



SRM
UNIVERSITY AP
Andhra Pradesh

STUDENT REPORT MANAGEMENT SYSTEM

Project Report...



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ABSTRACT:

The project titled “STUDENT REPORT MANAGEMENT” deals with the maintenance of student records. The student management system is software that is helpful for students as well as schools and colleges. In the current system, all the activities are done manually. It is very time-consuming and costly. Our student management system deals with the various activities related to the students.



INTRODUCTION :

- The student report management system undertaken as a project is based on relevant technologies.
- The aim of the project is to develop a software application for managing student records.
- The project has been developed to carry out the processes easily and quickly, which is not possible with the manual systems, which can over come by this software.



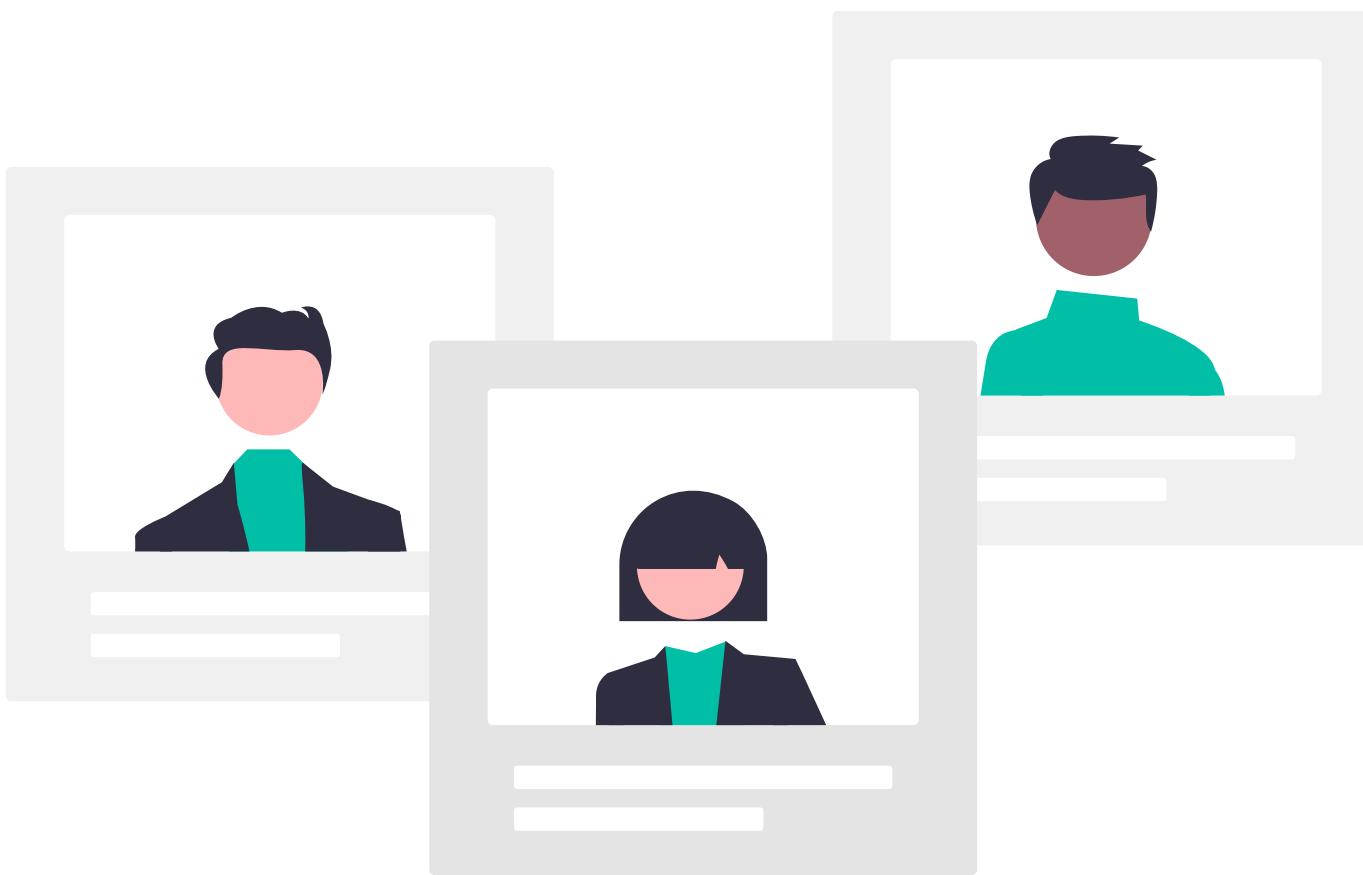
OBJECTIVE:



- The objective of the student management system is to allow the administrator of any organization to edit and find out the personal details of a student and allow the student to keep up to date with his profile.
- Collect student details like name, roll number, and marks in each subject (consider the subjects in semester III), and calculate their grade. Basic operations users can perform via this program project that is based on file handling are adding new student records, modifying student records, deleting student records, and displaying student records using C++.

