EMPLOYEE RECORD SYSTEM

PROJECT REPORT

Description

In this project, you can manage employee records. This Application should allow user to Add list, modify, delete, and exit the record. This application built to handle the records of employees of any company.

Requirements

The requirements of employee record system is the organization have to enter the details of employee name,age,basic salary.

High Level Requirements

The Application should allow user to enter information.

The user can add the member's details by entering his/her name, age, and salary. After entering the name, age and salary details the record will be saved .

The Application should allow user to list all the employee records.

The Application should allow user to modify the employee records.

The Application should allow user to delete employee records

The Application should allow user to exit from application.

Easy to operate and understandable.

Low Level Requirements

User need a system

SWOT ANALYSIS

Strength

Quick access to the employee

Safeguard Important Information

Save Time & Efforts

Easy to Encrypt Data

Weakness

Leakage of information

Not very much accurate

Danger of losing files.

Opportunities

We can store the employee records easily

The organiztion access the information at any time.

Threats

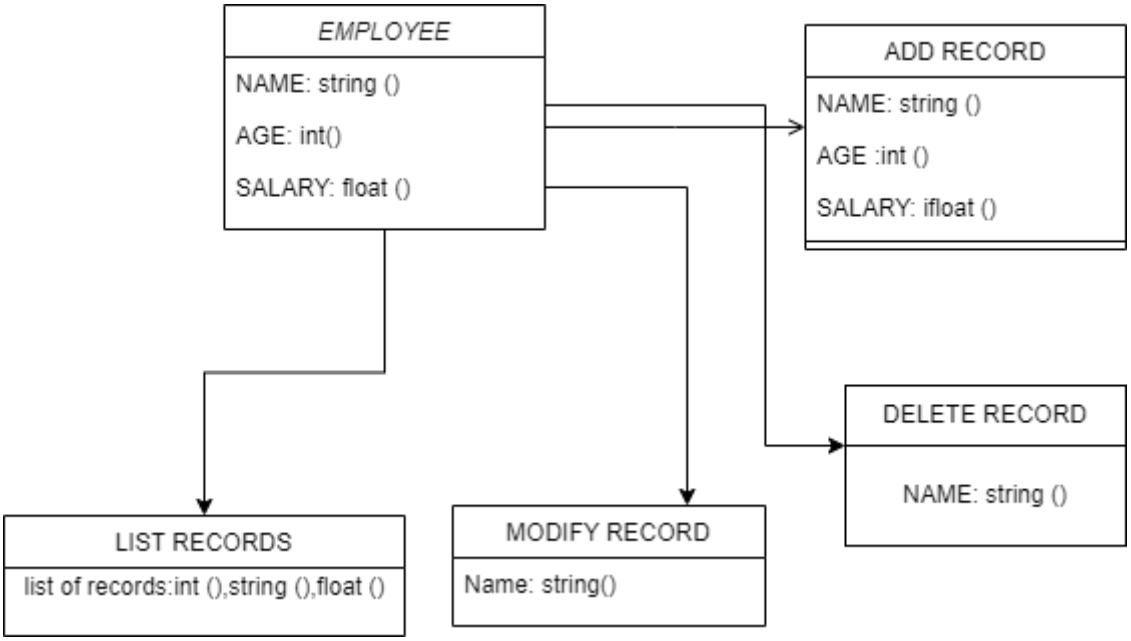
There is possibilites of missing and hack the employee information.

