

Employee Leave Management

Abstract:

It is an application designed to manage leave of employees. It consists of 8 classes and one interface.

The classes are as follows.

1. EmployeeManagementSystem.java - This contains the main method.
 2. WelcomePage.java - It displays the home page.
 3. Login.java - It checks the login credentials with username and password.
 4. EmployeeDetails.java - It tracks the detail of employees like location, designation and employee id etc.
 5. HolidayManagement.java - It tracks the attendance, leave taken, leaves left and is also used to apply for leave.
 6. Sneha.java - Employee 1 implemented from Employee.java interface.
 7. Sruthy.java - Employee 2 implemented from Employee.java interface.
 8. Sumit.java - Employee 3 implemented from Employee.java interface.
 9. Employee.java - It is the interface.
-

Flowchart:

It is given in the first page.

Source Code:

1. EmployeeManagementSystem.java

```
package project;

import java.util.Scanner;

public class EmployeeManagementSystem {
    static int login;
    static String ename;
    static Scanner sc = new Scanner(System.in);

    static Login log = new Login();
    static EmployeeDetails ed = new EmployeeDetails();
```

```

static HolidayManagement hm=new HolidayManagement();

public static void main(String[] args) {
    WelcomePage wp = new WelcomePage();
    int n = wp.begin();

    // To check login is failure or successful
    if (n == 1) {
        log.input();
        login = log.validate();
    } else
        System.exit(0);

    // Get Employee Details
    if (login == 1)
        ename=ed.details();
    else
        loginChecker();

    if(ename.equals("sumit") ||
    ename.equals("sruthy") || ename.equals("sneha"))
    {
        hm.manageHoliday(ename);
        while (true) {
            System.out.println("Do you want to
continue(y/n):");
            char c = sc.next().charAt(0);
            if (c == 'y')
                hm.manageHoliday(ename);
            else
                System.exit(0);
        }
    }
    else
        System.exit(0);
}

static void loginChecker()
{
    System.out.println("Do you want to
continue(y/n):");
    char ch = sc.next().charAt(0);
    if (ch == 'y') {
        log.input();
    }
}

```

```

        login=log.validate();
        if (login == 1)
            ed.details();
        else
            loginChecker();
    } else
        System.exit(0);
}
}

```

2. WelcomePage.java

```

package project;

import java.util.Scanner;

public class WelcomePage {
    static Scanner sc = new Scanner(System.in);
    int begin()
    {
        System.out.println("EMPLOYEE MANAGEMENT SYSTEM");
        System.out.println("*****");
        System.out.println("1.Continue");
        System.out.println("2.Exit");
        System.out.println("*****");
        System.out.println("Enter Your Choice(1/2):");
        int n=sc.nextInt();
        return n;
    }
}

```

3. Login.java:

```

package project;

import java.util.Scanner;

```

```

public class Login {
    String userName, password;
    static Scanner sc = new Scanner(System.in);

    //take username and password from user input
    void input() {
        System.out.println("*****");
        System.out.println("Login Credential");
        System.out.println("*****");
        System.out.println("Enter Username:");
        this.userName = sc.nextLine();
        System.out.println("Enter Password:");
        this.password = sc.nextLine();
    }

    //return 1 if login successful or return 0 if login
    failed
    int validate() {
        if (this.userName.equalsIgnoreCase("admin") &&
        this.password.equals("admin@123")) {
            System.out.println("*****");
            System.out.println("Login Successful");
            System.out.println("*****");
            return 1;
        } else {
            System.out.println("*****");
            System.out.println("Login Failed");
            System.out.println("*****");
            return 0;
        }
    }
}

```

4. EmployeeDetails.java:

```

package project;

import java.util.Scanner;

public class EmployeeDetails {
    static String ename;