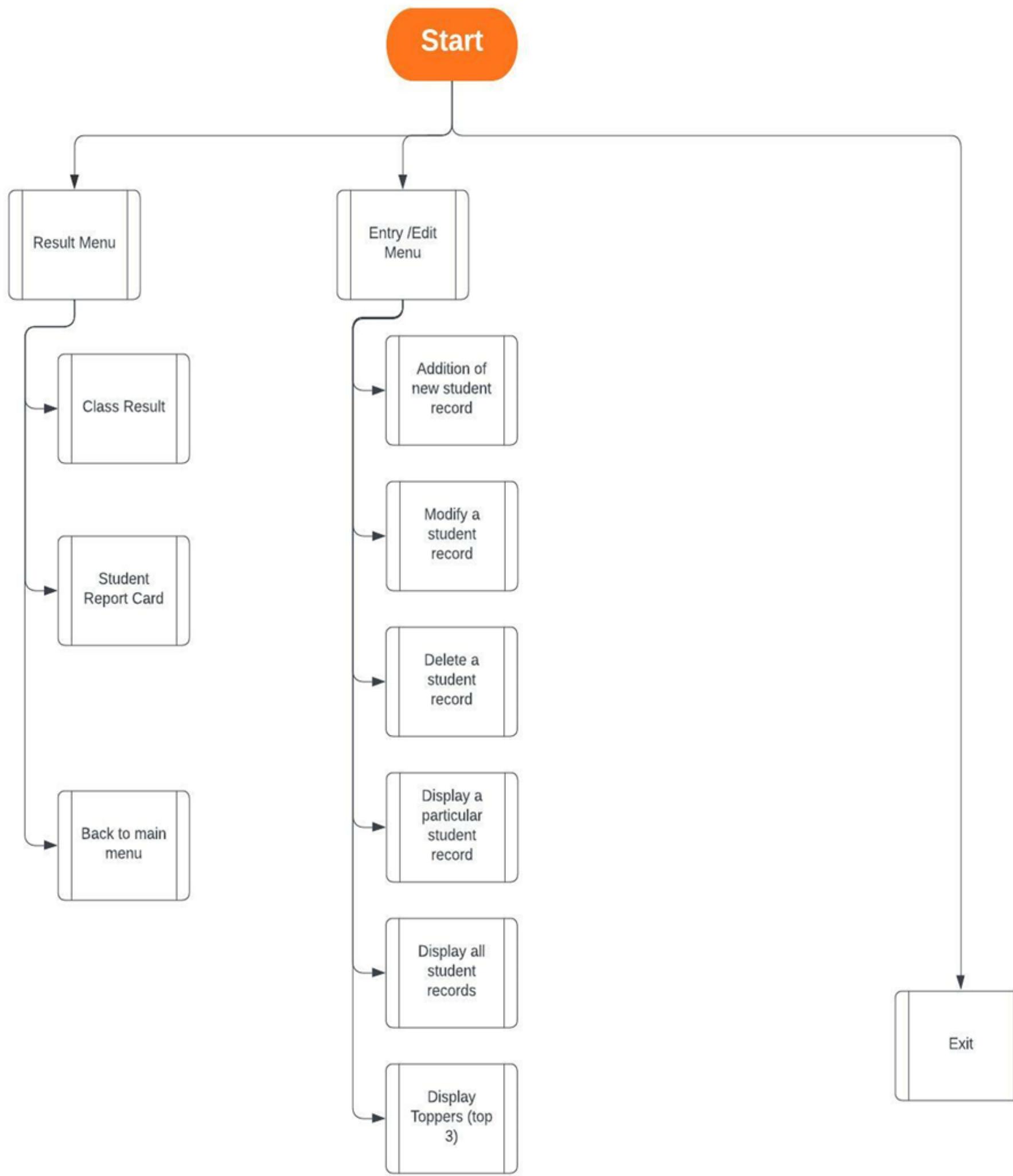
MODULES:

