MODEL INSTITUTE OF ENGINEERING & TECHNOLOGY, JMU

EMPLOYEE MANAGEMENT SYSTEM

SUBMITTED TO: Ms. Sheetal Mahajan

GROUP: 7th

Karan Sharma [2022a1r009]

Anshul Bhau [2022a1r010]

Krishna mam[2022a1r019]

[BRANCH CSE]

ABSTRACT

Employee management is a project 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. The purpose of an employee management system is to streamline HR processes, improve employee productivity, and provide insights into workforce performance. It can also help organizations comply with labor laws and regulations, as well as reduce errors and increase efficiency in HR-related tasks.

INTRODUCTION

An employee management system or EMS is a tool that helps improve employee satisfaction and productivity to help a company achieve their overall goals. These tools help monitor, assess and control employees' working hours and efficiently utilise human resources. It ensures that HR efficiently manages each employee's payroll and disburses salaries on time. An EMS securely stores and manages the personal and work-related details of employees. This makes it easier for the managers to store and access relevant data when needed.

LITERATURE

The literature on employee management systems covers a wide range of topics, including the benefits of using such systems, the various features and functionalities they offer, and the potential challenges and limitations associated with their implementation.

Studies have shown that employee management systems can have a positive impact on an organization's efficiency, accuracy, and overall productivity. By automating routine HR tasks, these systems can save time and reduce the risk of errors, leading to increased job satisfaction among employees and reduced administrative costs for the organization.

The literature also discusses the various features of employee management systems, such as employee self-service, time and attendance tracking, payroll processing, benefits administration, and performance management. These features are designed to streamline HR processes and improve communication and collaboration among employees and managers.

However, the literature also acknowledges that implementing an employee management system can be challenging. Some common challenges include the need for significant changes to existing processes, the cost of implementation and maintenance, and the potential resistance from employees who may be resistant to change.

Overall, the literature on employee management systems emphasizes the benefits of using these systems while also acknowledging the challenges that may arise during implementation. Organizations considering the adoption of an employee management system are encouraged to carefully evaluate their needs and resources to determine the best approach for their unique situation.

