EMPLOYEE RECORD SYSTEM

TEAM-V104

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ALGORITHM

Step 1: Start

Step 2: Ask the user whether they want to view and sort entries, which require no access, or modify or add entries, which requires a password, or exit.

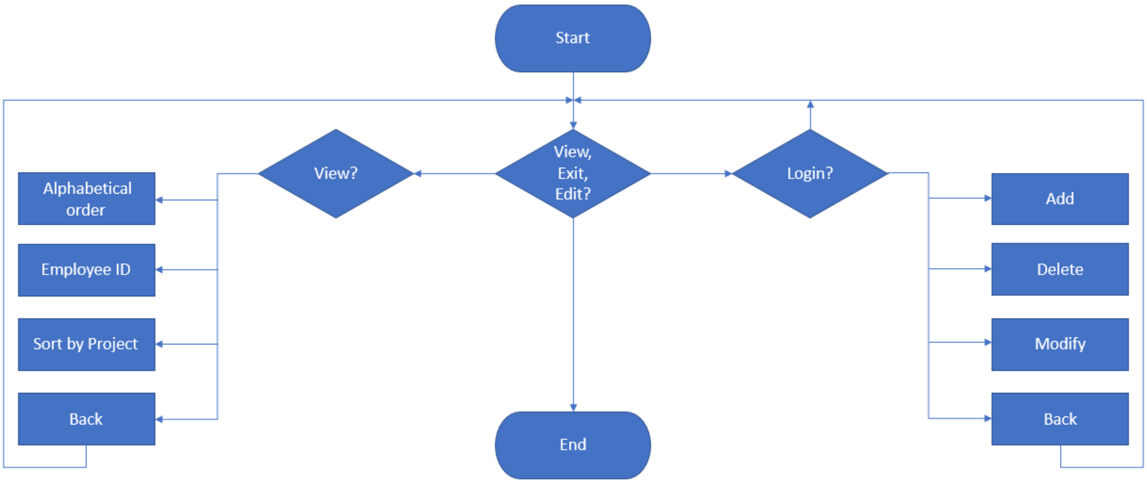
Step 3: If the user picks just to view and sort, they are given the option to view all entries in a list, or sort them by alphabetical order of name, assigned project, or employee ID. If the user picks modifying the entries and successfully enters the password, they can modify, add or delete entries.

Step 4: After the action the user is taken back to the screen where they again can pick between viewing/sorting or adding/modifying entries, or exiting.

Step 5: Upon clicking exit, a message will appear and the program will stop.