Architecture

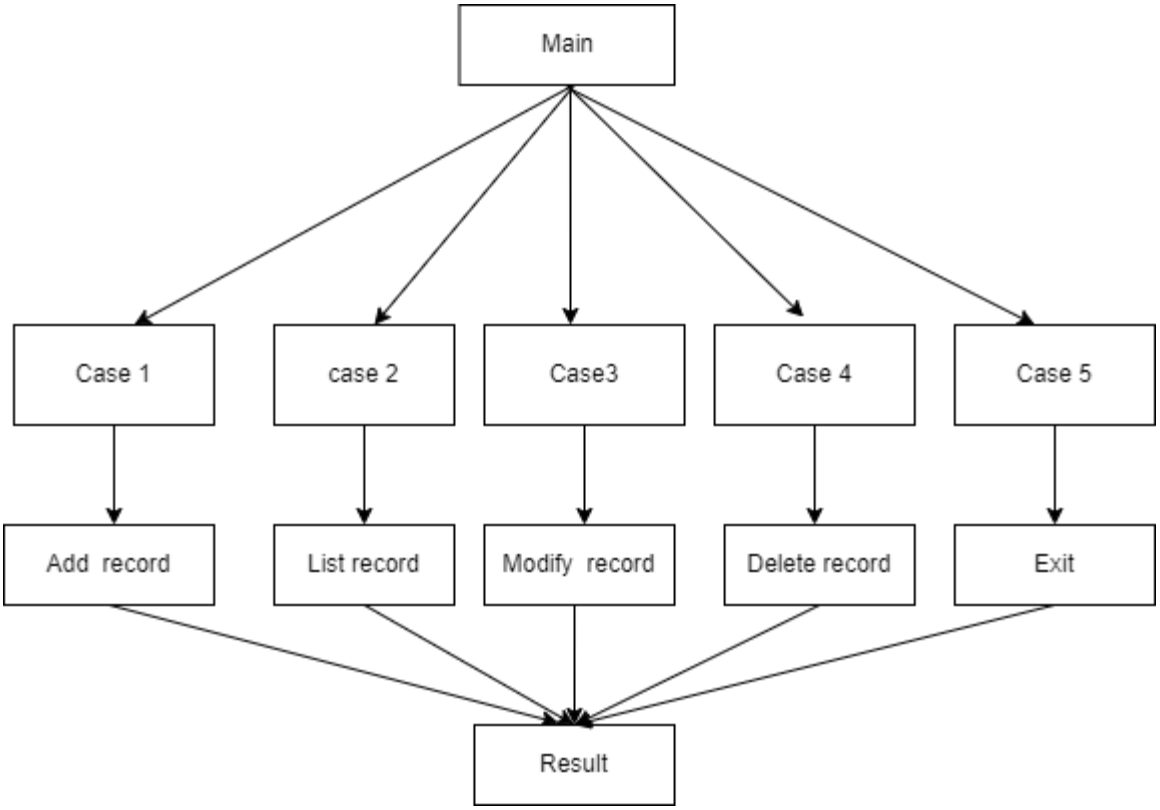
Architecture is a diagrammatic representation which shows how the operations and functions works in the program.

