

# Green University of Bangladesh Department of Computer Science and Engineering (CSE)

Faculty of Sciences and Engineering Semester: (Summer, Year:2022), B.Sc. in CSE (Day)

Course Title: Data Structure Lab Course Code: CSE-106 Section: DA

**Lab Project Name: CYBER MANAGEMENT SYSTEM** 

#### **Student Details**

Name	ID
Pankaj Mahanto	213902002

**Submission Date** : 11/09/2022

Course Teacher's Name : Farhana Akter Sunny

[For Teachers use only: Don't Write Anything inside this box]

<u>Lab Project Status</u>	
Marks:	Signature:
Comments:	Date:

# **Table of Contents**

Cha	pter 1 Introductionpter 1 Introduction
1.1	Introduction
1.2	Design Goals/Objective
	pter 2 Design/Development/Implementation of the Project Error! Bookmark not defined
	Interface Error! Bookmark not define
2.2	Algorithm
2.3	Implementation
<u>Cha</u>	pter 3 Performance Evaluation 1
3.1	
3.2	Results and Discussions
Cha	pter 4 Conclusion32
4.1I	troduction
	Practical Implications
4.2	Scope of Future Work
	pter 5 Reference
5.1I	ntroduction
5.2	Different Website

# Introduction

#### 1. Introduction

An information system can be defined as a set of interrelated components that collect, manipulate, store data, distribute information to support decision making and provide a feedback mechanism to monitor performance. It may also help the manager and workers to analysis problems, visualize complex subject, and create new products. Software, Hardware, information system users, computer system connections and information, and the system's housing are all part of an Information System.

### 2. Design Goals/Objective

The objective of Cybersecurity is to protect information from being stolen, compromised or attacked. Cybersecurity can be measured by at least one of three goals-

- 1. Protect the confidentiality of data.
- 2. Preserve the integrity of data.
- 3. Promote the availability of data for authorized users.

### 1. Cyber Management System

The Cyber Management System I made using C program will be look likethis.

```
| WELCOME TO CYBER MANAGEMENT SYSTEM |

WELCOME ADMIN!!! LOGIN SUCCESSFULL

|<--MENU-->|

1.Create Record

2.Insert Record

3.Display Record

4.Search Record

5.No Of Record

6.Delete Record

7.Update Record

7.Update Record

8.Sort In Record By Uer_id on Screen

9.Sort In Record By Uer_id in File

10.Sort In Record By User Name

0.Exit

Enter your choice :
```

S.R.S:1

### 2.2 pseudo code:

```
Void Create Record();
Void Insert Record();
Void Display Record();
Void Search Record();
Void No Of Record();
Void Delete Record();
Void Update Record();
Void Sort In Record By Uer_id on Screen();
Void Sort In Record By Uer_id in File();
Void Sort In Record By User Name();
```

```
void menu();
  void user menu();
  void insert();
  void display();
  void search();
  void delete ();
  void arrival_time();
  void user_login();
  void login user();
> void main() ···
> void heading() ···
> void main heading() --
> void menu() --
> void user_menu() ···
> void insert() ···
> void display() ···
> void search() ···
> void delete () ···
> void arrival_time() ···
> void user_login() --
> void login_user() ···
```