Code

```
// C program for  employee management system
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <windows.h>

// Structure of the employee
struct emp {
    char name[50];
    float salary;
    int age;
    int id;
};
struct emp e;

// size of the structure
long int size = sizeof(e);

// In the start coordinates
// will be 0, 0
COORD cord = { 0, 0 };

// function to set the
// coordinates
void gotoxy(int x, int y)
{
    cord.X = x;
    cord.Y = y;
    SetConsoleCursorPosition(
        GetStdHandle(STD_OUTPUT_HANDLE),
        cord);
```

```
}

FILE *fp, *ft;

// Function to add the records
void addrecord()
{
    system("cls");
    fseek(fp, 0, SEEK_END);
    char another = 'y';

    while (another == 'y') {
        printf("\nEnter Name : ");
        scanf("%s", e.name);

        printf("\nEnter Age : ");
        scanf("%d", &e.age);

        printf("\nEnter Salary : ");
        scanf("%f", &e.salary);

        printf("\nEnter EMP-ID : ");
        scanf("%d", &e.id);

        fwrite(&e, size, 1, fp);

        printf("\nWant to add another"
               " record (Y/N) : ");
        fflush(stdin);

        scanf("%c", &another);
    }
}

// Function to delete the records
void deleterecord()
{
    system("cls");
    char empname[50];
    char another = 'y';

    while (another == 'y') {
        printf("\nEnter employee "
               "name to delete : ");
        scanf("%s", empname);

        ft = fopen("temp.txt", "wb");
        rewind(fp);

        while (fread(&e, size,
                     1, fp)
               == 1) {
            if (strcmp(e.name,
                       empname)
                != 0)
                fwrite(&e, size, 1, ft);
        }

        fclose(fp);
        fclose(ft);
        remove("data.txt");
        rename("temp.txt", "data.txt");
        fp = fopen("data.txt", "rb+");

        printf("\nWant to delete another"
               " record (Y/N) :");
        fflush(stdin);
        another = getche();
    }
}

// Function to display the record
void displayrecord()
{
    system("cls");
    // sets pointer to start
    // of the file
    rewind(fp);

    printf("\n========================="
           "==========================="
           "======");
    printf("\nNAME\t\tAGE\t\tSALARY\t\t"
           "\tID\n",
           e.name, e.age,
           e.salary, e.id);
    printf("==========================="
           "==========================="
           "====\n");

    while (fread(&e, size, 1, fp) == 1)
        printf("\n%s\t\t%d\t\t%.2f\t%10d",
               e.name, e.age, e.salary, e.id);

    printf("\n\n\n\t");
    system("pause");
}

// Function to modify the record
void modifyrecord()
{
    system("cls");
    char empname[50];
    char another = 'y';

    while (another == 'y') {
        printf("\nEnter employee name"
               " to modify : ");
        scanf("%s", empname);

        rewind(fp);

        // While File is open
        while (fread(&e, size, 1, fp) == 1) {
            // Compare the employee name
            // with ename
            if (strcmp(e.name, empname) == 0) {
                printf("\nEnter new name:");
                scanf("%s", e.name);
                printf("\nEnter new age :");
                scanf("%d", &e.age);
                printf("\nEnter new salary :");
                scanf("%f", &e.salary);
                printf("\nEnter new EMP-ID :");
                scanf("%d", &e.id);

                fseek(fp, -size, SEEK_CUR);
                fwrite(&e, size, 1, fp);
                break;
            }
        }

        // Ask for modifying another record
        printf("\nWant to modify another"
               " record (Y/N) :");
        fflush(stdin);
        scanf("%c", &another);
    }
}

// Driver code
int main()
{
    int choice;

    // opening the file
    fp = fopen("data.txt", "rb+");

    // showing error if file is
    // unable to open.
    if (fp == NULL) {
```

```
    fp = fopen("data.txt", "wb+");
    if (fp == NULL) {
        printf("\nCannot open file...");
        exit(1);
    }
}

system("Color 3F");
printf("\n\n\n\n\t\t\t\t============="
       "============================="
       "===========");
printf("\n\t\t\t\t~~~~~~~"
       "~~~~~~~~~~~"
       "~~~");
printf("\n\t\t\t\t==================="
       "============================="
       "=====");
printf("\n\t\t\t\t[|:::>:::>:::>::>  "
       "EMPLOYEE RECORD  <::<:::<:::"
       "<:::|]\t");
printf("\n\t\t\t\t==================="
       "============================="
       "=====");
printf("\n\t\t\t\t~~~~~~~~"
       "~~~~~~~~~~"
       "~");
printf("\n\t\t\t\t====================="
       "==============================\n");
printf("\n\n\n\t\t\t\t\t\t\t\t\t\t"
       "Developer : @Karan And Anshul"
       "\n\n\t\t\t\t");

system("pause");

while (1) {
    // Clearing console and asking the
    // user for input
    system("cls");
```

```
gotoxy(30, 10);
printf("\n1. ADD RECORD\n");
gotoxy(30, 12);
printf("\n2. DELETE RECORD\n");
gotoxy(30, 14);
printf("\n3. DISPLAY RECORDS\n");
gotoxy(30, 16);
printf("\n4. MODIFY RECORD\n");
gotoxy(30, 18);
printf("\n5. EXIT\n");
gotoxy(30, 20);
printf("\nENTER YOUR CHOICE...\n");
fflush(stdin);
scanf("%d", &choice);

// Switch Case
switch (choice) {
case 1:

    // Add the records
    addrecord();
    break;

case 2:

    // Delete the records
    deleterecord();
    break;

case 3:

    // Display the records
    displayrecord();
    break;

case 4:

    // Modify the records
```