1. **Structural Diagram**

1.1 Class Diagram

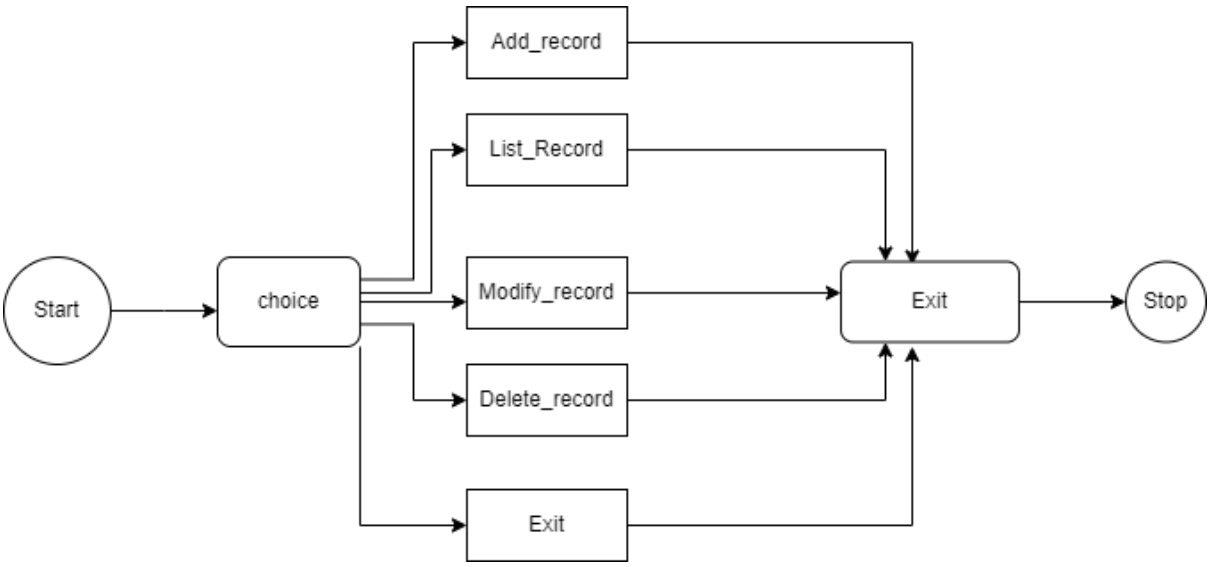


1.1 Component Diagram



2. Behavior Diagram

2.1 Flow chart



Implementation

The implementation includes the main code and its functional codes. These functional files show how every function of the code works. It includes the functions such as add, list, modify and delete the records of the employee.

Test Plan and Output

Test plan and output includes the High Level and Low Level of the program for implementation and the code to run.

1.High Level Test Plan

TEST ID	DESCRIPTION	EXP I/P	EXP O/P	ACTUAL O/P	TESTING INPUT
H01	Enter name	Enter name:abc	abc	abc	Manual
H02	Enter age	Enter age :15	15	15	Manual
H03	Enter basic salary	Basic salary:5000	5000	5000	Manual
H04	List record	abc 15 5000	abc 15 5000	abc 15 5000	Manual
H05	Delete record	Enter the name:abc	Record deleted	Record deleted	Manual

2.Low Level Test Plan

TEST ID	FUNCTION	I/P	O/P	ACTUAL O/P	TEST TYPE
L 01	Enter name	Enter name: abc	char	char	Unit testing
L 02	Enter age	Enter age:21	int	int	Unit testing
L 03	Enter Basic Salary	Enter basic salary:5000	float	float	Unit testing

Main Code

```
#include <stdio.h>
#include <stdlib.h>
#include <conio.h>
#include <windows.h>
#include <string.h>

COORD coord = {0,0};
void gotoxy(int x,int y)
{
   coord.X = x;
   coord.Y = y;

SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE),coo
rd);
}

// main function

int main()
{
   FILE *fp, *ft;
   char another, choice;
   struct emp
   {
```

```
    char name[40];
    int age;
    float bs;
};

struct emp e;

char empname[40];

long int recsize;
fp = fopen("EMP.DAT","rb+");
if(fp == NULL)
{
    fp = fopen("EMP.DAT","wb+");
    if(fp == NULL)
    {
        printf("Connot open file");
        exit(1);
    }
}
recsize = sizeof(e);

while(1)
{
    system("cls");
    gotoxy(30,10);
```

```
printf("1. Add Record");
gotoxy(30,12);
printf("2. List Records");
gotoxy(30,14);
printf("3. Modify Records");
gotoxy(30,16);
printf("4. Delete Records");
gotoxy(30,18);
printf("5. Exit");
gotoxy(30,20);
printf("Your Choice: ");
fflush(stdin);
choice  = getche();

     //switch function

switch(choice)
{
      // add the record

 case '1':
    system("cls");
    fseek(fp,0,SEEK_END);
      another = 'y';
    while(another == 'y')
    {
```