Step 6: Stop

FLOWCHART

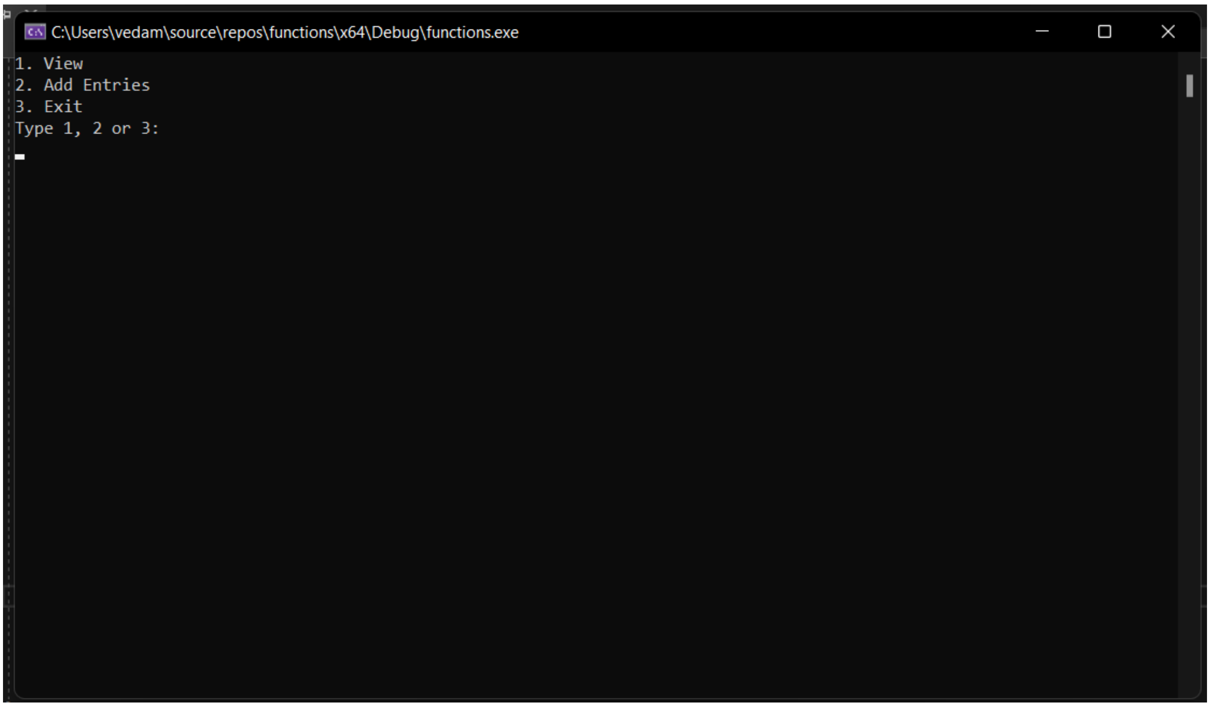


SOURCE CODE

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

int goto_view();
int goto_edit();
int login();
int takeinput();
char* strip(char[]);

int main()
{
    int x=0, opt = 0;

    while (true)
    {
        printf("1. View \n2. Add Entries \n3. Exit \nType 1, 2 or 3:\n");

        scanf("%d", &opt);

        if (opt == 1)
        {
            x = goto_view();
            if (x == -1) printf("No records in the file\n");
        }
        else if (opt == 2)
            x=goto_edit();
        else if (opt == 3)
            break;
        else printf("Make a valid selection\n");

    } //while


    return 0;
}


int goto_edit()
{
    int x = 0;
    printf("ENTRIES\n");
    x=login();
    if (x == 0)
        takeinput();

    return 0;
                                        }

int login()
{
    int ptry = 3, ret = -1;
    char user[30];
    char pwd[30];
    char* ppwd;

    while (ptry >0)
    {
        fflush(stdin);
        fflush(stdin);
        printf("");
        fgets(pwd, 30, stdin);

        fflush(stdin);
        printf("Enter password :");
        fgets(pwd, 30, stdin);


        ppwd=strip(pwd);

        if (strcmp(pwd, "rohit") == 0)
        {
            printf("Login scuccessful! You can now add entries\nType EXIT as
employee name to exit.");

            ret = 0; break;
        }
        else
        {
            ptry = ptry - 1;
            printf("You have %d tries left\n", ptry);

        }
    }
    return ret;
}

int takeinput()
{
    char name[30];
    char sid[5];
    char proj[30];
    int i = 0, c = 0, j = 0, k = 0;
    FILE* fl;
    char* pnm, * psid, * pproj;

    fl = fopen("c:\emp.txt", "a+");

    while (i < 30) // no use
    {
        printf("\n");
        fflush(stdin);
        printf("Enter employee name:");
        fgets(name, 30, stdin);
        pnm = strip(name);


        if (strcmp(name, "EXIT") == 0) break;

        fflush(stdin);
        while (true)
        {
        printf("Enter employee ID:");
        fgets(sid, 5, stdin);
        for (k=0, j = 0; (j < 5 && sid[j]!='\n'); j++) {
            if (sid[j] >= '0' && sid[j] <= '9')
                k = 0;
            else k = 1;
        } //for
        if (k == 0) break;
        } //while
        psid = strip(sid);
        fflush(stdin);
        printf("Enter project name:");
        fgets(proj, 30, stdin);
        pproj = strip(proj);

        fprintf(fl, "%s|%s|%s\n", pnm,psid, pproj);

        i = i++;


