

INTRODUCTION

This project depicts simple **Employee Management System** software, which contains various functions that allow the user/company to keep track of its employees and store the details of its employees in a database.

This project has been made using C language, and uses some important concepts, features and algorithms to accomplish the task. This software is entirely text based and could be run on any machine having C compiler (GCC, Turbo-C, Borland, etc.) through a Terminal window (LINUX), or Command Prompt (Windows).

HEADER FILES USED:

1. `stdio.h`
2. `stdlib.h`
3. `string.h`
4. `ctype.h`
5. `termios.h`

FUNCTIONS USED:

void head_disp() – This function displays the masthead of the Employee Management Software program and is used as a header for displaying the Software name to all subparts of the program. As indicated by its return type, it returns no value, and accepts no parameter.

void initTermios(int) – This function is used to set the terminal properties to its default stage, and also it is used to implement `getch()` and `getche()` functions which are by default not present in the standard C library, but are required for usage in some parts of the program.

void resetTermios() – This function resets the default state of the terminal which might have been changed during implementation of `getch()` and `getche()` functions. The default values to be used are stored in a structure variable named **old**.

char getch_(int) - This function takes an integer argument which is passed to it by, the `getch()` and `getche()` functions, and according to the input passed to it, it instructs the `initTermios(int)` function to implement those functions, and whether to echo the output on the screen or not.

char getch() – This function takes a character from the standard input i.e. keyboard and returns that character to a char type variable, but the value which is typed by the user on the screen is not displayed. Also, `getch()` function does not wait for the user to press Enter key after entering a character. The entered character is automatically used.

char getche() – This function takes a character from the standard input i.e. keyboard and returns that character to a char type variable, and the value which is typed by the user is displayed on the screen. Like `getch()` function, `getche()` function also does not wait for the user to press Enter key after entering a character. The entered character is automatically used.

NOTE- The employee database where information about all the employees will be stored is a binary file, with name “**employeeRecord.txt**”. The program has been designed in such a manner that it uses this file to work with all its functions. The software also analyzes and checks if the file is present or not, and prompts the user for creating Employee database, if it does not exists already.

void emp_append() – This function is used to add an Employee’s record in the existing database.

void emp_delete() – This function is used for deleting the records of an employee present in the database of the software.

void emp_modify() – This function is used to modify the records of the employees which are present in the software’s database.

void emp_display() – This function takes Employee ID from the user, and displays all information about that employee, from the database.

void emp_displayAll() – This function displays information about all the employees present in the current software’s database.

void emp_search() – This function allows a user to search through the employee records present in the database. User can search for employee either by Name or by Employee ID. If found, the function displays the information about that employee to the user.

int main(void) – This function is the driving function of the program. The execution of the software begins from this function, and it contains all the information about the database, and it manages the control of execution of the program, by displaying user to choose what operation which he wants to perform on the given database.

EMPLOYEE INFORMATION:

An employee has usually these details on which this software works on-

Name of Employee, Position of Employee in Company, Qualifications of Employee, Certifications(if any) of Employees, Employee ID, Programming Languages known.

Personal Information of Employee including his/her Age, Phone number.

These values are stores in a structure **personal**.

CODE

[Create Employee-Management-System.c · Subhajitsdev/Employee-Management-System@5101422 \(github.com\)](https://github.com/Subhajitsdev/Employee-Management-System)

OUTPUT

1.Add New Employee Function

```
File Edit View Search Terminal Help

*****
**                               **
**      EMPLOYEE MANAGEMENT SOFTWARE      **
**                               **
*****

Employee ID: 1
Employee Name: Mohit
Employee Position: Founder
Employee Age: 18
Employee Work Experience: 2
Employee Salary: 100000
Employee Phone Number: 7080974623
Employee Qualifications: B.Tech.
Employee Certifications: None
Programming languages Known: JAVA,C
Employee Record Successfully Written.
Press 1 to Continue and 0 to EXIT
INPUT: 1
```