### 3. Implementation of the Project:

> Start of the code:

```
#include <stdio.h>
#include <string.h>
#include <conio.h>
#include <ctype.h>
#include <stdlib.h>
typedef struct cyber
  int id;
  char name[20], email[20], phone[20], dofb[20], sex[10];
  struct topics
   int scode;
     char sname[20];
     int info;
  } tp[4];
  int total;
} cyber;
void heading()
  printf("\n\t\t\t-----\t\t\t\t");
  printf("\n\t\t\t\t\");
                      -----\t\t\t\t\n");
  printf("\n\t\t\t\t-----
void main heading()
  printf("\n\t\t\t----\t\t\t\t");
  printf("\n\t\t\t| CYBER MANAGEMENT SYSTEM |\t\t");
  printf("\n\t\t\t----\t\t\t\t");
void sortbyName()
                    _____\t\t\t\t");
  printf("\n\t\t\t\t----
  printf("\n\t\t\t\
                                              \t\t");
  printf("\n\t\t\t"
                                           ----\t\t\t\t");
}
void sortbyID()
                 \t\t\t\t");
  printf("\n\t\t\t\t-----
  printf("\n\t\t\t| CYBER MANAGEMENT SYSTEM SORT BY ID
                                              \t\t");
  printf("\n\t\t\t\+
```

```
}
void search_value()
   printf("\n\t\t\t-----
                                                 ----\t\t\t\t");
                      CYBER MANAGEMENT SYSTEM SEARCH
   printf("\n\t\t\t\t
                                                          \t\t");
   printf("\n\t\t\t\-----\t\t\t\t");
void update_value()
   printf("\n\t\t\t-----
                              -----\t\t\t\t");
                      CYBER MANAGEMENT SYSTEM UPDATE
                                                           \t\t");
   printf("\n\t\t\t\t
   -----\t\t\t\t");
// Create item
void create()
   cyber *s;
   FILE *fp;
   int n, i, j;
   s = (cyber *)calloc(n, sizeof(cyber));
   fp = fopen("t.txt", "w");
   for (i = 0; i < 1; i++)
   {
       s[i].total = 0;
       printf("\n\t\t\t\tenter the id:");
       scanf("%d", &s[i]);
       fflush(stdin);
       printf("\n\t\t\t\tenter the name:");
       scanf("%[^\n]s", s[i].name);
       fflush(stdin);
       printf("\n\t\t\t\t1.enter your Email:");
       scanf("%[^\n]s", s[i].email);
       fflush(stdin);
       printf("\n\t\t\t\t1.enter your Phone:");
       scanf("%[^\n]s", s[i].phone);
       fflush(stdin);
       printf("\n\t\t\t\t\t1.enter your Dofb:");
       scanf("%[^\n]s", s[i].dofb);
       fflush(stdin);
       printf("\n\t\t\t\t1.enter your Sex:");
       scanf("%[^{n}]s", s[i].sex);
       fflush(stdin);
       for (j = 0; j < 3; j++)
          printf("\n\t\t\t\tenter the information-1.-%d:", j + 1);
          scanf("%d", &s[i].tp[j].info);
          s[i].total += s[i].tp[j].info;
       fwrite(&s[i], sizeof(cyber), 1, fp)
```

```
fclose(fp);
}
// Display item
void display()
    cyber s1;
    FILE *fp;
    int j;
    fp = fopen("t.txt", "r");
    while (fread(&s1, sizeof(cyber), 1, fp))
        printf("\n\t\t|%-10d%-15s %-15s%-10s%-15s%-5s| \t\t", s1.id, s1.name, s1.email, s1.phone,
s1.dofb, s1.sex);
        for (j = 0; j < 3; j++)
            printf("%d\t", s1.tp[j].info);
        printf("%5d ", s1.total);
    }
// Appened item
void appened()
    cyber *s;
    FILE *fp;
    int n, i, j;
    // printf("\n\t\t\t\tenter how many user you want:");
    // scanf("%d", &n);
    s = (cyber *)calloc(n, sizeof(cyber));
    fp = fopen("t.txt", "a");
    for (i = 0; i < 1; i++)
    {
        // s[i].total = 0;
        printf("\t\t\t\t\tenter the id:");
        scanf("%d", &s[i]);
        fflush(stdin);
        printf("\t\t\t\t\tenter the name:");
        scanf("%[^\n]s", s[i].name);
        fflush(stdin);
        printf("\n\t\t\t\t1.enter your Email:");
        scanf("%[^\n]s", s[i].email);
        fflush(stdin);
        printf("\n\t\t\t\t1.enter your Phone:");
        scanf("%[^\n]s", s[i].phone);
        fflush(stdin);
        printf("\n\t\t\t\t\t1.enter your Dofb:");
        scanf("%[^\n]s", s[i].dofb);
        fflush(stdin);
```

```
printf("\n\t\t\t\t1.enter your Sex:");
        scanf("%[^{n}]s", s[i].sex);
        fflush(stdin);
        for (j = 0; j < 3; j++)
            printf("\n\t\t\t\tenter the information-%d:", j + 1);
            scanf("%d", &s[i].tp[j].info);
            s[i].total += s[i].tp[j].info;
        fwrite(&s[i], sizeof(cyber), 1, fp);
    }
    fclose(fp);
    printf("\nIf you add more user Just write 1 otherwise enter 0 :");
    scanf(" %d", &n);
    if (n == 1)
    {
        appened();
    else
       menu();
}
// no_of_rec
void nofr()
{
    cyber *s;
   FILE *fp;
    int n;
    printf("\n\t\t\t How Many User Are Avaiable:\n");
    fp = fopen("t.txt", "r");
    fseek(fp, 0, SEEK_END);
    n = ftell(fp) / sizeof(cyber);
    printf("\n\n\t\t\t\tNo of Records =%d", n);
}
// Search item
void search()
    main_heading();
    search_value();
    cyber s1;
    FILE *fp;
    int j;
    fp = fopen("t.txt", "r");
    int id, flag = 0;
