DOON INTERNATIONAL SCHOOL
RIVERSIDE CAMPUS

PROJECT FILE ON EMPLOYEE MANAGEMENT

SESSION

2022-2023

Submitted By :   Submitted To :

Rabjyot Singh Rajpal   Mr. Mukul Joshi

Class-12A   PGT CS

RollNo - _____

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Rabjyot Singh

Class:12A

CERTIFICATE

This is to certify that the program enlisted in this project report file have been designed and executed by

<u>Rabjyot Singh</u>

Of class XII Science,

The Doon International School Riverside

For session 2022-2023

Under The supervision of

<u>Mr. Mukul Joshi</u>

In Partial fulfilment for the

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(Mr. Mukul Joshi)

(HOD CS)

INTRODUCTION

Employee management is a practice that helps a manager improve employee productivity and satisfaction to help an organisation reach its goals. Human resources (HR) professionals often use an employee management system (EMS), including recruitment, offboarding and performance management. Using a dedicated EMS can help an HR manager streamline the hiring process and improve workplace efficiency.

Employee Management system is an application-based program, having 4 sub tasks:

- To remove an employee
- To display the list of employees
- To add an employee
- To search for an employee in the list

Every organisation, be it schools, governments, offices etc, use an employee management system to keep track of the employees. This employee system keeps data secured and updated for future reference. The program is written in Python language and utilises MySQL database to store the data and access it.

OBJECTIVE

The objective of employee management system is to design a system which manages the employee data within a small company or organisation.

This project simplifies the task of maintaining records due to its user-friendly nature.

This system has been developed to override problems prevailing in the practising of manual system. Software supports the elimination of hardships faced by the manual system.

SYSTEM IMPLEMENTATION

Hardware used:

The following are the minimum hardware requirements:

- Minimum 32 GB memory space
- Intel processor of 1 GHz or more
- Pen drive or CD drive to transport files
- System which has python 3.10 and MySQL database installed.
- QWERTY Keyboard

SOFTWARE REQUIREMENTS:

- Operating system recommended are Windows, Linux or MacOS
- Developing Language --- Python v3.10
- Database --- MySQL 8.0

    The above elementary hardware and software devices were used for optimum performance.

DESIGN

Database design:

Database name --- EMS

TABLE name --- EMPLOYEE

EMPLOYEE	
Variable	Type
ID	int
Name	VARCHAR(256)
Post	VARCHAR(20)
Salary	int

ID--- Primary key to identify the Employee

name--- name of the Employee

post--- post of the Employee

salary--- salary paid to the employee annually.

Table creation script:

CREATE TABLE EMPLOYEE (id INT, name VARCHAR(256), post VARCHAR(20), salary int).

PROGRAM CODE

```python
import mysql.connector


def addEmployee(mydb, mycursor) :

    print("Add an Employee");

    name= input("Please enter your name ")

    post= input("Please enter your post ")

    sal= int(input("Please enter your salary "))

    employeeId= int(input("Please enter your employee id "))


    sql = "INSERT INTO EMPLOYEE (id, name, post, salary) VALUES (%s,%s,%s,%s)"

    val = (employeeId, name, post, sal)


    mycursor.execute(sql, val)

    mydb.commit()

    print ("===Employee with name " + name + " added succesfully===")

    print()


def removeEmployee(mydb, mycursor):

    print("Remove an Employee");

    employeeID= int(input("Please enter your Employee Id "))
```

```python
    query="SELECT * FROM EMPLOYEE where
ID={}".format(employeeID)

    mycursor.execute(query)

    myresult = mycursor.fetchall()

    if len(myresult)==0:

        print("===============")

        print("Record not found")

        print("===============")

        print()

    else :

        sql = "DELETE FROM EMPLOYEE where ID=%s"

        val = (employeeID,)


        mycursor.execute(sql, val)


        mydb.commit();

        print("===Employee with id "+ str(employeeID) + " deleted
succesfully===")

        print()


def displayEmployees( mycursor ) :

    print("Display the Employee list");

    mycursor.execute("SELECT * FROM EMPLOYEE")

    myresult = mycursor.fetchall()

    print ("===List of Employees are as below===")
```

```python
    for x in myresult:
        print("Eployee Id : " + str(x[0]))

        print("Employee Name : " + x[1])

        print("Employee Post : " + x[2])

        print("Employee Salary : " + str(x[3]))

        print()
    print()


def searchEmployeeByName(mycursor):
    print("Search an Employee by Name ");

    name1= input("Please enter your name ")


    sql = "SELECT * FROM EMPLOYEE where NAME=%s"

    val = (name1,)


    mycursor.execute(sql, val)

    myresult = mycursor.fetchall()

    if len(myresult)==0:

        print("================")

        print("Record not found")

        print("================")

        print()

    else :
```

```python
        print ("===List of Employees found with name are below===")
        for x in myresult:
            print("Employee Id : " + str(x[0]))
            print("Employee Name : " + x[1])
            print("Employee Post : " + x[2])
            print("Employee Salary : " + str(x[3]))
            print()
        print()




print("=========================");
print("EMPLOYEE MANAGEMENT SYSTEM");
print("=========================");
n=-1;

mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="manager",
    database="EMS"
)

print(mydb)
```

```python
mycursor = mydb.cursor()

while n != 0 :
    print("Please enter the following keys for different functions:")
    print("1 : Add an Employee")
    print("2 : Remove an Employee")
    print("3 : Display the Employee")
    print("4 : Search an Employee list")
    print("0 : Exit")
    n = int(input("Please enter your choice "))
    if n==1 :
        addEmployee(mydb, mycursor);
    if n==2:
        removeEmployee(mydb, mycursor);
    if n==3 :
        displayEmployees(mycursor);
    if n==4 :
        searchEmployeeByName(mycursor);
    if n==0 :
        print ("Thank you for using EMPLOYEE
MANAGEMENT SYSTEM ");
```