2. Modify Employee's Record Function

```
File Edit View Search Terminal Help

*****
**                               **
**      EMPLOYEE MANAGEMENT SOFTWARE      **
**                               **
*****

Enter Employee ID to Edit Record: 1
EXISTING RECORD IS.....
EMPLOYEE ID: 1
EMPLOYEE NAME: Mohit
EMPLOYEE POSITION: Founder
EMPLOYEE AGE: 18
EMPLOYEE QUALIFICATIONS: B.Tech.
EMPLOYEE CERTIFICATIONS: None
EMPLOYEE WORK EXPERIENCE: 2
EMPLOYEE SALARY: 100000.00
EMPLOYEE PHONE NUMBER: 7080974623
PROGRAMMING LANGUAGES KNOWN: JAVA,C
*****MODIFYING EMPLOYEE RECORD*****
Enter New Employee Name: Mohit
Enter New Employee Position: CEO
Enter New Employee Age: 20
Enter New Employee Qualifications: B.Tech.,MS
Enter New Employee Certifications: CCNA,CEH
Enter New Employee Work Experience: 4
Enter new Employee Salary: 200000
```

3. Search for an Employee Function

```
File Edit View Search Terminal Help

*****
**          EMPLOYEE MANAGEMENT SOFTWARE          **
*****

What Do You Know about the Employee?
Employee ID: Enter 1
Employee Name: Enter 2
INPUT: 1

Enter Employee ID:      1

*****EMPLOYEE RECORD IS.....

EMPLOYEE ID:      1
EMPLOYEE NAME:    Mohit
EMPLOYEE POSITION: Founder
EMPLOYEE AGE:     18
EMPLOYEE QUALIFICATIONS: B.Tech.
EMPLOYEE CERTIFICATIONS: None
EMPLOYEE WORK EXPERIENCE: 2
EMPLOYEE SALARY: 100000.00
EMPLOYEE PHONE NUMBER: 7080974623
PROGRAMMING LANGUAGES KNOWN: JAVA,C

Press 1 to Continue and 0 to EXIT

INPUT: 
```

4. Delete an Employee's Record Function

```
File Edit View Search Terminal Help

*****
**          EMPLOYEE MANAGEMENT SOFTWARE          **
*****

Enter Employee ID to delete it's Record:      1

Record successfully deleted.

Press 1 to Continue and 0 to EXIT

INPUT: 
```

5. Display All Employee's Information Function

```
File Edit View Search Terminal Help

*****
**                               **
**      EMPLOYEE MANAGEMENT SOFTWARE      **
**                               **
*****

*****ALL EMPLOYEES INFORMATION*****

EMPLOYEE ID: 1
EMPLOYEE NAME: Mohit
EMPLOYEE POSITION: Founder
EMPLOYEE AGE: 18
EMPLOYEE QUALIFICATIONS: B.Tech.
EMPLOYEE CERTIFICATIONS: None
EMPLOYEE WORK EXPERIENCE: 2
EMPLOYEE SALARY: 100000.00
EMPLOYEE PHONE NUMBER: 7080974623
PROGRAMMING LANGUAGES KNOWN: JAVA,C

TOTAL EMPLOYEES: 1

Press 1 to Continue and 0 to EXIT

INPUT: 
```

6. Display an Employee's Record Function

```
File Edit View Search Terminal Help

*****
**                               **
**      EMPLOYEE MANAGEMENT SOFTWARE      **
**                               **
*****

Enter Employee ID to display it's Record: 1

EMPLOYEE RECORD IS.....
EMPLOYEE ID: 1
EMPLOYEE NAME: Mohit
EMPLOYEE POSITION: Founder
EMPLOYEE AGE: 18
EMPLOYEE QUALIFICATIONS: B.Tech.
EMPLOYEE CERTIFICATIONS: None
EMPLOYEE WORK EXPERIENCE: 2
EMPLOYEE SALARY: 100000.00
EMPLOYEE PHONE NUMBER: 7080974623
PROGRAMMING LANGUAGES KNOWN: JAVA,C

Press 1 to Continue and 0 to EXIT

INPUT: 
```