Student report Management System is a C++ project which can be used to perform various operations and store the marks records of students without using SQL (database) i.e...., only using C++. We can perform the following **6 main operations**:



- 1.Create a New student record**
- 2.Display all student records**
- 3.Search student record**
- 4.Modify Student record**
- 5.Delete student record**
- 6.Display Class result**

FLOW CHART



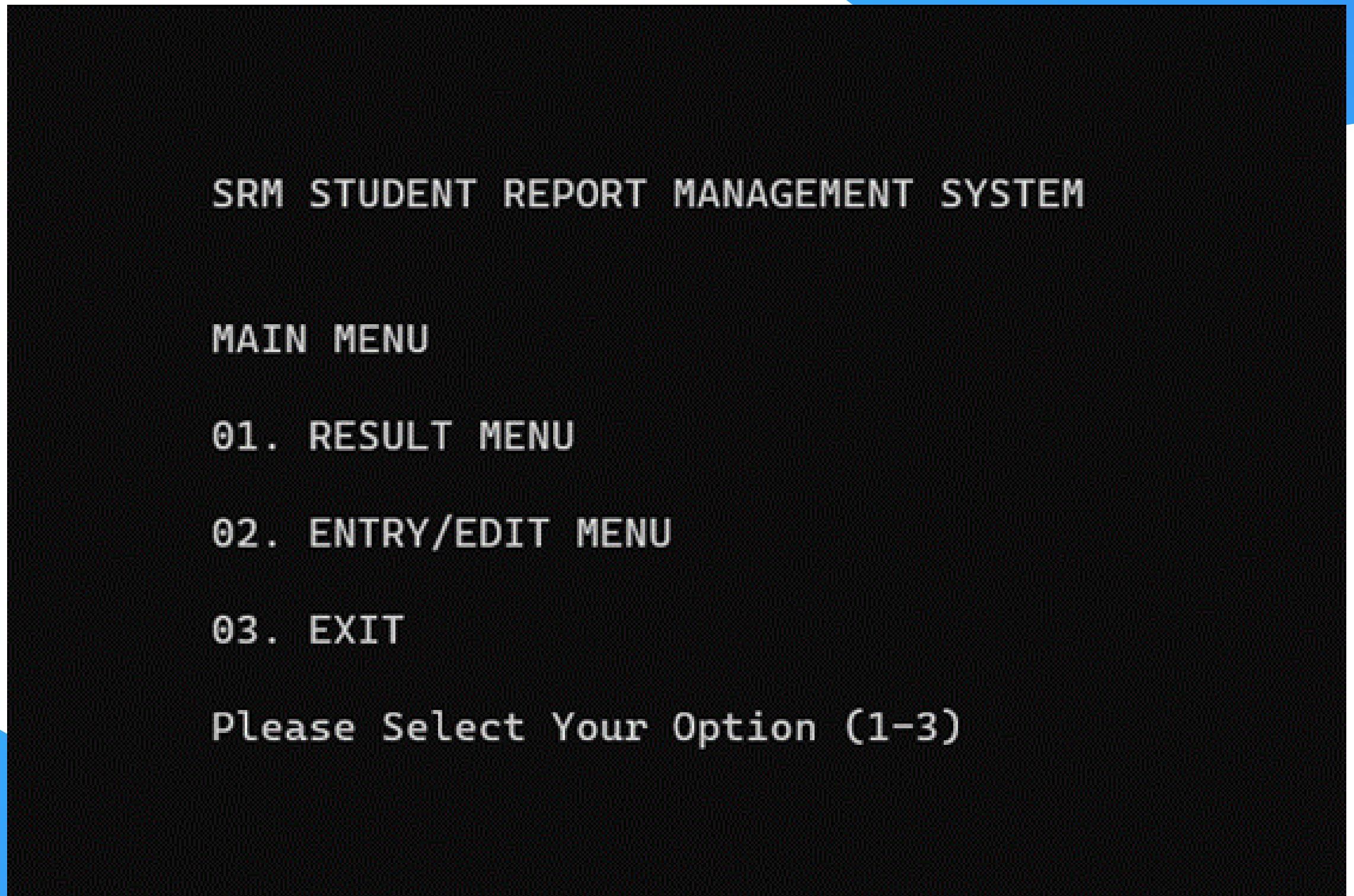
Source

Code:

<https://1drv.ms/w/s!AvDOjYzi9UUlgV6mAlp64BzG7lQJ?e=eR0Ta8>

OUTPUT

Main menu:



Result menu:

Class Result

RESULT MENU

1. Class Result
2. Student Report Card
3. Back to Main Menu

Enter Choice (1/2/3)? 1

ALL STUDENTS RESULT

R.No	Name	P	C	M	E	DAA	%age	Grade
1	Ram	80	84	89	90	79	422	84.4 B
2	Bhavya	98	92	95	98	94	477	95.4 A
3	Harsha	87	79	75	85	81	407	81.4 B
4	lucy	90	60	75	82	79	386	77.2 C
5	Sahithi	99	91	90	89	85	454	90.8 A
6	Venky	72	75	79	84	87	397	79.4 C
7	Sajjad	89	82	83	76	68	398	79.6 C
8	Pardha	75	70	72	83	89	389	77.8 C
9	Suma	44	50	60	70	64	288	57.6 E
10	Kali	67	72	77	83	75	374	74.8 C

STUDENT REPORT CARD

Enter Roll Number Of Student : 2

Roll number of student : 2

Name of student : Bhavya

Marks in Python : 98

Marks in Cpp : 92

Marks in Maths : 95

Marks in Economics : 98

Marks in DAA : 94

Percentage of the student is : 95.4

Grade of student is : A

FEATURES: (Entry/Edit Option):

MAIN MENU

01. RESULT MENU

02. ENTRY/EDIT MENU

03. EXIT

Please Select Your Option (1-3)

2

ENTRY MENU

1. ADDITION OF NEW STUDENT RECORD

2. DISPLAY ALL STUDENTS RECORDS

3. DISPLAY A PARTICULAR STUDENT RECORD

4. MODIFY A STUDENT RECORD

5. DELETE A STUDENT RECORD

6. DISPLAY TOP THREE STUDENTS

7. BACK TO MAIN MENU

Please Enter Your Choice (1-7) |

1. ADDITION OF NEW STUDENT RECORD

```
Please Enter Your Choice (1-7) 1  
Enter The roll number of student 10  
Enter The Name of student Lucy  
Enter The marks in python out of 100 : 75  
Enter The marks in cpp out of 100 : 83  
Enter The marks in maths out of 100 : 88  
Enter The marks in economics out of 100 : 91  
Enter The marks in DAA out of 100 : 79  
  
Student record Has Been Created |
```

```
void write_student()  
{  
    student st;  
    ofstream outFile;  
    outFile.open("student.dat",ios::binary|ios::app);  
    st.getdata();  
    outFile.write(reinterpret_cast<char *> (&st),  
    sizeof(student));  
    outFile.close();  
    cout<<"\n\nStudent record Has Been Created ";  
    cin.ignore();  
    cin.get();  
}
```

2. DISPLAY ALL STUDENT RECORD

```
void display_all()
{
    student st;
    ifstream inFile;
    inFile.open("student.dat",ios::binary);
    if(!inFile)
    {
        cout<<"File could not be open !! Press any Key...";
        cin.ignore();
        cin.get();
        return;
    }
    cout<<"\n\n\n\tDISPLAY ALL RECORD !!!\n\n";
    while(inFile.read(reinterpret_cast<char *> (&st), sizeof(student)))
    {
        st.showdata();
        cout<<"\n\n=====\\n";
    }
    inFile.close();
    cin.ignore();
    cin.get();
}
```

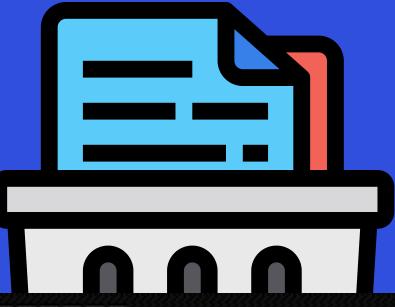
Please Enter Your Choice (1-7) 2

DISPLAY ALL RECORD !!!