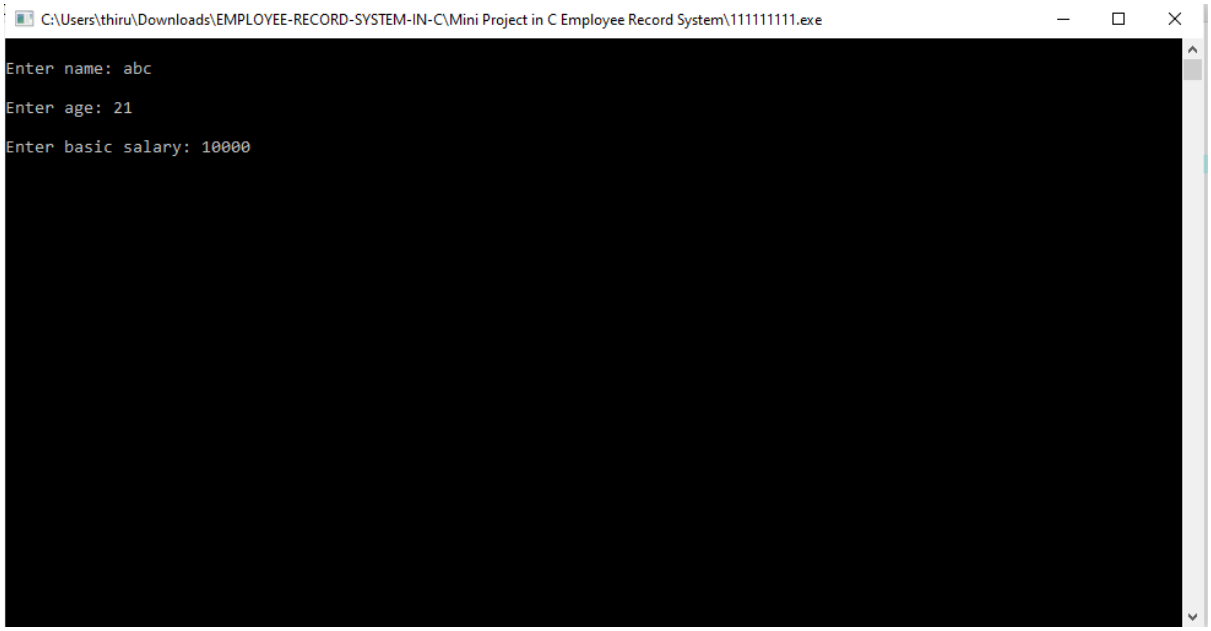
```
            printf("\nEnter name: ");
            scanf("%s",e.name);
            printf("\nEnter age: ");
            scanf("%d", &e.age);
            printf("\nEnter basic salary: ");
            scanf("%f", &e.bs);

            fwrite(&e,recsize,1,fp);
            printf("\nAdd another record(yes/no) ");
            fflush(stdin);
            another = getche();
        }
        break;

case '2':
            //list the record

         system("cls");
        rewind(fp);
        while(fread(&e,recsize,1,fp)==1)
        {
            printf("\n%s %d %.2f",e.name,e.age,e.bs);
        }
        getch();
        break;
```