    printf("\n\t\twhich records search enter id:");
    scanf("%d", &id);
    while (fread(&s1, sizeof(cyber), 1, fp))
        if (s1.id == id)
```

```
flag = 1;
            printf("\n\t\t|%-10d%-15s %-15s%-10s%-15s%-10s| \t\t", s1.id, s1.name, s1.email,
s1.phone, s1.dofb, s1.sex);
            for (j = 0; j < 4; j++)
                printf("%d\t", s1.tp[j].info);
            printf("%5d ", s1.total);
    if (!flag)
        printf("\n\t\t\t\tRecords not found\n");
    }
}
// Update item
void update()
    main_heading();
    update_value();
    cyber s1;
    FILE *fp;
    int j;
    fp = fopen("t.txt", "r");
    int id, flag = 0;
    FILE *p;
    n = fonen("undate data.txt". "w"):
    printf("\n\t\t\twhich records update enter id:");
    scanf("%d", &id);
    while (fread(&s1, sizeof(cyber), 1, fp))
    {
        if (s1.id == id)
        {
            s1.total = 0;
            flag = 1;
            fflush(stdin);
            printf("\nenter new name:");
            scanf("%[^\n]s", s1.name);
            fflush(stdin);
            printf("\n\t\t\t\t1.enter your Email:");
            scanf("%[^\n]s", s1.email);
            fflush(stdin);
            printf("\n\t\t\t\t1.enter your Phone:");
            scanf("½[^\n]s", s1.phone);
            fflush(stdin);
            printf("\n\t\t\t\t\t1.enter your Dofb:");
            scanf("<u>%</u>[^\n]s", s1.dofb);
            fflush(stdin);
            printf("\n\t\t\t\t1.enter your Sex:");
```

```
scanf("%[^\n]s", s1.sex);
            fflush(stdin);
            for (j = 0; j < 3; j++)
                 printf("\n\t\t\t\enter the information-%d:", j + 1);
                 scanf("%d", &s1.tp[j].info);
                 s1.total += s1.tp[j].info;
        fwrite(&s1, sizeof(cyber), 1, p);
    fclose(fp);
    fclose(p);
    if (flag)
    {
        p = fopen("update data.txt", "r");
        fp = fopen("t.txt", "w");
        while (fread(&s1, sizeof(cyber), 1, p))
            fwrite(&s1, sizeof(cyber), 1, fp);
        fclose(fp);
        fclose(p);
    }
    else
        printf("\n Records not found\n");
}
// Delete item
void delete ()
{
    cyber s1;
    FILE *fp;
    int j;
    fp = fopen("t.txt", "r");
    int id, flag = 0;
    FILE *p;
    p = fopen("update data.txt", "w");
    printf("which records delete enter id:");
    scanf("%d", &id);
    while (fread(&s1, sizeof(cyber), 1, fp))
        if (s1.id == id)
```

```
else
            fwrite(&s1, sizeof(cyber), 1, p);
    fclose(fp);
    fclose(p);
    if (flag)
        p = fopen("update data.txt", "r");
        fp = fopen("t.txt", "w");
        while (fread(&s1, sizeof(cyber), 1, p))
            fwrite(&s1, sizeof(cyber), 1, fp);
        fclose(fp);
        fclose(p);
    else
        printf("\n Records not found\n");
// sort by in screen
void sort_by_id_on_screen()
{
    cyber *s, s1;
    FILE *fp;
    int i, j;
    fp = fopen("t.txt", "r");
    fseek(fp, 0, SEEK_END);
    int n = ftell(fp) / sizeof(cyber);
    s = (cyber *)calloc(n, sizeof(cyber));
    rewind(fp);
    for (i = 0; i < n; i++)
        fread(&s[i], sizeof(cyber), 1, fp);
    for (i = 0; i < n; i++)
        for (j = i + 1; j < n; j++)
            if (s[i].id > s[j].id)
                 s1 = s[i];
                 s[i] = s[j];
                 s[j] = s1;
             }
    sortbyID();
    for (i = 0; i < n; i++)
```

```
// printf("\n\t\t|%-10d%-15s %-15s%-10s%-15s%-10s|\t\t", s1.id, s1.name, s1.email, s1.phone,
s1.dofb, s1.sex);
                           // for (j = 0; j < 3; j++)
                           // {
                           //
                                                  printf("%d\t", s[i].tp[j].info);
                           // }
                           // printf("%5d ", s[i].total);
                           printf("\n\t\t|\%-10d\%-15s \%-15s\%-10s\%-10s\%-10s| \t\t", s[i].id, s[i].name, s[i].email, s
s[i].phone, s[i].dofb, s[i].sex);
                           for (j = 0; j < 3; j++)
                                        printf("%d\t", s[i].tp[j].info);
                           printf("%5d ", s[i].total);
             fclose(fp);
}
// Sort by parmanent BY id
void sort_by_id_in_file()
             cyber *s, s1;
             FILE *fp;
             int i, j;
             fp = fopen("t.txt", "r");
             fseek(fp, 0, SEEK_END);
             int n = ftell(fp) / sizeof(cyber);
             s = (cyber *)calloc(n, sizeof(cyber));
             rewind(fp);
             for (i = 0; i < n; i++)
             {
                           fread(&s[i], sizeof(cyber), 1, fp);
             fclose(fp);
              for (i = 0; i < n; i++)
                           for (j = i + 1; j < n; j++)
                                        if (s[i].id > s[j].id)
                                        {
                                                      s1 = s[i];