Working with software:

To access the program, first you would be displayed list of modules to perform task. Choose the respective key to perform tasks.

If 0 chosen; program exits and prints thank you message.

If 1 chosen; you would be asked to enter employee details like name, id, post, salary etc.

This employee will be added into list.

If 2 chosen; you would be asked to enter id and employee(s) will be removed.

If 3 chosen; the list of employees is displayed.

If 4 chosen; then employee's name will be asked. The name employee would be searched in the list.

The loop will execute until the user wished to exit, hence terminating the program.

OUTPUT

Add employee:

Remove employee:

```
Please enter the following keys for different functions:
 1 : Add an Employee
 2 : Remove an Employee
 3 : Display the Employee list
 4 : Search an Employee by Name
 0 : Exit
Please enter your choice 2
Remove an Employee
Please enter your Employee Id 1
===Employee with id 1 deleted succesfully===

Please enter the following keys for different functions:
 1 : Add an Employee
 2 : Remove an Employee
 3 : Display the Employee list
 4 : Search an Employee by Name
 0 : Exit
Please enter your choice 3
Display the Employee list
===List of Employees are as below===
Employee Id : 2
Employee Name : john
Employee Post : manager
Employee Salary : 20000000

Please enter the following keys for different functions:
 1 : Add an Employee
 2 : Remove an Employee
 3 : Display the Employee list
 4 : Search an Employee by Name
 0 : Exit
Please enter your choice _
```

Display employee:


```
C:\Windows\py.exe

2 : Remove an Employee
3 : Display the Employee list
4 : Search an Employee by Name
0 : Exit
Please enter your choice 3
Display the Employee list
===List of Employees are as below===
Employee Id : 2
Employee Name : john
Employee Post : manager
Employee Salary : 20000000

Employee Id : 5
Employee Name : kevin
Employee Post : CEO
Employee Salary : 122220000

Employee Id : 9
Employee Name : rick
Employee Post : worker
Employee Salary : 1000000


Please enter the following keys for different functions:
 1 : Add an Employee
 2 : Remove an Employee
 3 : Display the Employee list
 4 : Search an Employee by Name
 0 : Exit
Please enter your choice _
```

Search employee:


```
Please enter the following keys for different functions:
 1 : Add an Employee
 2 : Remove an Employee
 3 : Display the Employee list
 4 : Search an Employee by Name
 0 : Exit
Please enter your choice 4
Search an Employee by Name
Please enter your name john
===List of Employees found with name are below===
Employee Id : 2
Employee Name : john
Employee Post : manager
Employee Salary : 20000000


Please enter the following keys for different functions:
 1 : Add an Employee
 2 : Remove an Employee
 3 : Display the Employee list
 4 : Search an Employee by Name
 0 : Exit
Please enter your choice
```

BIBLIOGRAPHY

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