```

```

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

//Fetch the Employee's Details
String details()
{
    System.out.println("Enter Employee Name");
    ename=sc.nextLine();
    System.out.println("*****");
    System.out.println("Employee Details");
    System.out.println("*****");
    switch(ename)
    {
        case "sumit":
            System.out.println("Employee ID=176541");
            System.out.println("Location=Bangalore");
            System.out.println("Designation=Software
Developer II");
            return ename;

        case "sruthy":
            System.out.println("Employee ID=179294");
            System.out.println("Location=Trivandrum");
            System.out.println("Designation=Associate
Software Developer");
            return ename;

        case "sneha":
            System.out.println("Employee ID=112356");
            System.out.println("Location=Hyderabad");
            System.out.println("Designation=Project
Manager");
            return ename;

        default:
            System.out.println(ename+" is an invalid
employee name");
            return ename;

    }

}

}

```

5. HolidayManagement.java:

```
package project;

import java.util.Scanner;

public class HolidayManagement {
    static Scanner sc = new Scanner(System.in);
    Sruthy s1 = new Sruthy();
    Sneha s2 = new Sneha();
    Sumit s3 = new Sumit();
    void manageHoliday(String ename) {
        System.out.println("*****");
        System.out.println("Manage Holiday");
        System.out.println("*****");
        System.out.println("1.View Attendance");
        System.out.println("2.View Lop");
        System.out.println("3.Apply for the Leave");
        System.out.println("4.Leaves Left");
        System.out.println("Enter your choice(1-4):");
        int ch = sc.nextInt();
        switch (ch) {
            case 1:
                if(ename.equals("sruthy"))
                    s1.attendance();
                else if(ename.equals("sneha"))
                    s2.attendance();
                else
                    s3.attendance();
                break;
            case 2:
                if(ename.equals("sruthy"))
                    s1.lop();
                else if(ename.equals("sneha"))
                    s2.lop();
                else
                    s3.lop();
                break;
            case 3:
                if(ename.equals("sruthy"))
                    s1.applyLeave();
```

```

        else if(ename.equals("sneha"))
            s2.applyLeave();
        else
            s3.applyLeave();
        break;
    case 4:
        if(ename.equals("sruthy"))
            s1.leaveBalance();
        else if(ename.equals("sneha"))
            s2.leaveBalance();
        else
            s3.leaveBalance();
        break;
    default:
        System.out.println("Invalid Choice");
    }
}
}

```

6. Sneha.java:

```
package project;
```

```
import java.util.Scanner;
```

```

public class Sneha implements Employee{
    static int cl=6,pl=6,sl=6,lop=1, leaveTaken=2;
    static int leaveLeft=(cl+pl+sl) - leaveTaken;
    static Scanner sc= new Scanner(System.in);
    @Override
    public void attendance()
    {
        System.out.println("Total Working Day="+365);
        System.out.println("Leave Taken="+leaveTaken);
    }

    @Override
    public void lop()
    {
        System.out.println("You have Loss of Payment for
"+lop+" days");
    }
}

```



```

@Override
public void applyLeave()
{
    if (leaveLeft <= 0)
    {
        System.out.println("Leave Left="+leaveLeft);
        System.out.println("Leave Denied");
    }
    else
    {
        System.out.println("Enter the no of days:");
        leaveTaken=leaveTaken+sc.nextInt();
        System.out.println("Leave Granted");
        leaveLeft=(cl+pl+sl)-leaveTaken;
        System.out.println("Leave Left="+leaveLeft);
    }
}

@Override
public void leaveBalance()
{
    System.out.println("Leave Left:"+leaveLeft);
}
}

```

7. Sruthy.java:

```

package project;

import java.util.Scanner;

public class Sruthy implements Employee{

    static int cl=6,pl=6,sl=6,lop=3, leaveTaken=4;
    static int leaveLeft=(cl+pl+sl)- leaveTaken;
    static Scanner sc= new Scanner(System.in);
    @Override
    public void attendance()
    {
        System.out.println("Total Working Day="+365);
        System.out.println("Leave Taken="+leaveTaken);
    }
}