                                                      s[i] = s[j];
                                                      s[j] = s1;
                                        }
                           }
             fp = fopen("t.txt". "w"):
             main_heading();
             sortbyID();
              for (i = 0; i < n; i++)
```

```
// printf("\n\t\t|%-10d%-15s %-15s%-10s%-15s%-10s|\t\t", s1.id, s1.name, s1.email, s1.phone,
s1.dofb, s1.sex);
        // for (j = 0; j < 3; j++)
               printf("%d\t", s[i].tp[j].info);
        // }
        // printf("%5d ", s[i].total);
        // fwrite(&s[i], sizeof(cyber), 1, fp);
        printf("\n\t\t|%-10d%-15s %-15s%-10s%-10s%-10s| \t\t", s[i].id, s[i].name, s[i].email,
s[i].phone, s[i].dofb, s[i].sex);
        for (j = 0; j < 3; j++)
            printf("%d\t", s[i].tp[j].info);
        printf("%5d ", s[i].total);
    fclose(fp);
// Sort By name
void sort_by_name()
{
    cyber *s, s1;
    FILE *fp;
    int i, j;
    fp = fopen("t.txt", "r");
    fseek(fp, 0, SEEK_END);
    int n = ftell(fp) / sizeof(cyber);
    s = (cyber *)calloc(n, sizeof(cyber));
    rewind(fp);
    for (i = 0; i < n; i++)
        fread(&s[i], sizeof(cyber), 1, fp);
    for (i = 0; i < n; i++)
    {
        for (j = i + 1; j < n; j++)
            if (strcmp(s[i].name, s[j].name) > 0)
                 s1 = s[i];
                 s[i] = s[j];
                 s[j] = s1;
            }
    main_heading();
    sortbyName();
    for (i = 0; i < n; i++)
```

```
// printf("\n\t\t|%-10d%-15s %-15s%-10s%-15s%-10s|\t\t", s1.id, s1.name, s1.email, s1.phone,
s1.dofb, s1.sex);
       // for (j = 0; j < 3; j++)
               printf("%d\t", s[i].tp[j].info);
        // }
        // printf("%5d ", s[i].total);
        printf("\n\t\t|%-10d%-15s %-15s%-10s%-10s%-10s| \t\t", s[i].id, s[i].name, s[i].email,
s[i].phone, s[i].dofb, s[i].sex);
        for (j = 0; j < 3; j++)
            printf("%d\t", s[i].tp[j].info);
        printf("%5d ", s[i].total);
   fclose(fp);
void menu()
   int choice;
   printf("\n\n\t\t\t\t\t\t | <--MENU-->|");
   printf("\n\n\t\t\t\t\t\t1.Create Record");
   printf("\n\n\t\t\t\t\t\t2.Insert Record");
   printf("\n\t\t\t\t\t\t3.Display Record");
   printf("\n\t\t\t\t\t\t4.Search Record");
   printf("\n\t\t\t\t\t\t5.No Of Record");
   printf("\n\t\t\t\t\t\t6.Delete Record");
   printf("\n\t\t\t\t\t\t7.Update Record");
   printf("\n\t\t\t\t\t8.Sort In Record By Uer_id on Screen");
   printf("\n\t\t\t\t\t9.Sort In Record By Uer_id in File");
   printf("\n\t\t\t\t\t10.Sort In Record By User Name");
   printf("\n\t\t\t\t\t\t0.Exit");
   printf("\n\n\t\t\t\t\tEnter your choice :");
   scanf("%d", &choice);
   switch (choice)
   {
    case 1:
        system("CLS");
        create();
        system("color F");
        printf("\n\n\t\t\t\t\tPress any key to continue ");
        fflush(stdin);
        getchar();
        menu();
       break;
    case 2:
        svstem("CLS"):
       appened();
```

```
printf("\n\n\t\t\t\tPress any key to continue ");
    fflush(stdin);
    getchar();
    menu();
    break;
case 3:
    system("CLS");
    main_heading();
    display();
    printf("\n\n\t\t\t\t\tPress any key to continue ");
    fflush(stdin);
    getchar();
    menu();
case 4:
    system("CLS");
    search();
    printf("\n\n\t\t\t\tPress any key to continue ");
    fflush(stdin);
    getchar();
    menu();
    break;
case 5:
    system("CLS");
    nofr();
    printf("\n\n\t\t\t\tPress any key to continue ");
    fflush(stdin);
    getchar();
    menu();
    break;
case 6:
    system("CLS");
    delete ();
    break;
case 7:
    system("CLS");
    update();
    printf("\n\n\t\t\t\tPress any key to continue ");
    fflush(stdin);
    getchar();
    menu();
    break;
case 8:
    system("CLS");
    sort_by_id_on_screen();
    printf("\n\n\t\t\t\tPress any key to continue ");
    fflush(stdin);
    getchar();
    menu();
```

```
break;
    case 9:
        system("CLS");
        sort_by_id_in_file();
        printf("\n\n\t\t\t\tPress any key to continue ");
        fflush(stdin);
        getchar();
        menu();
        break;
    case 10:
        system("CLS");
        sort_by_name();
        printf("\n\n\t\t\t\tPress any key to continue ");
        fflush(stdin);
        getchar();
        menu();
        break;
    case 0:
        system("CLS");
        exit(0);
        break;
    default:
        printf("INVALID CHOICE !!!");
        break;
    }
void user_menu()
    int choice, n;
    printf("\n\n\t\t\t\t\t\t | <--MENU-->|");
    printf("\n\n\t\t\t\t\t\t1.View Your Record");
    printf("\n\t\t\t\t\t\t2.Exit");
    printf("\n\n\t\t\t\t\tEnter your choice :");
    scanf("%d", &choice);
    switch (choice)
    case 1:
        system("CLS");
        search();
        fflush(stdin);
        break;
    case 2:
