 then exit the program.

1. Action plan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sr. No. | Details of Activity | Planned  Start Date | Planned  Finish Date | Name of Responsible  Team members |
| 1 | Data collection |  |  |  |
| 2 | Analysis |  |  |  |
| 3 | Design |  |  |  |
| 4 | Development (program coding) |  |  |  |
|  |  |  |  |  |
| 5 | Report writing |  |  |  |

1. Resources required

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sr. No. | Name of Resource/ material | Specification | Quantity | Remark |
| 1 | Computer System | **OS**: window 11(64 bit)  **Processor**: Intel(R)  Pentium(R) Dual CPU E2140 @1.60 GHz 1.60GHz  **RAM**:2 GB | 1 |  |
| 2 | Software | jdk 1.8.0 | 1 |  |

Part B:- Micro-Project Report

**Employee Record Management System**

1. Introduction

To develop employee record management system which will be able to add, update, display and search employee related information. In getData method we can accept the employee id, employee name, contact no, email ID, designation and salary. In search method we can enter the employee id that we want to search if it is present in the record then display the information of entered employee id. In update method we enter the employee id that we want to update and also accept the updated the information.

1. Aims/Benefits of the Microproject

To develop employee record management system which will be able to add, update, display and search employee related information.

1. Course outcomes Achieved
2. Develop programs using Object Oriented Methodology in Java.
3. Apply concept of Inheritance for code reusability.
4. Implement Exceptions Handling
5. Actual Methodology Followed
6. getData () method is use for accepting the information about the employee.
7. Display () method is use for displaying the information in tabular format
8. Search() method is use to searching the information that we want to search.
9. Update() method is use for updating the information that we wnt to update.

import java.io.\*;

class Employee

{

    int empId;

    String name,contact\_no,email\_id,designation;

    float salary;

    void getData()throws IOException

    {

        DataInputStream d=new DataInputStream(System.in);

        System.out.print("Enter the Employee id:  ");

        empId=Integer.parseInt(d.readLine());

        System.out.print("Enter the Employee name:  ");

        name=d.readLine();

        System.out.print("Enter the Salary:  ");

        salary=Float.valueOf(d.readLine());

        System.out.print("Enter the Designation:  ");

        designation=d.readLine();

        System.out.print("Enter the Email-id:  ");

        email\_id=d.readLine();

        System.out.print("Enter the Contact:  ");

        contact\_no=d.readLine();

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

    }

    void search(Employee e[],int n,int ei)

    {

        int i,flag=0;

      for(i=0;i<n;i++)

        {

            if(ei==e[i].empId)

            {

                flag=1;

                break;

            }

        }

        if(flag==1)

        {

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

            System.out.println("Name: "+name);

            System.out.println("Designation: "+designation);

            System.out.println("Email ID: "+email\_id);

            System.out.println("Contact No: "+contact\_no);

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

        }

        else

            System.out.println("Employee is not found.");

    }

    void update(Employee e[],int n)throws IOException

    {

        int eId,flag=0;

        float sal;

        String designation1;

        DataInputStream d = new DataInputStream(System.in);

        System.out.println("Enter Employee ID you want to update: ");

        eId=Integer.parseInt(d.readLine());

        System.out.println("<<<What You Want to update??>>> ");

        System.out.println("1.EMPLOYEE'S SALAR\n2.EMPLOYEE'S DESIGNATION");

        int N = Integer.parseInt(d.readLine());

        if(N==1)

        {

            System.out.println("Enter the salary you want to update: ");

            sal=Float.valueOf(d.readLine());

            for(int i=0;i<n;i++)

            {

                if(eId==e[i].empId)

                {

                    e[i].salary=sal;

                    flag=1;

                }

            }

        }

        else

        {

            System.out.println("Enter the designation you want to update: ");

            designation1=d.readLine();

            for(int i=0;i<n;i++)

            {

                if(eId==e[i].empId)

                {

                    e[i].designation=designation1;

                    flag=1;

                }

            }

        }

        if(flag==1)

            System.out.println("Information updated.......");

        else

            System.out.println("Information not updated......");

    }

    void display()

    {

        System.out.println(empId+"          "+name+"          "+salary+"          "+designation+"          "+email\_id+"          "+contact\_no+"\n");

    }

    public static void main(String args[])throws IOException

    {

        DataInputStream d=new DataInputStream(System.in);

        Employee e[];

        int n=0;

        int i,ch;

        System.out.println("Enter number records to create:");

        n=Integer.parseInt(d.readLine());

        e=new Employee[n];

        for(i=0;i<n;i++)

        e[i]=new Employee();

        while(true)

        {

            System.out.println("\*\*\*\*\*<<<<<MENU>>>>>\*\*\*\*\*");

            System.out.println("1 : ACCEPT THE EMPLOYEE INFORMATIOON");

            System.out.println("2 : DISPLAY THE EMPLOYEE INFORMATION");

            System.out.println("3 : SEARCH THE EMPLOYEE INFORMATION");

            System.out.println("4 : UPDATE THE EMPLOYEE INFORMATION");

            System.out.println("5 : EXIT");

            System.out.println("Enter your choice: ");

            ch=Integer.parseInt(d.readLine())

  switch(ch)

            {   case 1:for(i=0;i<n;i++)

                    e[i].getData();

                    break;

              case2:System.out.println("Empl\_id          Name         Salary          Designation          Email\_id         Contact\_No\n");

                    for(i=0;i<n;i++)

                    e[i].display();

                    break;

                case 3:System.out.println("Enter Employee id to search:");

                    int ei=Integer.parseInt(d.readLine());

                    e[0].search(e,n,ei);

                    break;

                case 4:System.out.println("<<<<UPDATE THE DATA>>>>");

                    e[0].update(e,n);

                    break;

                case 5:System.exit(0);

            }

        }

    }

}

1. Resources required

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sr. No. | Name of Resource/ material | Specification | Quantity | Remark |
| 1 | Computer System | **OS**: window 11(64 bit)  **Processor**: Intel(R)  Pentium(R) Dual CPU E2140 @1.60 GHz 1.60GHz  **RAM**:2 GB | 1 |  |
| 2 | Software | jdk 1.8.0 | 1 |  |

1. Output of Micro-project

Case 1: Accepting employee details.

Case 2: Display the information.

Case 3: Searching the information.

Case 4: updating the information.

1. Skill Developed /Learning outcome of this micro-project
2. We learned how to define class and how to create object of class.
3. We learned how to implement the array of object.
4. We learned the concept of constructor and also the types of constructor Default and parameterized constructor.
5. We learned the concept of menu driven program.
6. We learned how to implement concept of exception handling.
7. We learned how to import package in the program.
8. Application of this Micro-Project
9. The employee record management system in use in the office for store the information of employee.
10. In the shop for store records of employee that work in the shop.