    }// while 30 - can be removed

    fclose(fl);
    return 0;
}

char* strip(char* str)
{
    int i = 0;
    while (true)
    {

    if (str[i] == '\n')
    {
        str[i] = '\0'; break;
    }
    if (str[i] == '\0') break;

    i++;
    }
    return str;
}

int goto_view()
{
    printf("VIEW\n");
    printf("------------------\n");
    int c=0, i=0, ret=-1;
    char str[30];
    int fld = 0;
    FILE* fl;
    fl = fopen("emp.txt", "r");
    if (fl == NULL)
    {
        ret = 1;
        printf("Could not open the file\n");
    }
    else
    {
        while ((c = getc(fl)) != EOF)
        {
            ret = 0;
            str[i] = c;


            if (c == '|' || c=='\n')
            {
                str[i] = '\0'; // end the string by putting null

                if (fld == 0)
                {
                    printf("Name    : %s\n", str);
                    fld = 1; i = 0;
                }
                else if (fld == 1)
                {
                    printf("Id      : %s\n", str); fld = 2; i = 0;
                }
                else {
                    printf("Project : %s\n", str);
                    printf("------------------\n");
                i = 0; fld = 0; }

            }
            else i++;


        }

    }
    fclose(fl);
    return ret;
}
```

SCREENSHOTS

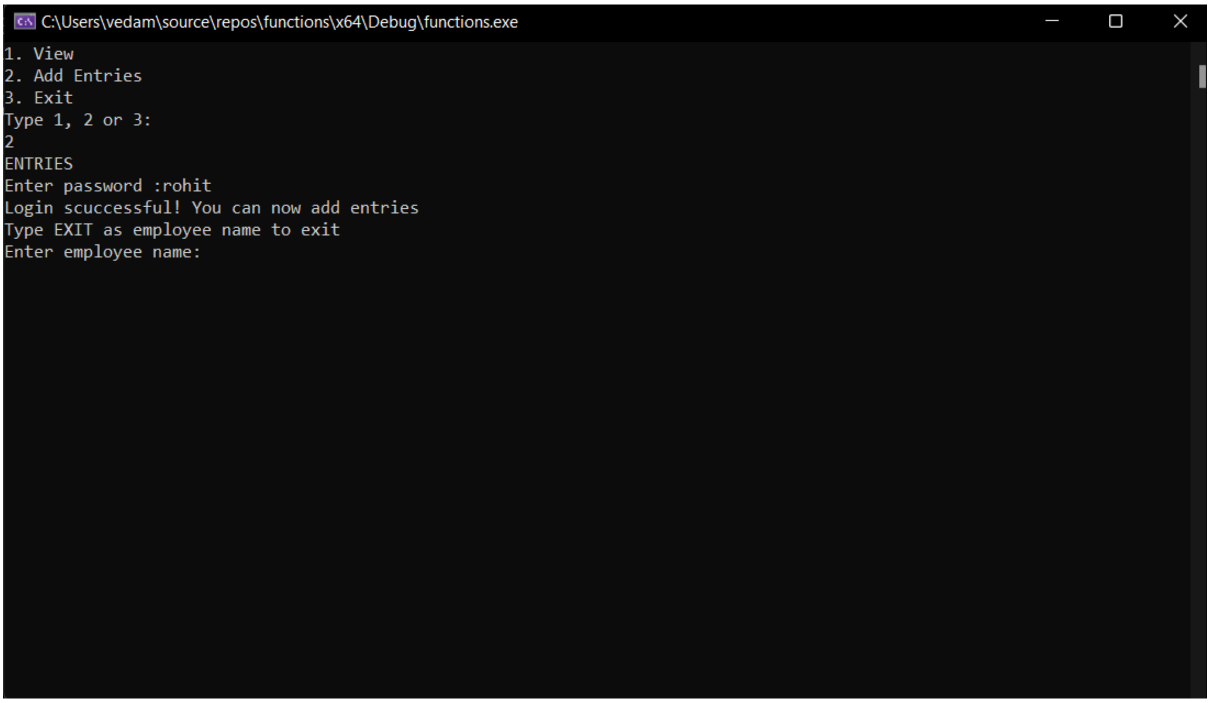
1. Main page



C:\Users\vedam\source\repos\functions\x64\Debug\functions.exe

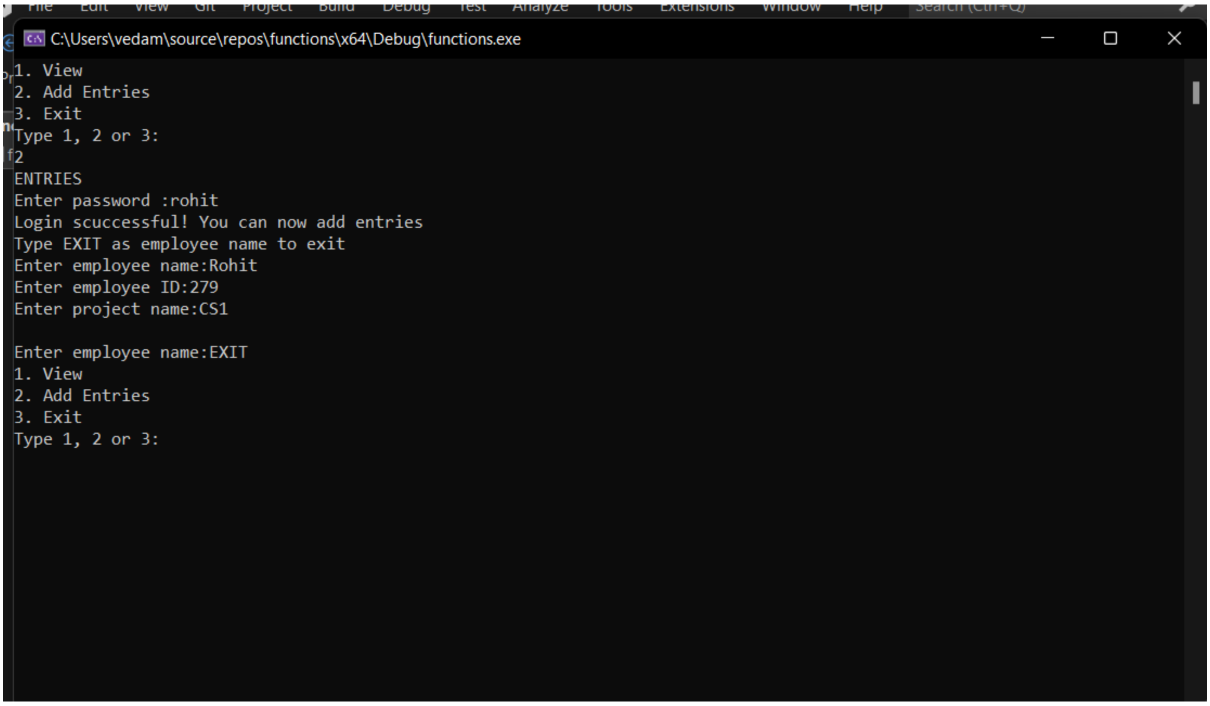
```
1. View
2. Add Entries
3. Exit
Type 1, 2 or 3:
```

2. Entry page and login


C:\Users\vedam\source\repos\functions\x64\Debug\functions.exe