        printf("\n\t\t\tExit OR Main enter 0 for exit or enter 1 for main menu\n");
        scanf("%d", &n);
        if (n == 0)
        {
            system("CLS");
```

```
else
            menu();
        break;
void Signin()
    cyber *s;
    FILE *fp;
    int n = 1, i, j;
    s = (cyber *)calloc(n, sizeof(cyber));
    fp = fopen("t.txt", "a");
    for (i = 0; i < n; i++)
        s[i].total = 0;
        printf("\n\t\t\t\tEnter Password : ");
        scanf(" %d", &s[i]);
        fflush(stdin);
        printf("\n\t\t\t\tEnter Username :");
        scanf("%[^\n]s", s[i].name);
        fflush(stdin);
        printf("\n\t\t\t\t\t1.enter your Email:\n");
        scanf("%[^\n]s", s[i].email);
        fflush(stdin);
        printf("\n\t\t\t\t1.enter your Phone:\n");
        scanf("<u>%</u>[^\n]s",
                          s[i].phone);
        fflush(stdin);
        printf("\n\t\t\t\t1.enter your Dofb:\n");
        scanf("%[^\n]s", s[i].dofb);
        fflush(stdin);
        printf("\n\t\t\t\t1.enter your Sex:\n");
        scanf("%[^{n}]s", s[i].sex);
        fflush(stdin);
        for (j = 0; j < 3; j++)
            printf("\n\t\t\t\tenter the information- %d:", j + 1);
            scanf("%d", &s[i].tp[j].info);
            s[i].total += s[i].tp[j].info;
        fwrite(&s[i], sizeof(cyber), 1, fp);
    fclose(fp);
    system("CLS");
    printf("\n\t\t\t\tSuccessfully Signed in ");
    user_menu();
```

```
cyber s1;
    FILE *fp;
    int j;
    fp = fopen("t.txt", "r");
    int id, flag = 0;
    char uname[20];
    printf("\n\t\tEnter Your Password:");
    scanf("%d", &id);
    printf("\n\t\tEnter Username:");
    scanf("%[\n]s", uname);
    while (fread(&s1, sizeof(cyber), 1, fp))
        if (s1.id == id)
        {
            flag = 1;
            system("CLS");
            main_heading();
            printf("\n\n\t\t\t\t\tWELCOME USER!!! LOGIN SUCCESSFULL");
            printf("\n\n");
            printf("\n\t\t|%-10d%-20s %-10s%-10s%-10s%-10s \\t\t", s1.id, s1.name, s1.email, s1.phone,
s1.dofb, s1.sex);
            for (j = 0; j < 3; j++)
                printf("%d\t", s1.tp[j].info);
            printf("%5d ", s1.total);
            printf("\n\n\t\t\t\tPress any key to continue ");
            fflush(stdin);
            getchar();
            user menu();
            fflush(stdin);
            getchar();
            user_menu();
        else
            printf("\nIncorrect Username!!! try again");
            printf("\nDo You Try Again Input 1 or 0\n");
            scanf("%d", &n);
            if (n == 1)
            {
                Signin();
                fflush(stdin);
```

```
menu();
    }
   if (!flag)
        printf("\n Records not found\n");
    }
int main()
   while (1)
        char name[30];
       int id;
        int ch;
        char username[20];
        char password[20];
        system("CLS");
        system("color 5F");
       heading();
        printf("\n\n\t\t\t\t1) Login as Admin");
        printf("\n\t\t\t\t2) Login as user");
        printf("\n\n\t\t\t\tEnter your choice (1/2) : ");
        scanf("%d", &ch);
        svstem("CLS"):
        switch (ch)
        {
        case 1:
            system("CLS");
            system("color 4F");
            heading();
            printf("\n\n\t\t\t\t\t||
                                         ADMIN LOGIN
                                                         ||\t\t\t\t");
            printf("\n\n\t\t\t\tEnter your Username :");
            scanf("%s", &username);
            printf("\t\t\t\tEnter your Password :");
            scanf("%s", &password);
            if (strcmp(username, "admin") == 0)
                if (strcmp(password, "admin") == 0)
                    system("CLS");
                    heading();
                    printf("\n\n\t\t\t\tWELCOME ADMIN!!! LOGIN SUCCESSFULL");
                    menu();
                else
                {
                    printf("\t\t\t\tIncorrect Password !!! Failed to Login");
```

```
}
    {
        printf("\t\t\t\tUsername is invalid !!! Failed to Login");
    }
   break;
case 2:
    system("CLS");
   heading();
    system("color 2F");
    int cho;
   printf("\n\n\t\t\t\t1.Login ");
   printf("\n\t\t\t\t\t2.New user? sign up ");
   printf("\n\t\t\t\t\t\nEnter your Choice : ");
   scanf("%d", &cho);
    switch (cho)
    case 1:
       printf("\n\n\t\t\t\t\t||
                                   USER LOGIN
                                                   ||\t\t\t\t");
       main_heading();
       login();
       break;
    case 2:
        system("CLS");
                                               ||\t\t\t\t");
        printf("\n\n\t\t\t\t\t\t| SIGNIN
       main_heading();
       Signin();
       break;
   default:
        printf("\n\t\t\t\tInvalid Choice!!!");
       break;
default:
   printf("\n\n\t\t\t\tInvalid Choice!!!");
   break;
```

