Final Project

"Java 2 "

* Company Attendance Management System *

- -- Develop Company Attendance Management system that consists of Features:
 - Attendance.
 - Holidays.
 - Reports.
- -- Types of users (Admin, Manager and Employee) each type of user has its own distinctive functions.
- -- When you only run the system for the first time you will be asked to enter the administrator's: **id, username** and password, there is only one manager for this system.
- -- Program details:

1. Login Screen:

The login screen contains the following details:

-- Login using the user **Id** and **password**.

>>>> Login Screen <<<< 1- Login as Admin 2- Login as Manager 3- Login as Employee 4- About System 5- Exit

-- If the user does not have an account, print a message.

2. Admin:

The admin has many functions, including adding managers, modifying manager data, deleting managers, searching for manager, printing manager reports, accepting holiday requests and activating and disabling manager accounts...etc.

- Admin interface:

```
>>>> Admin <<<<<
1- Add Manager.
2- Update Manager.
3- Delete Manager.
4- Search about Manager.
5- Report about Manager.
6- Report about All Managers.
7- Holiday requests.
8- Deactivate & Activate Manager.
9- Get Manager count and Employee count.
10- Exit.
```

1. Add Manager:

To add a new manager, press Add manager and it will show you the information you need to fill out. -- (Enter >> id, name, password, email, phone number, status).

```
>>>> Add Manager <<<<
Enter id:
120202566
Enter name:
Abd Alaziz
Enter password:
123456
Enter email:
abdalaziz@gmail.com
Enter phone number:
0599745000
Enter status:
1
The manager has been successfully added.
```

-- The status means the account status if 1 means the account is active and if 0 means the account is disabled.

2. Update Manager:

You can change the manager's password through the manager ID and if there is an error in the manager ID, print a message.

```
>>>> Update Manager <>><
Enter id :
120140000
New password :
654321
The manager's data was successfully updated.
```

3. Delete Manager:

You can delete any manager by its ID number and if an error occurs or the ID is not found, print a message.

```
>>>> Delete Manager <><<
Enter id :
120140500
The manager has been successfully deleted.
```

4. Search about Manager:

You can search for any manager using ID to make sure it exists and print its name and account status and if that person is not present, print a message.

```
>>>> Search about Manager <><<
Enter id :
120202566
Name: Abd Alaziz || Status: 1
```

5. Report about Manager:

To print a detailed report about managers you can search for the manager by using the **ID or name**, if there is any error, print a message.

```
>>>>> Report about Manager <>>>
Enter id or name :
120202566

Id: 120202566 || Name: Abd Alaziz || Email: abdalaziz@gmail.com || Phoen : 0599745000 || Status: 1 || Check in: 8:00 || check out : 4:00
```

6. Report about All Managers:

You make a full report on all managers, and give the advantage of arranging the data **based on the name**, whether ascending or descending.

```
>>>> Report about All Managers <>>>
>>>> Choose the view of the data on the screen <>>>
1- Ascending order by Name.
2- Descending order by Name.
2
>>>> Final Report <>>>
Id: 120202566 || Name: Abd Alaziz || Email: abdalaziz@gmail.com || Phoen: 0599745000 || Status: 1 || Check in: 8:00 || check out: 4:00
Id: 120140000 || Name: Joe Nice || Email: joe@gmail.com || Phoen: 0599594000 || Status: 1 || Check in: 9:00 || check out: 3:00
Id: 120141111 || Name: Waleed || Email: waleed@gmail.com || Phoen: 0599264000 || Status: 0 || Check in: 8:00 || check out: 12:00
```

7. Holiday requests:

You can see all holiday requests and you can approve or reject any holiday.

```
>>>>> Holiday requests <<<<

1- View Holiday requests.

2- Accept the holiday.

3- Rejected the holiday.

4- Exit
```

1- View Holiday requests:

All holiday requests are offered by all employees: (managers and employees).

-- The report will contain the following information: (Id, name, reason, details, date).

```
>>>>> View Holiday requests <>>>
Id: 120202566 || Name: Abd Alaziz || Reason: Tourist vacation || Details: Travel to London || Date: 2022/9/13
Id: 120140000 || Name: Joe Nice || Reason: Attend a conference || Details: Attending a conference on human development in Cairo || Date: 2022/10/5
```

2. Accept the holiday:

To approve a holiday request the employee ID number is entered and will appear at the employee that the holiday request has been accepted.

```
>>>> Accept the holiday <>>>
Enter id:
120202566
Approved successfully.
```

3- Rejected the holiday:

To refuse a holiday request you will enter an employee ID and the status of the application will appear when the employee has rejected it. > Change the check value 1.

```
>>>> Rejected the holiday <>>>
Enter id :
120145891
The request was rejected.
```

-- If the request is accepted or the request is rejected, the request will disappear from the request list.