Roll number of student : 1
Name of student : Ram
Marks in Python : 80
Marks in Cpp : 84
Marks in Maths : 89
Marks in Economics : 90
Marks in DAA :79
Percentage of the student is :84.4
Grade of student is :B
=====

Roll number of student : 2
Name of student : Bhavya
Marks in Python : 98
Marks in Cpp : 92
Marks in Maths : 95
Marks in Economics : 98
Marks in DAA :94
Percentage of the student is :95.4
Grade of student is :A

2. DISPLAY ALL STUDENT RECORD



```
=====
```

Roll number of student : 3

Name of student : Harsha

Marks in Python : 87

Marks in Cpp : 79

Marks in Maths : 75

Marks in Economics : 85

Marks in DAA :81

Percentage of the student is :81.4

Grade of student is :B

```
=====
```

Roll number of student : 4

Name of student : lucy

Marks in Python : 90

Marks in Cpp : 60

Marks in Maths : 75

Marks in Economics : 82

Marks in DAA :79

Percentage of the student is :77.2

Grade of student is :C

```
=====
```

Roll number of student : 5

Name of student : Sahithi

Marks in Python : 99

Marks in Cpp : 91

```
=====
```

Marks in Economics : 89

Marks in DAA :85

Percentage of the student is :90.8

Grade of student is :A

```
=====
```

Roll number of student : 6

Name of student : Venky

Marks in Python : 72

Marks in Cpp : 75

Marks in Maths : 79

Marks in Economics : 84

Marks in DAA :87

Percentage of the student is :79.4

Grade of student is :C

```
=====
```

Roll number of student : 7

Name of student : Sajjad

Marks in Python : 89

Marks in Cpp : 82

Marks in Maths : 83

Marks in Economics : 76

Marks in DAA :68

Percentage of the student is :79.6

Grade of student is :C

```
=====
```

Roll number of student : 8

Name of student : Pardha

Marks in Python : 75

Marks in Cpp : 70

Marks in Maths : 72

Marks in Economics : 83

Marks in DAA :89

Percentage of the student is :77.8

Grade of student is :C

```
=====
```

Roll number of student : 9

Name of student : Suma

Marks in Python : 44

Marks in Cpp : 50

Marks in Maths : 60

Marks in Economics : 70

Marks in DAA :64

Percentage of the student is :57.6

Grade of student is :E

```
=====
```

|

3. DISPLAY A PARTICULAR STUDENT REPORT

```
void display_sp(int n)
{
    student st;
    ifstream inFile;
    inFile.open("student.dat",ios::binary);
    if(!inFile)
    {
        cout<<"File could not be open !! Press any Key...";
        cin.ignore();
        cin.get();
        return;
    }
    bool flag=false;
    while(inFile.read(reinterpret_cast<char *> (&st), sizeof(student)))
    {
        if(st.retrollno()==n)
        {
            st.showdata();
            flag=true;
        }
    }
    inFile.close();
    if(flag==false)
        cout<<"\n\nrecord not exist";
    cin.ignore();
    cin.get();
}
```

```
Please Enter Your Choice (1-7) 3
Please Enter The roll number 3
Roll number of student : 3
Name of student : Harsha
Marks in Python : 87
Marks in Cpp : 79
Marks in Maths : 75
Marks in Economics : 85
Marks in DAA :81
Percentage of the student is :81.4
Grade of student is :B|
```