# **Performance Evaluation**

# 3.1 Simulation Environment/Simulation Procedure

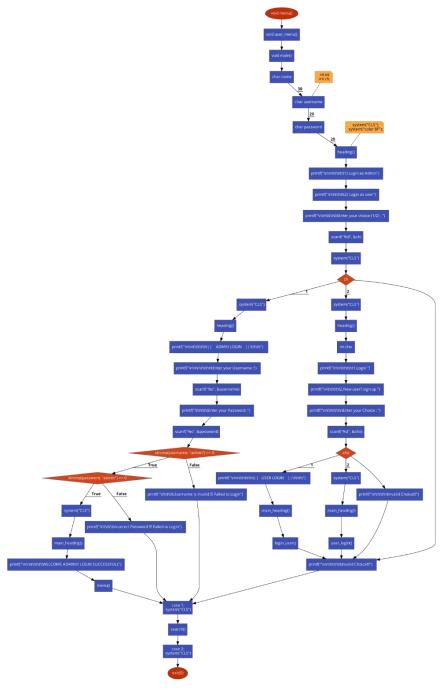


Figure 3.1: Flowchart of This Project

### 2. Results and Discussions

#### 1. Output

❖ This is the main panel of the system. From there can do any of the following option.

```
| WELCOME TO CYBER MANAGEMENT SYSTEM |

1) Login as Admin
2) Login as user

Enter your choice (1/2) :
```