```

```

    }

    @Override
    public void lop()
    {
        System.out.println("You have Loss of Payment for
"+lop+" days");
    }

    @Override
    public void applyLeave()
    {
        if (leaveLeft <= 0)
        {
            System.out.println("Leave Left="+leaveLeft);
            System.out.println("Leave Denied");
        }
        else
        {
            System.out.println("Enter the no of days:");
            leaveTaken=leaveTaken+sc.nextInt();
            System.out.println("Leave Granted");
            leaveLeft=(cl+pl+sl)-leaveTaken;
            System.out.println("Leave Left="+leaveLeft);
        }
    }

    @Override
    public void leaveBalance()
    {
        System.out.println("Leave Left:"+leaveLeft);
    }
}

```

8. Sumit.java:

```

package project;

import java.util.Scanner;

```

```

public class Sumit implements Employee{
    static int cl=6,pl=6,sl=6,lop=2, leaveTaken=18;
    static int leaveLeft=(cl+pl+sl)- leaveTaken;
    static Scanner sc= new Scanner(System.in);
    @Override
    public void attendance()
    {
        System.out.println("Total Working Day="+365);
        System.out.println("Leave Taken="+leaveTaken);
    }

    @Override
    public void lop()
    {
        System.out.println("You have Loss of Payment for
"+lop+" days");
    }

    @Override
    public void applyLeave()
    {
        if (leaveLeft <= 0)
        {
            System.out.println("Leave Left="+leaveLeft);
            System.out.println("Leave Denied");
        }
        else
        {
            System.out.println("Enter the no of days:");
            leaveTaken=leaveTaken+sc.nextInt();
            System.out.println("Leave Granted");
            leaveLeft=(cl+pl+sl)-leaveTaken;
            System.out.println("Leave Left="+leaveLeft);
        }
    }

    @Override
    public void leaveBalance()
    {
        System.out.println("Leave Left:"+leaveLeft);
    }
}

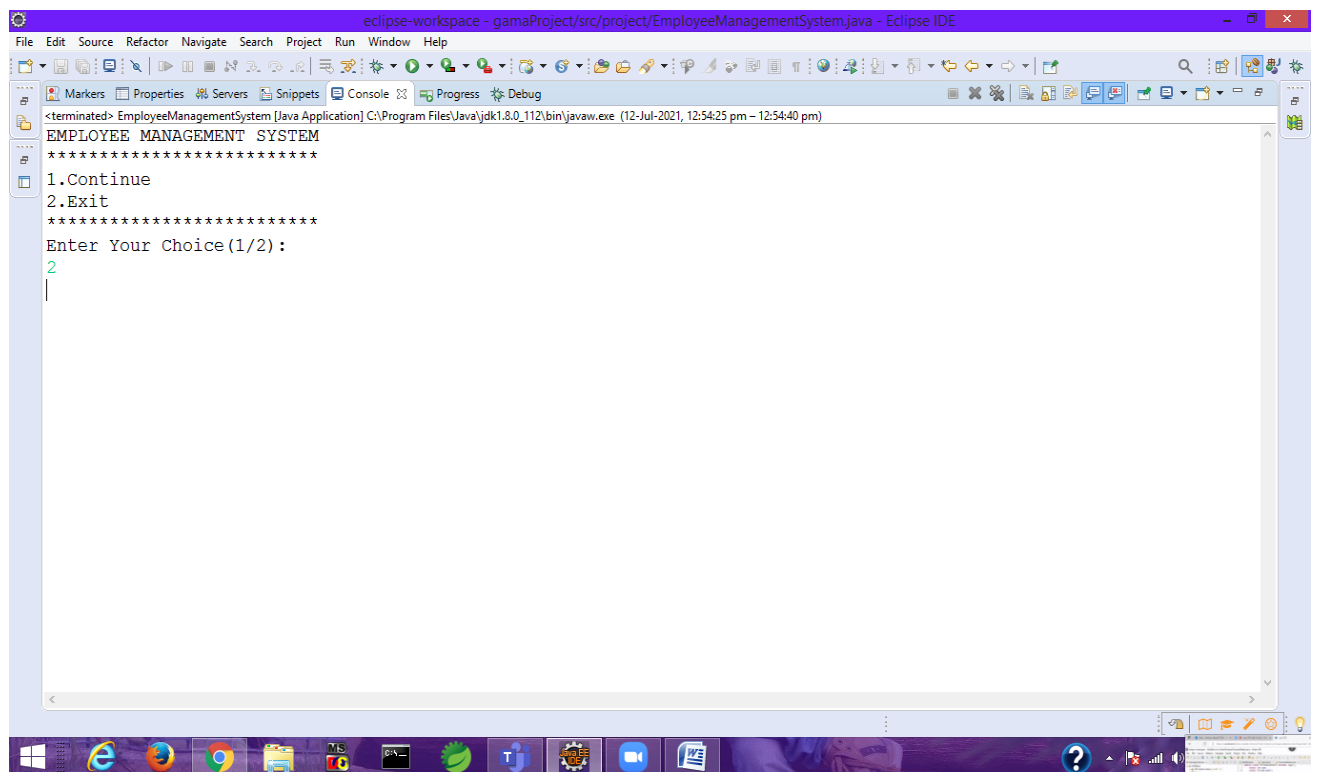
```