8- Deactivate & Activate Manager:

The Manager Account status is disabled or activated by changing the status from 0 to 1 or vice versa.

```
>>>> Deactivate & Activate Manager <<<<
1- Activate.
2- Deactivate.
3- Exit.
```

- -- The active account can login to the system.
- -- The disabled account cannot login to the system.

1- Activate:

Enter the ID of the account to be activated and you must verify that ID exists and if it does not exist, print an error message.

```
>>>> Activate Manager <>>>
Enter id:
120141111
The account has been activated.
```

2- Deactivate:

When you enter an ID number, this account is disabled and you must make sure there is an ID number for an employee and the account that is disabled cannot log on to the system.

```
2- Deactivate.
>>>> Deactivate Manager <>>>
Enter id:
120140000
The account has been disabled.
```

9- Get Manager Count and Employee count:

You will bring in the number of managers within the company and the number of employees within the company as shown in the picture.

```
>>>> Get Manager count and Employee count <<<<
- Manager Count: 3
- Employee Count: 2
```

9- Exit:

When you press Exit, you will return to the login screen.

3- Manager:

The manager has many functions including adding a new employee, modifying employee data, deleting an employee, searching for an employee, displaying a report on a particular employee, or displaying a detailed report of all employees, disabling or activating an employee account, upgrading an employee from a regular employee to a manager, registering attendance and leave and the possibility of requesting a holiday.

- Manager interface:

```
>>>> Manager <<<<
1- Add Employee.
2- Update Employee.
3- Delete Employee
4- Search about Employee.
5- Report about Employee.
6- Report about All Employee.
7- Deactivate & Activate Employee.
8- Promote an Employee to Manager.
9- Attendance.
10- Holiday.
11- Exit
```

1. Add Employee:

To add a new Employee, press Add Employee and it will show you the information you need to fill out.

-- (Enter >> id, name, password, email, phone number, type of employees, status).

```
>>>> Add Employee <<<<
Enter id:
120140300
Enter name:
Khaled
Enter password:
123456
Enter email:
Khaled@gmail.com
Enter phone number:
0599745258
Types of employees (1) <Full-time> or (2) <Part-time>
1
Enter status:
1
The Employee has been successfully added.
```

2. Update Employee:

You can change the employee's password through the manager ID and if there is an error in the employee ID, print a message.

```
>>>>> Update Employee <>>>
Enter id:
120140110
New password:
156974
The Employee data was successfully updated.
```

3. Delete Employee:

You can delete any employee by its ID number and in the event of any error or Id not found, print a message.

```
>>>> Delete Employee <><<
Enter id :
120140220
The Employee has been successfully deleted.
```

4. Search about Employee:

You can search for any employee using ID to make sure it exists and print its name and account status and if that person is not present, print a message.

```
>>>> Search about Employee <>>>
Enter id:
120140300
Name: Khaled || Status: 1
```

5. Report about Employee:

To print a detailed report about employees you can search for the person using **the ID or name**, if there is any error, print a message.

```
>>>>> Report about Employees <>>>
Enter id or name :
120140300
Id: 120140300 || Name: Khaled || Email: Khaled@gmail.com || Phoen : 0599745258 || Type Emp: 1 || Status: 1 || Check in: 10:00 || check out : 3:30
```

6. Report about All Managers:

You make a full report on all employees.

```
>>>>> Report about All Employees <<<<<
Id: 120140110 || Name: Khaled || Email: Khaled@gmail.com || Phoen : 0599745258 || Type Emp: 1 || Status: 1 || Check in: 10:00 || check out : 3:30
Id: 120141551 || Name: jess || Email: jess@gmail.com || Phoen : 0599261117 || Type Emp: 0 || Status: 0 || Check in: 7:30 || check out : 2:20
```

7. Deactivate & Activate Employee:

The Employee account status is disabled or activated by changing the status from 0 to 1 or vice versa.

```
>>>> Deactivate & Activate Employee <<<<

1- Activate.

2- Deactivate.

3- Exit.
```

-- The active account can login to the system.

-- The disabled account cannot login to the system.