4. MODIFY A STUDENT RECORD

```
Roll number of student : 5
Name of student : Sahithi
Marks in Python : 99
Marks in Cpp : 91
Marks in Maths : 90
Marks in Economics : 89
Marks in DAA :85
Percentage of the student is :90.8
Grade of student is :A

Please Enter The New Details of student

Enter The roll number of student 5

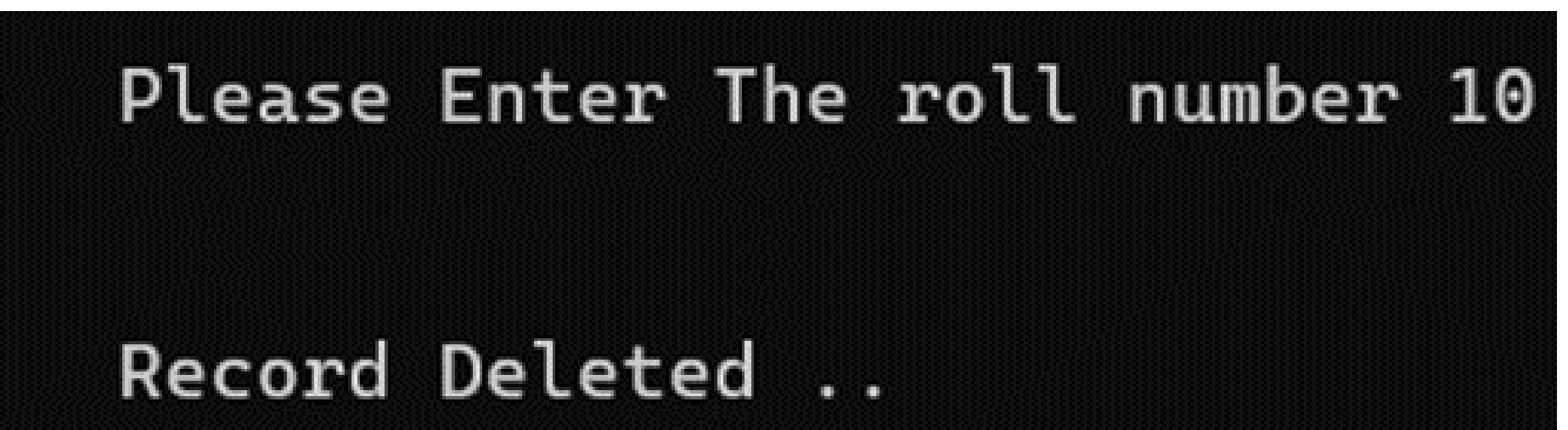
Enter The Name of student Sahithi
Enter The marks in python out of 100 : 99
Enter The marks in cpp out of 100 : 91
Enter The marks in maths out of 100 : 90
Enter The marks in economics out of 100 : 96
Enter The marks in DAA out of 100 : 91

Record Updated|
```

```
void modify_student(int n)
{
    bool found=false;
    student st;
    fstream File;
    File.open("student.dat",ios::binary|ios::in|ios::out);
    if(!File)
    {
        cout<<"File could not be open !! Press any Key...";
        cin.ignore();
        cin.get();
        return;
    }
    while(!File.eof() && found==false)
    {
        File.read(reinterpret_cast<char *>(&st), sizeof(student));
        if(st.retrollno()==n)
        {
            st.showdata();
            cout<<"\n\nPlease Enter The New Details of student"<<endl;
            st.getdata();
            int pos=(-1)*static_cast<int>(sizeof(st));
            File.seekp(pos,ios::cur);
            File.write(reinterpret_cast<char *>(&st), sizeof(student));
            cout<<"\n\n\t Record Updated";
            found=true;
        }
    }
    File.close();
    if(found==false)
        cout<<"\n\n Record Not Found ";
    cin.ignore();
    cin.get();
}
```

5. DELETE A STUDENT RECORD

```
void delete_student(int n)
{
    student st;
    ifstream inFile;
    inFile.open("student.dat",ios::binary);
    if(!inFile)
    {
        cout<<"File could not be open !! Press any Key...";
        cin.ignore();
        cin.get();
        return;
    }
    ofstream outFile;
    outFile.open("Temp.dat",ios::out);
    inFile.seekg(0,ios::beg);
    while(inFile.read(reinterpret_cast<char *> (&st), sizeof(student)))
    {
        if(st.rollno()!=n)
        {
            outFile.write(reinterpret_cast<char *> (&st), sizeof(student));
        }
    }
    outFile.close();
    inFile.close();
    remove("student.dat");
    rename("Temp.dat","student.dat");
    cout<<"\n\n\tRecord Deleted ..";
    cin.ignore();
    cin.get();
}
```



```
Please Enter The roll number 10
Record Deleted ..
```

6. TOP 3 MARKS

```
void display_top3()
{
    student st;
    ifstream inFile;
    inFile.open("student.dat",ios::binary);
    if(!inFile){
        cout<<"File could not be open !! Press any Key...";
        cin.ignore();
        cin.get();
        return;
    }
    int index=0,i,j,temp,a[50];
    while(inFile.read(reinterpret_cast<char *> (&st), sizeof(student))){
        a[index]=st.rettotal();
        index++;
    }
    for(i=0;i<index;i++){
        for(j=0;j<index;j++){
            if(a[j]>a[i]){
                temp=a[i];
                a[i]=a[j];
                a[j]=temp;
            }
        }
    }
}
```

```
int k=index;
cout<<"\n\tTOP 3 MARKS ARE";
while(k-- &&k>index-4){
    cout<<"\n\t"<<a[k];
}
}
```