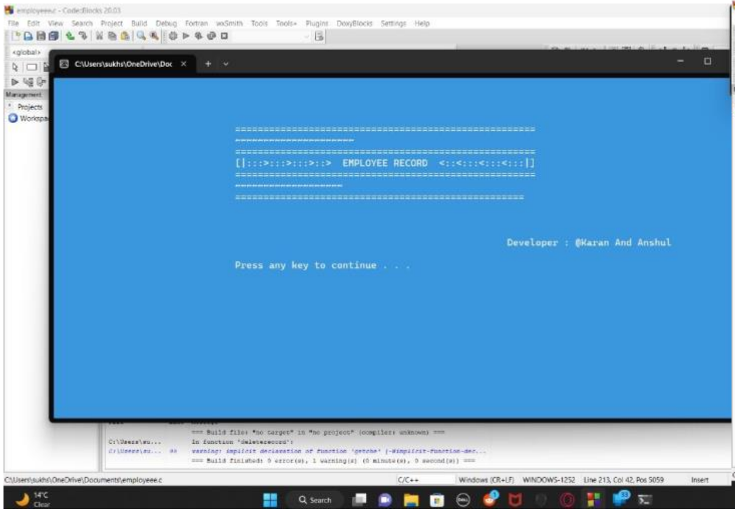
```
            modifyrecord();
            break;

         case 5:
            fclose(fp);
            exit(0);
            break;

         default:
            printf("\nINVALID CHOICE...\n");
         }
      }

      return 0;
   }
```

OUTPUT

The output of an employment management system in C can vary depending on its specific features and the actions taken by the user.Some possible examples could include:

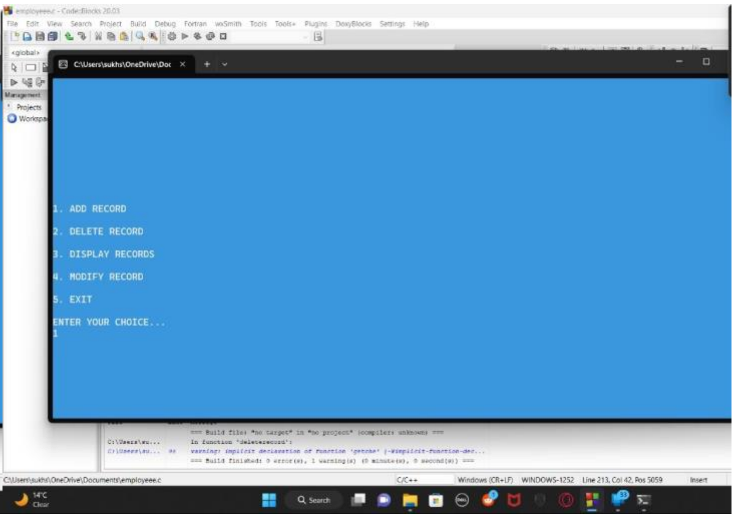
1-Adding record of an employee
2-Deleting record of an employee
3-Modifying records of employees

Ultimately, the output of an employment management system program should help businesses to better manage their employees and make data-driven decisions to improve productivity, efficiency, and employee satisfaction.

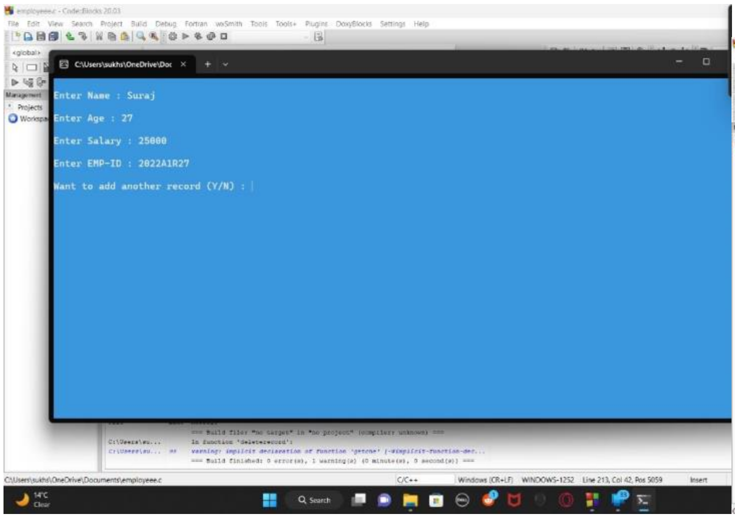


```
===========================================================
=======================
===========================================================
[|:::>:::>:::>::>  EMPLOYEE RECORD  <::<:::<:::<:::|]
===========================================================
=====================
=========================================================


                                          Developer : @Karan And Anshul

Press any key to continue . . .
```