9. Employee.java:

```
package project;

public interface Employee {
    void attendance();
    void lop();
    void applyLeave();
    void leaveBalance();
}
```

Output:



```
eclipse-workspace - gamaProject/src/project/EmployeeManagementSystem.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Markers Properties Servers Snippets Console Progress Debug
<terminated> EmployeeManagementSystem [Java Application] C:\Program Files\Java\jdk1.8.0_112\bin\javaw.exe (12-Jul-2021, 12:56:24 pm - 12:57:29 pm)
EMPLOYEE MANAGEMENT SYSTEM
*****
1.Continue
2.Exit
*****
Enter Your Choice(1/2):
1
*****
Login Credential
*****
Enter Username:
admin
Enter Password:
admin@123
*****
Login Successful
*****
Enter Employee Name
sneha
*****
Employee Details
*****
Employee ID=112356
Location=Hyderabad
Designation=Project Manager
*****
```

```
eclipse-workspace - gamaProject/src/project/EmployeeManagementSystem.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Markers Properties Servers Snippets Console Progress Debug
<terminated> EmployeeManagementSystem [Java Application] C:\Program Files\Java\jdk1.8.0_112\bin\javaw.exe (12-Jul-2021, 12:56:24 pm - 12:57:29 pm)
*****
Manage Holiday
*****
1.View Attendance
2.View Lop
3.Apply for the Leave
4.Leaves Left
Enter your choice(1-4):
1
Total Working Day=365
Leave Taken=2
Do you want to continue(y/n):
y
*****
Manage Holiday
*****
1.View Attendance
2.View Lop
3.Apply for the Leave
4.Leaves Left
Enter your choice(1-4):
3
Enter the no of days:
16
Leave Granted
Leave Left=0
```

```
eclipse-workspace - gamaProject/src/project/EmployeeManagementSystem.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Markers Properties Servers Snippets Console Progress Debug
<terminated> EmployeeManagementSystem [Java Application] C:\Program Files\Java\jdk1.8.0_112\bin\javaw.exe (12-Jul-2021, 12:56:24 pm - 12:57:29 pm)
Do you want to continue(y/n):
y
*****
Manage Holiday
*****
1.View Attendance
2.View Lop
3.Apply for the Leave
4.Leaves Left
Enter your choice(1-4):
4
Leave Left:0
Do you want to continue(y/n):
y
*****
Manage Holiday
*****
1.View Attendance
2.View Lop
3.Apply for the Leave
4.Leaves Left
Enter your choice(1-4):
2
You have Loss of Payment for 1 days
Do you want to continue(y/n):
n
```

Submitted By:

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----- Thank You-----