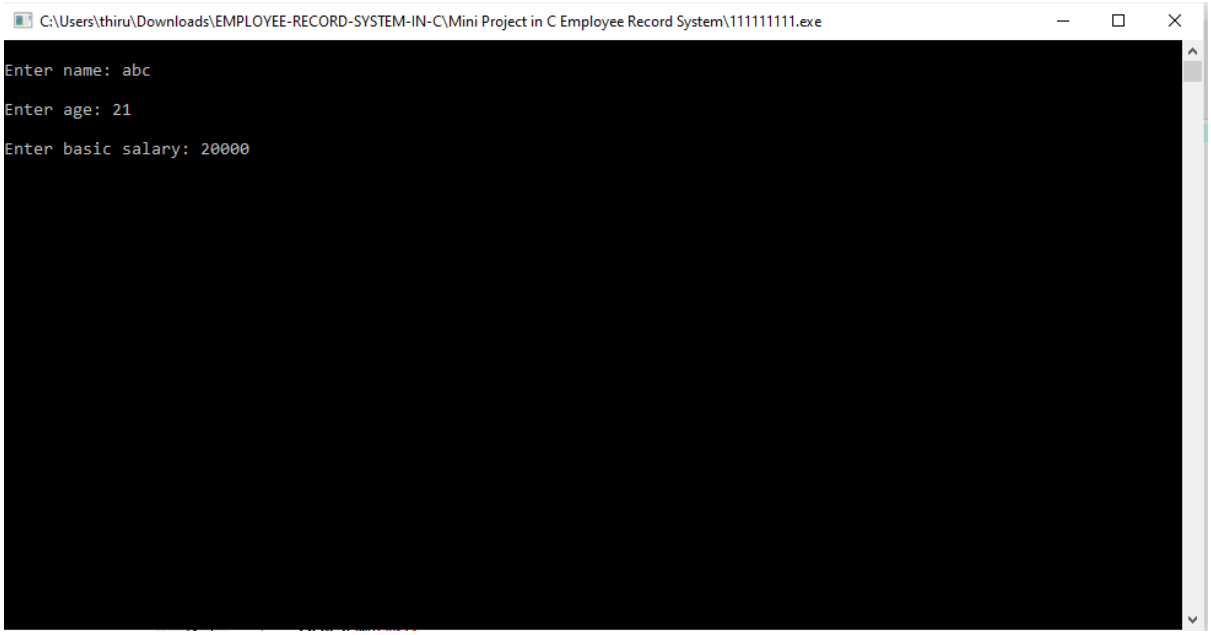
```
case '3':
        //modify the record

    system("cls");
    another = 'y';
    while(another == 'y')
    {
       printf("Enter the employee name to modify: ");
       scanf("%s", empname);
       rewind(fp);
       while(fread(&e,recsize,1,fp)==1)
       {
          if(strcmp(e.name,empname) == 0)
          {
             printf("\nEnter new name,age and bs: ");
             scanf("%s%d%f",e.name,&e.age,&e.bs);
             fseek(fp,-recsize,SEEK_CUR);
             fwrite(&e,recsize,1,fp);
             break;
          }
       }
       printf("\nModify another record(y/n)");
       fflush(stdin);
       another = getche();
    }
    break;
```

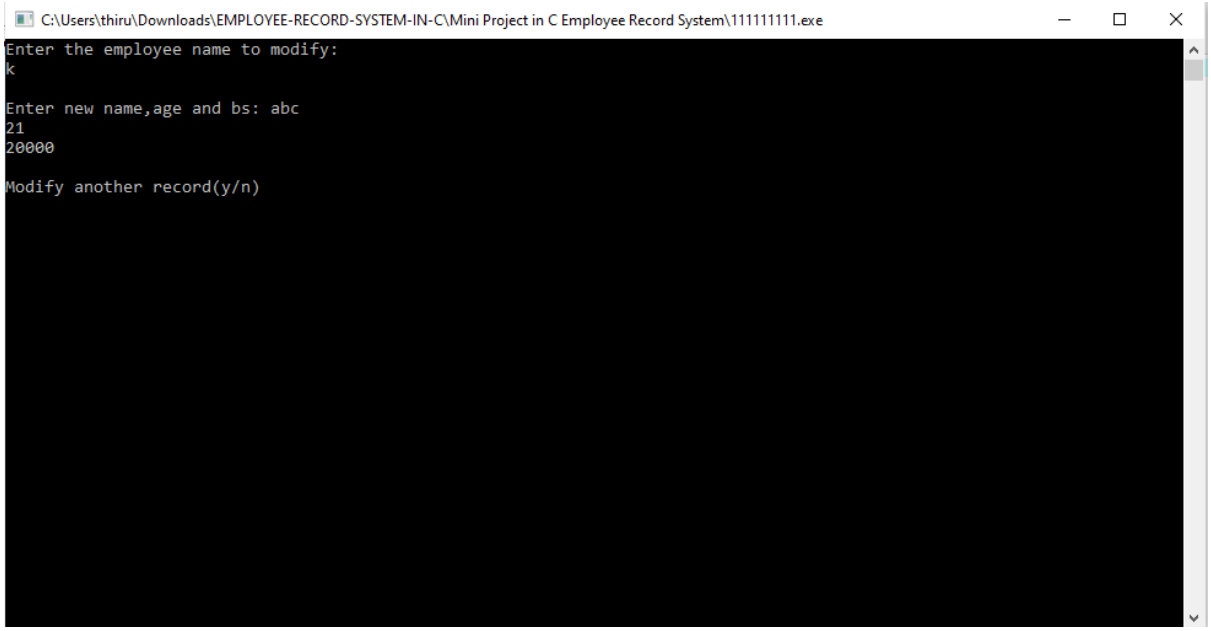
```
case '4':
                    //delete the record

        system("cls");
        another = 'y';
        while(another == 'y')
        {
            printf("\nEnter name of employee to delete: ");
            scanf("%s",empname);
            ft = fopen("Temp.dat","wb");
            rewind(fp);
            while(fread(&e,recsize,1,fp) == 1)
            {
               if(strcmp(e.name,empname) != 0)
               {
                  fwrite(&e,recsize,1,ft);
               }
            }
            fclose(fp);
            fclose(ft);
            remove("EMP.DAT");
            rename("Temp.dat","EMP.DAT");
            fp = fopen("EMP.DAT", "rb+");
            printf("Delete another record(y/n)");
            fflush(stdin);
```