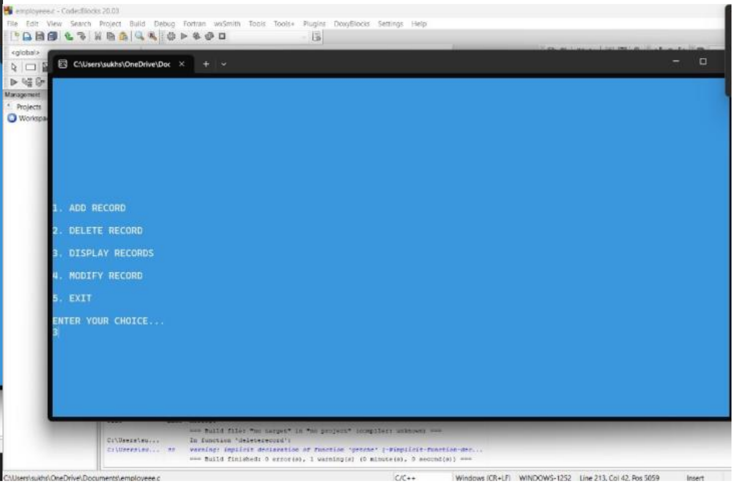
```
=== Build file: "no target" in "no project" (compiler: unknown) ===
C:\Users\su...        In function 'deleterecord':
C:\Users\su...   85   warning: implicit declaration of function 'getche' [-Wimplicit-function-dec...
                      === Build finished: 0 error(s), 1 warning(s) (0 minute(s), 0 second(s)) ===
```



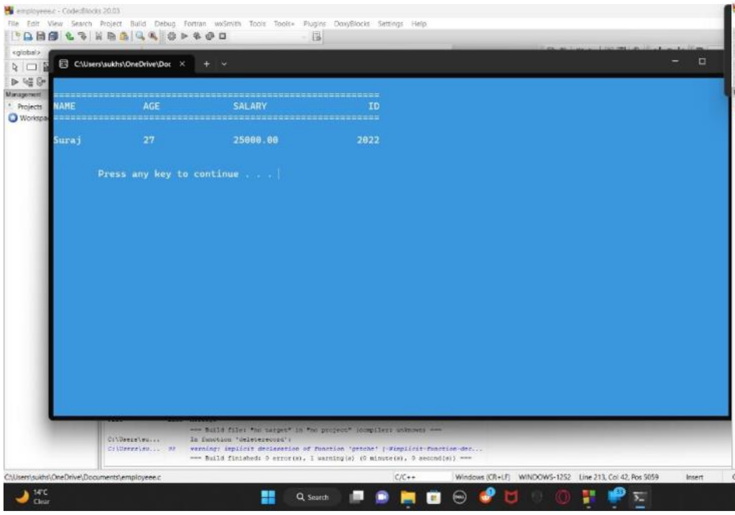
```
1. ADD RECORD

2. DELETE RECORD

3. DISPLAY RECORDS

4. MODIFY RECORD

5. EXIT

ENTER YOUR CHOICE...
1
```