❖ If the user enter 1 then the output will be look like that



This is how we a data insert or any number 1 upto 10

WELCOME TO CYBER MANAGEMENT SYSTEM |

#### WELCOME ADMIN!!! LOGIN SUCCESSFULL

|<--MENU-->|

- 1. Create Record
- 2.Insert Record
- 3. Display Record
- 4.Search Record
- 5.No Of Record
- 6.Delete Record
- 7.Update Record
- 8.Sort In Record By Uer\_id on Screen
- 9.Sort In Record By Uer\_id in File
- 10.Sort In Record By User Name

0.Exit

Enter your choice:3

-----

#### | CYBER MANAGEMENT SYSTEM

88	Nishi	<u>n@gmail.com</u> 014 8/9/2002	female	8	5	2	15
21	Joy	<u>j@gmail.com</u> 013 5/8/2002	male	8	5	2	15
2	Pankaj	[	0 0	0	0		
15	Dulal	d@gmail.com 019 7/8/2000	male	1	2	3	6

Press any key to continue

Enter your choice :2

enter the id:37

enter the name:Rabby

1.enter your Email:r@gmail.com

1.enter your Phone:018...

1.enter your Dofb:1/10/2002

1.enter your Sex:male

enter the information-1:5

enter the information-2:6

enter the information-3:4

If you add more user Just write 1 otherwise enter 0:1

enter the id:41 enter the name:Virat

1.enter your Email:v@gmail.com

1.enter your Phone:015....

1.enter your Dofb:4/7/2002

1.enter your Sex:male

enter the information-1:4

enter the information-2:7

enter the information-3:5

If you add more user Just write 1 otherwise enter 0:0

|<--MENU-->|

1. Create Record

2.Insert Record

3. Display Record

4.Search Record

5.No Of Record

6.Delete Record

7. Update Record

8.Sort In Record By Uer\_id on Screen

9.Sort In Record By Uer\_id in File

10.Sort In Record By User Name

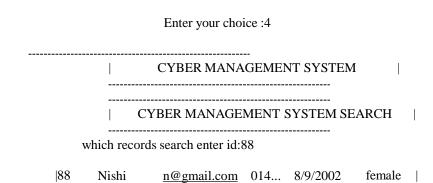
0.Exit

Enter your choice :3

	1	CYBER MANAGEMENT SYSTEM	1				
88	Nishi	n@gmail.com 014 8/9/2002	- female	8	3 5	2	15
21	Joy	<u>j@gmail.com</u> 013 5/8/2002	male	8	5	2	15
2	Pankaj		0 0	0	0		
15	Dulal	<u>d@gmail.com</u> 019 7/8/2000	male	1	2	3	6
37	Rabby	<u>r@gmail.com</u> 018 1/10/2002	male		5 6	4	15
41	Virat	<u>v@gmail.com</u> 015 4/7/2002	male	4	7	5	16

15

Press any key to continue



#### Press any key to continue

# CYBER MANAGEMENT SYSTEM

-----

CYBER MANAGEMENT SYSTEM SEARCH

which records search enter id:16

Records not found

Enter your choice:5

How Many User Are Avaiable:

No of Records =6

Press any key to continue

#### CYBER MANAGEMENT SYSTEM

88	Nishi	n@gmail.com	014	8/9/2002	female	8	5	2	15
21	Joy	j@gmail.com	013	5/8/2002	male	8	5	2	15
15	Dulal	d@gmail.com	019	7/8/2000	male	1	2	3	6
37	Rabby	r@gmail.com	018	1/10/2002	male	5	6	4	15
41	Virat	v@gmail.com	015	4/7/2002	male	4	7	5	16