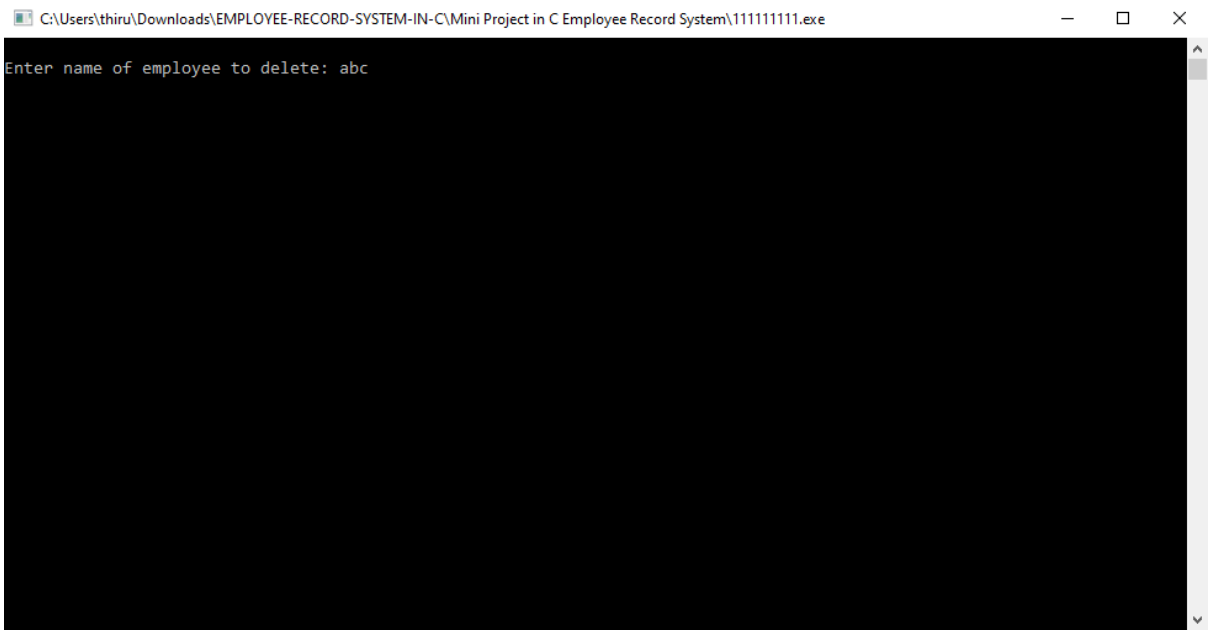
```
            another = getche();
        }
        break;

case '5':
        fclose(fp);
        exit(0);
    }
  }
  return 0;
}
```

Output




C:\Users\thiru\Downloads\EMPLOYEE-RECORD-SYSTEM-IN-C\Mini Project in C Employee Record System\111111111.exe
Enter name: abc
Enter age: 21
Enter basic salary: 20000


C:\Users\thiru\Downloads\EMPLOYEE-RECORD-SYSTEM-IN-C\Mini Project in C Employee Record System\111111111.exe
Enter the employee name to modify:
k
Enter new name,age and bs: abc
21
20000
Modify another record(y/n)



Reference

For diagram - https://app.diagrams.net/