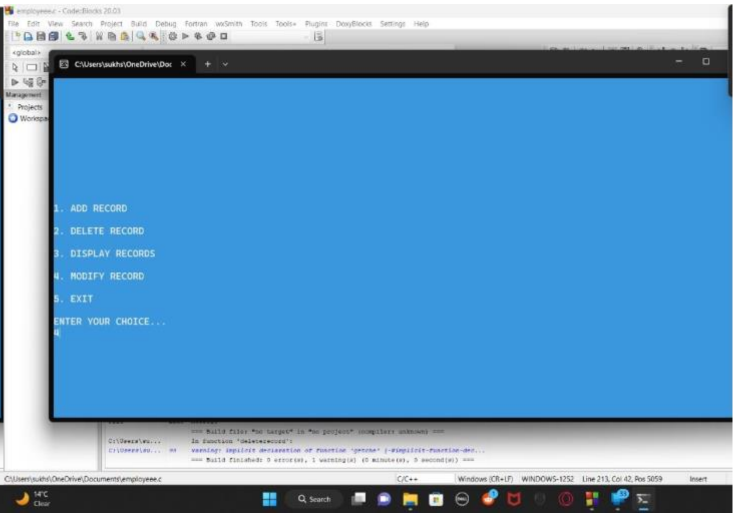
```
Enter Name : Suraj

Enter Age : 27

Enter Salary : 25000

Enter EMP-ID : 2022A1R27

Want to add another record (Y/N) :
```



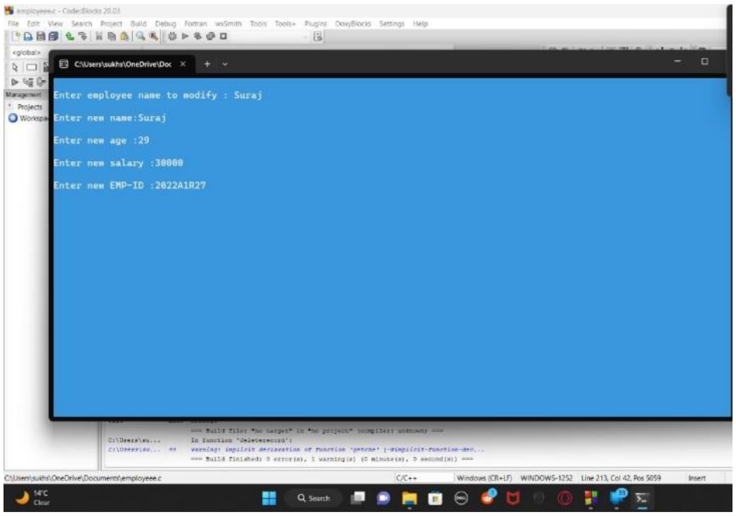
```
1. ADD RECORD

2. DELETE RECORD

3. DISPLAY RECORDS

4. MODIFY RECORD

5. EXIT

ENTER YOUR CHOICE...
3
```



```
==========================================================
NAME          AGE             SALARY                    ID
==========================================================

Suraj         27              25000.00                2022


        Press any key to continue . . . .
```



```
1. ADD RECORD

2. DELETE RECORD

3. DISPLAY RECORDS

4. MODIFY RECORD

5. EXIT

ENTER YOUR CHOICE...
4
```



```
Enter employee name to modify : Suraj

Enter new name:Suraj

Enter new age :29

Enter new salary :30000

Enter new EMP-ID :2022A1R27
```

CONCLUSION

In conclusion, an employee management system can be a valuable tool for organizations looking to streamline their HR operations and optimize their workforce management. By automating routine HR tasks, such as onboarding, time and attendance tracking, payroll processing, benefits administration, and performance management, these systems can save time, reduce errors, and improve communication and collaboration among team members.

However, implementing an employee management system can be challenging, and organizations should carefully evaluate their needs and resources to determine the best approach for their unique situation. Additionally, organizations must ensure that their employee management system is compliant with labor laws and regulations.

Despite the potential challenges associated with implementing an employee management system, the benefits can be significant. By using these systems, organizations can improve their overall productivity, increase job satisfaction among employees, and reduce administrative costs. Therefore, an employee management system can be an essential tool for any organization looking to optimize their HR processes and manage their workforce more efficiently.