1- Activate:

Enter the ID of the account to be activated and you must verify that ID exists and if it does not exist, print an error message.

```
>>>> Activate Employee <<<<
Enter id :
120141551
The account has been activated.
```

2- Deactivate:

When you enter an ID number, this account is disabled and you must make sure there is an ID number for an employee and the account that is disabled cannot log on to the system.

```
>>>> Deactivate Employee <<<<
Enter id :
120140770
The account has been disabled.
```

8- Promote an employee to Manager:

The manager can upgrade the employee to a manager by entering the employee ID, so that the employee becomes a manager and can log on as manager and cannot log on as an employee.

```
>>>>> Promote an employee to Manager <<<<
Enter id :
120140110
The current employee (120140110) has the authority of a manager.
```

9- Attendance:

The current manager can record the time of the company's attendance and the time of departure from the company.

```
>>>> Attendance <<<<

1- Time of attendance.

2- Time to leave.

3- Exit.
```

1- Time of attendance:

The current manager will enter the company's time of attendance.

```
>>>> Time of attendance <<<<
Enter the time.
8:35
```

2- Time of leave:

The current manager will enter the company's time of leave.

```
>>>> Time of leave <<<<
Enter the time.
3:45
```

10- Holiday:

You can see the holiday requests you have created and you can create new holiday requests.

```
>>>> Holiday <<<<
1- My Holiday.
2- Create Holiday.
3- Exit.
```

1- My Holiday:

Here all the holiday requests you have submitted to the admin will be displayed. >add (Check).

```
>>>>> My Holiday <>>>>
Id: 120140000 || Name: Joe Nice || Reason: Tourist vacation || Details: Travel to London || Date: 2019/9/15 || Check: 1
Id: 120140000 || Name: Joe Nice || Reason: Attend a conference || Details: Attending a conference on human development in Cairo || Date: 2019/11/13 || Check: 0
```

-- Check: 0 means the request is in wait and 1 means the request has been accepted and 2 means the request has been rejected.

2- Create Holiday:

The current user can create a new holiday request by filling in the following information (name, reason, details, date).

```
>>>> Create Holiday <><<<
Enter Name :
Joe Nice
Enter Reason :
Tourist vacation
Enter Details :
Travel to USA
Enter Date :
2022/7/13
```

9- Exit:

When you press Exit, you will return to the login screen.

3. Employee:

The employee has some functions including the possibility of changing the password for himself and recording the attendance and departure dates as well as creating a new holiday and seeing his old holidays.

- Employee interface:

```
>>>> Employee <<<<
1- Change Password.
2- Attendance.
3- Holiday.
4- Exit.
```

1- Change Password:

The current employee can change his or her password directly.

```
>>>> Change Password <<<<
Enter new Password :
123789
```

2. Attendance:

The current employee can record the time of the company's attendance and the time of departure from the company.

```
>>>> Attendance <<<<

1- Time of attendance.

2- Time to leave.

3- Exit.
```

1- Time of attendance:

The current employee will enter the company's time of attendance.

```
>>>>> Time of attendance <<<<
Enter the time.
9:55
```

2- Time of leave:

The current employee will enter the company's time of leave.

```
>>>> Time of leave <<<<
Enter the time.
1:36
```

10. Holiday:

You can see the holiday requests you have created and you can create new holiday requests.

```
>>>> Holiday <<<<

1- My Holiday.

2- Create Holiday.

3- Exit.
```

1- My Holiday:

Here all the holiday requests you have submitted to the admin will be displayed.

```
>>>>> My Holiday <>>>>
Id: 120141551 || Name: Jess || Reason: Tourist vacation || Details: Travel to Germany || Date: 2019/12/13 || Check : 2
```

2- Create Holiday:

The current user can create a new holiday request by filling in the following information (name, reason, details, date).

```
>>>> Create Holiday <>>>
Enter Name :
Jess
Enter Reason :
Tourist vacation
Enter Details :
Travel to Germany
Enter Date :
2022/11/23
```

9- Exit:

When you press Exit, you will return to the login screen.

3- About system:

View details of the system as shown in the image attached below.

>>>> System information <>>> > Company Management System > Developed by Abd Alaziz > @2022-2023

3- Exit:

The system will be completely closed.

Notes:

- **1-** The **Exit** option on the Login screen means the program will be is closed, while other exit options mean back.
- 2- All information must be stored and read using the files.
- 3- You must use Object-Oriented Programming Professionally.
- **4-** All expected errors must be handling professionally.
- **5-** Array List must be used within the program.
- **6-** There will be a discussion for the project, if you delay the discussion time specified for discussion or if you are late in handing over the project. Make you lose **10%** of your mark, *Discussions will be scheduled later.
- 7- If the project is not discussed, will make you lose 50% of your mark.
- **8-** The total mark for this project is **40%** of the course's total mark.
- **9-** All students have to form groups to work on this project and **each group consists of two students only.**
- **10** If there is any match between the projects, both groups **will take a zero** mark in the project. **⊕ ⊕**
- **11-** All group members must deliver the project **on their Moodle** and no late deliveries are allowed.
- **12-** Submit the project is **not allowed outside the Moodle**.
- **13-** The names of students who want to work as a team must be handed over on the Moodle.
- **14-** Deliver the complete project file, compress it with a .zip or .rar format, and write your university number on it (id).
- 15- Deadline for delivery 2022/5/15.

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