Please Enter Your Choice (1-7) 6

TOP 3 MARKS ARE

477

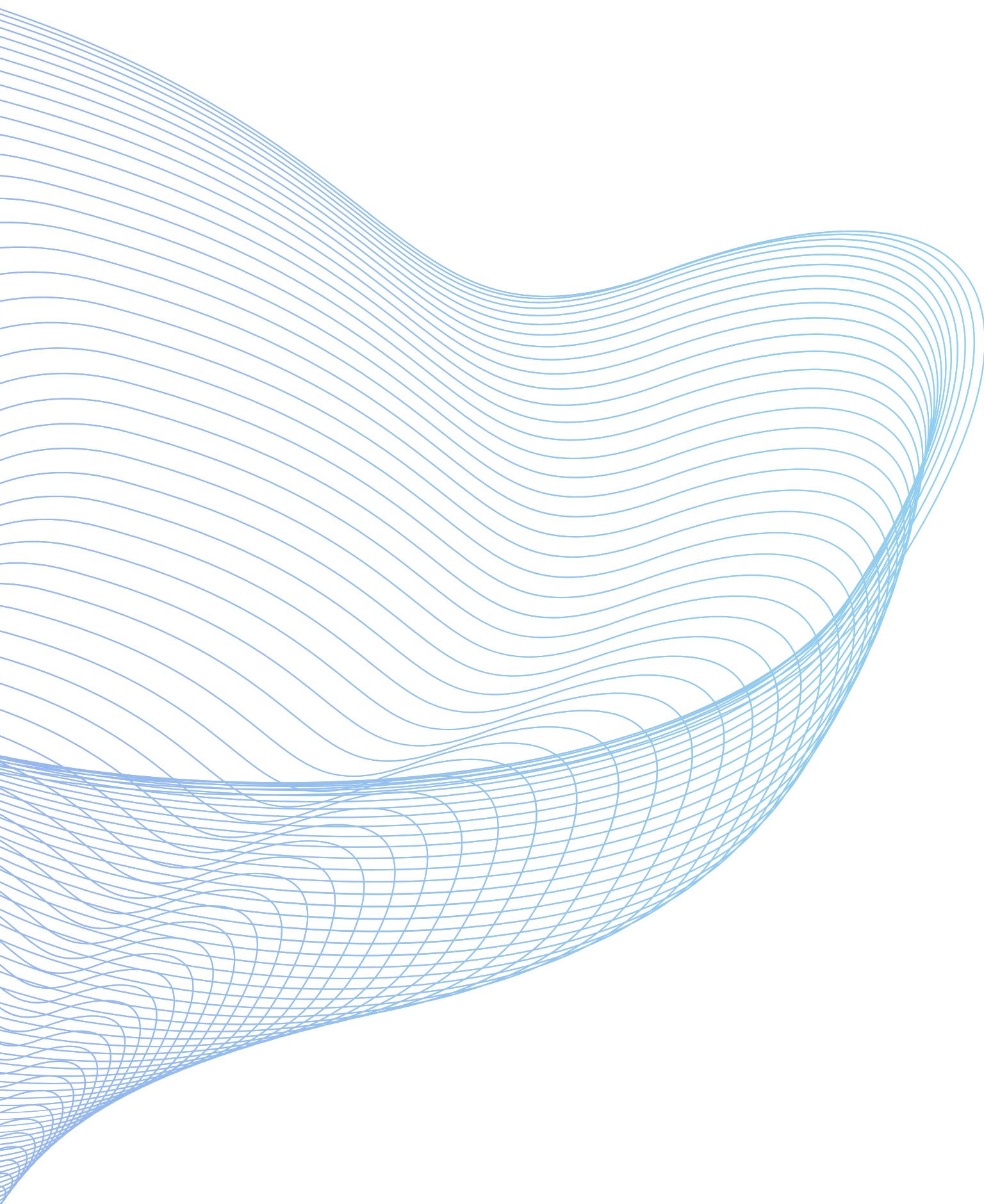
467

422

CONCLUSION:

Our project is only a humble venture to satisfy the needs of an Institution. Several user-friendly coding has also been adopted. This package shall prove to be a powerful package in satisfying all the requirements of the organization. The objective of software planning is to provide a frame work that enables the institution to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.





Thank You!

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