Press any key to continue

|<--MENU-->|

1.Create Record

2.Insert Record

3. Display Record

4.Search Record

5.No Of Record

6.Delete Record

7. Update Record

8.Sort In Record By Uer\_id on Screen

9.Sort In Record By Uer\_id in File

10.Sort In Record By User Name

0.Exit

Enter your choice :6

CYBER MANAGEMENT SYSTEM

CYBER MANAGEMENT SYSTEM SEARCH

which records search enter id:15

Records not found

#### Enter your choice:7 CYBER MANAGEMENT SYSTEM CYBER MANAGEMENT SYSTEM UPDATE which records update enter id:41 enter new name:Jenny's 1.enter your Email:j@gmail.com 1.enter your Phone:012... 1.enter your Dofb:8/4/1995 1.enter your Sex:female enter the information-1:4 enter the information-2:8 enter the information-3:2 Press any key to continue Enter your choice:3 CYBER MANAGEMENT SYSTEM Nishi n@gmail.com 014... 8/9/2002 female 15 Joy j@gmail.com 013... 5/8/2002 male | 15 Rabby <u>r@gmail.com</u> 018... 1/10/2002 15 male | 6 j@gmail.com 012... 8/4/1995 2 Jenny's female 14 Press any key to continue Enter your choice :8 CYBER MANAGEMENT SYSTEM SORT BY ID Joy j@gmail.com 013... 5/8/2002 male 15 Rabby <u>r@gmail.com</u> 018... 1/10/2002 male 5 15 6 <u>j@gmail.com</u> 012... 8/4/1995 female Jenny's 2 14 Nishi <u>n@gmail.com</u> 014... 8/9/2002 female 15 Press any key to continue Enter your choice:10 CYBER MANAGEMENT SYSTEM CYBER MANAGEMENT SYSTEM SORT BY NAME j@gmail.com 012... 8/4/1995 female | Jenny's 14 Joy <u>j@gmail.com</u> 013... 5/8/2002 male 2 15 <u>n@gmail.com</u> 014... 8/9/2002 female | Nishi 2 15 <u>r@gmail.com</u> 018... 1/10/2002 male Rabby 15

|88

21

|37

41

21

|37

41

188

41

|21

|88

|37

#### Press any key to continue Enter your choice :9

		 	CYBER MANAGEMENT SYSTEM				
			CYBER MANAGEMENT SYSTEM SORT BY ID	1			
	21  37  41  88	Joy Rabby Jenny's Nishi	j@gmail.com 012 8/4/1995 female	5	5 2 6 8 5	4	15 15 14 1 5
			Press any key to continue				3
			WELCOME TO CYBER MANAGEMENT SYSTEM				
			1.Login 2.New user? sign up				
Enter y	our Cho	ice :2					
Success	sfully Sig	gned in					
			<menu> </menu>				
			1. View Your Record 2. Exit				
			Enter your choice :2				
			WELCOME TO CYBER MANAGEMENT SYSTEM				
			1.Login 2.New user? sign up				
Enter y	our Cho	ice :1					
			CYBER MANAGEMENT SYSTEM				
			WELCOME USER!!! LOGIN SUCCESSFULL				
	56	Kajol7	8 <u>k@gmai.com014</u> 7/8/2000 male	8	5	3	16

• Options 2 is for the display all the record available.



Those are the record of user's

❖ Option 3 is for Search about a specific users search information



We can search using only user ID otherwise the result is invalid

❖ Option 4 is for Delete an information about a student



- > pankaj's information was deleted.
- ❖ Option 5 is for modify go to main menu section information



#### 3.2.2 Analysis and Outcome

The project is build using C programming language. We do the coding on VS code using GCC compiler. This project is mainly built for reduce the pressure and do the work efficiently. We will update this project and add more feature. It will be helpful for all the all people . So fer we do the project using the course knowledge of structured programming.

# **Conclusion**

#### 4.1 Introduction

An information system can be defined as a set of interrelated components that collect, manipulate, store data, distribute information to support decision making and provide a feedback mechanism to monitor performance. It may also help the manager and workers to analyse problems, visualize complex subject, and create new products. Software, Hardware, information system users, computer system connections and information, and the system's housing are all part of an Information System.

### 1. Practical Implications

The Cyber Management System is mainly making for the security base software and it is help for people save hacking tendency and so on.

### 2. Scope of Future Work

In future this can be the most useful product in the any security issues and all the sector. It will keep all information safe and synchronized. In future we can add more feature to this. Like add hacking, tracking, find the history, more attractive look, and performance of that. This system can make more purpose security issues and so on. In this way it can be helpful for our work.

## Reference

### 5.1 Reference

- i. <a href="https://www.geeksforgeeks.org/bubble-sort/">https://www.geeksforgeeks.org/bubble-sort/</a>
- ii. <a href="https://www.geeksforgeeks.org/data-structures/">https://www.geeksforgeeks.org/data-structures/</a>
- iii. https://www.programiz.com/c-programming/c-file-input-output
- iv. <a href="https://www.geeksforgeeks.org/basics-file-handling-c/">https://www.geeksforgeeks.org/basics-file-handling-c/</a>.
- v. https://www.edureka.co/blog/binary-search-in-c/
- vi. https://www.programiz.com/dsa/binary-search
- vii. https://www.programiz.com/c-programming/c-structures