```
1. View
2. Add Entries
3. Exit
Type 1, 2 or 3:
2
ENTRIES
Enter password :rohit
Login scuccessful! You can now add entries
Type EXIT as employee name to exit
Enter employee name:
```

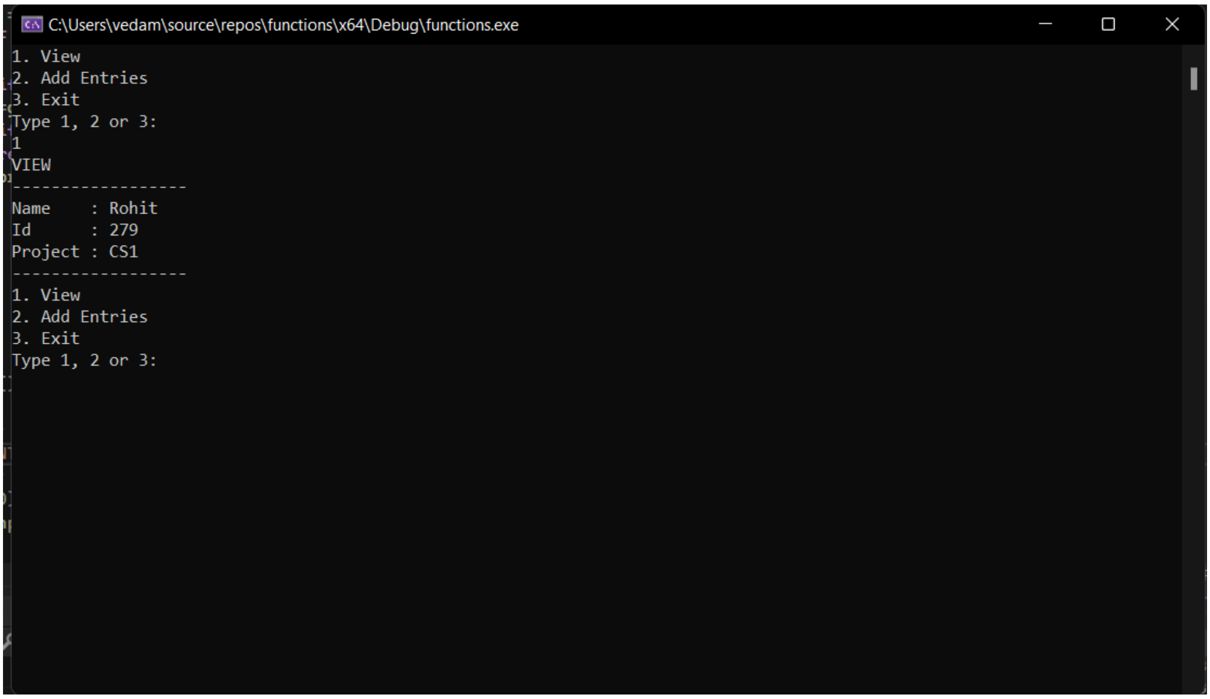
3. Adding entries


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Search (Ctrl+Q)
C:\Users\vedam\source\repos\functions\x64\Debug\functions.exe

```
1. View
2. Add Entries
3. Exit
Type 1, 2 or 3:
2
ENTRIES
Enter password :rohit
Login scuccessful! You can now add entries
Type EXIT as employee name to exit
Enter employee name:Rohit
Enter employee ID:279
Enter project name:CS1

Enter employee name:EXIT
1. View
2. Add Entries
3. Exit
Type 1, 2 or 3:
```

The entries are stored in a file called emp.txt

4. Viewing



C:\Users\vedam\source\repos\functions\x64\Debug\functions.exe

```
1. View
2. Add Entries
3. Exit
Type 1, 2 or 3:
1
VIEW
------------------
Name    : Rohit
Id      : 279
Project : CS1
------------------
1. View
2. Add Entries
3. Exit
Type 1, 2 or 3:
```

Results and Conclusion

The result is that we can successfully store data in a system file called emp.txt and add and view entries. Through this, we can save paper and time by not writing it down and this lets us share the file also. The system is simple but easy to use.