



Report Card Management System

DS Project Report

PROPOSED TO:

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The way can't walk itself. We have to walk on it. For that we must have a guide. Many guides have contributed to the successful completion of the project we would like to place on record my grateful thanks to each one of them who help us in this project.

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We would like to thank our [parents & friends](#) for giving us full feedback when we are in trouble.

Our special thanks go to [Indu Singh Mam](#) to give their expert guidance to us whenever necessary.

INTRODUCTION:

This Project Report card management System includes the facilities of registration, modification, search, display, Deletion etc. of students information about marks, their names and roll number.

This program searches for a record information on the basis of the roll number of that student.

This software is very useful for small schools for maintaining their report card records and that is in cost effective way.

MODULES:-

- main:- To control all other functions flow
- entryMenu:- To display the the starting navigation menu
- acceptdata:- To write information of student in file
- view_specific:- To display the data of specific student
- deleterecord:- To Delete the any students full information
- modify:- To modify record of specific student
- result:- To display the result Menu

PROJECT OBJECTIVES

- The objective of developing such a computerization system is to reduce the paperwork and time in Report Card management thereby increasing the efficiency and decreasing the workload.
- To use fundamental Data Structures, Classes and Objects to implement member functions that register, search, display, modify, delete student information about the marks and their names and roll number.

SOFTWARE AND HARDWARE

REQUIREMENTS :

- Printer : To print project report
- Compiler : Dev C++, Code Blocks
- Operating System: Windows xp, 7,8,10.
- RAM : 512 MB or more than 512 MB
- Processor : Dual core
- Hard Disk Usage : 1 to 5 MB

THEORY OF CONCEPTS USED

Input /Output with files

C++ provides the following classes to perform output and input of characters to/from files:

S.No	Data Type & Description
1	Ofstream <i>This data type shows the output file stream and used to create files and to write information to files.</i>
2	ifstream <i>This data type shows the input file stream and is used to read information from files.</i>
3	fstream <i>This data type represents the file stream generally, and has the capabilities of both ofstream and ifstream which means it can create files, write information to files, and read information from files.</i>

All C++ compilers come with classes for streaming input from the console and output to the console. These classes are defined by putting the directive `#include <iostream>` at the top of the code. The `istream` class has methods for detecting input errors and the end of input data. The `ostream` class has methods for formatting output, i.e. specifying scientific notation, fixed decimal notation, or a combination thereof, and for specifying the number of decimal digits displayed. Using some of the features of these classes, we add the capability of reading and writing our own custom types. Finally, the `ifstream` and `ofstream` classes let us read from and write to named files.

Opening a File

A file must be opened before you can read from it or write to it. Either **ofstream** or **fstream** object may be used to open a file for writing. And **ifstream** object is used to open a file for reading purpose only.

Following is the standard syntax for **open()** function, which is a member of **fstream**, **ifstream**, and **ofstream** objects.

```
void open(const char *filename, ios::opening mode);
```

Here, the first argument specifies the name and location of the file to be opened and the second argument of the **open()** member function defines the mode in which the file should be opened.

Sr.No	Mode Flag & Description
1	ios::app <i>Append mode. All output to that file to be appended to the end.</i>
2	ios::binary <i>Open a file for storing in such a way that it is not in readable format by human</i>
3	ios::in <i>Open a file for reading.</i>
4	ios::out <i>Open a file for writing.</i>
5	ios::trunc <i>If the file already exists, its contents will be truncated before opening the file.</i>

You can combine two or more of these values by **OR**ing them together. For example if you want to open a file in write mode and want to truncate it in case that already exists, **following will be the syntax –**

```
ofstream outfile;  
outfile.open("file.dat", ios::app || ios::binary );
```

Similar way, you can open a file for reading and writing purpose as follows –

```
fstream afile;  
afile.open("file.dat", ios::out || ios::in );
```

Closing a File

When a C++ program terminates it automatically flushes all the streams, release all the allocated memory and close all the opened files. But it is always a good practice that a programmer should close all the opened files before program termination.

Following is the syntax for close() function

```
void close();
```

Writing to a File

While doing C++ programming, you write information to a file from your program using the stream insertion operator (<<) just as you use that operator to output information to the screen. The only difference is that you use an **ofstream** or **fstream** object instead of the **cout** object.

Reading from a File

You read information from a file into your program using the stream extraction operator (>>) just as you use that operator to input information from the keyboard. The only difference is that you use an **ifstream** or **fstream** object instead of the **cin** object.

ostream::seekp(pos)

The **seekp(pos)** method of **ostream** in C++ is used to set the position of the pointer in the output sequence with the specified position. This method takes the new position to be set and returns this ostream instance with the position set to the specified new position.

Syntax:

```
ostream& seekp(streampos pos);
```

Parameter: This method takes the **new position** to be set as the parameter.

Return Value: This method returns **this ostream instance** with the position set to the specified new position.

Ignore()

Essentially, for `std::cin` statements you use `ignore` before you do a `getline` call, because when a user inputs something with `std::cin`, they hit enter and a `'\n'` char gets into the `cin` buffer. Then if you use `getline`, it gets the newline char instead of the string you want.

So you do a `std::cin.ignore(1000, '\n')` and that should clear the buffer up to the string that you want.

(The 1000 is put there to skip over a specific amount of chars before the specified break point, in this case, the `\n` newline character.)

Defining color of output

For background and foreground, type in a number from 0 - 9 or a letter from A - F.

```
system("color A1");  
std::cout<<"hi"<<std::endl;
```

That would display the letters "hi" with a green background and blue text.

Sleep()

This function stops the program running for the time given in bracket.

```
Sleep(x);
```

This stops the program for x milliseconds.

SOURCE CODE

Header files and variables

```
1  #include <iostream>
2  #include<fstream>
3  #include<windows.h>
4  using namespace std;
5  struct student
6  {
7  char name[80];
8  char batch[80];
9  int roll;
10 float dsa,os,mands,analog,sum,average;
11 };
12 void intro();
13 void mainmenu();
14 void acceptdata();
15 void view_Specific(int);
16 void viewall();
17 void result(int);
18 void deleterecord(int);
19 void modify(int);
20
```

THE MAIN FUNCTION

```

21 int main()
22 { system("color a");
23   char c;
24   system("cls");
25   intro();
26   do{
27     system("cls");
28     system("color e");
29     cout<<"\n\n";
30     cout<<"\t=====STUDENT REPORT CARD MANEGEMENT SYSTEM======"<<endl;
31     cout<<endl;
32     cout<<"\t\t\t\t\t1. MAIN MENU\n\n";
33     cout<<"\t\t\t\t\t2. EXIT\n\n";
34     cout<<"ENTER YOUR CHOICE : ";
35     cin>>c;
36     system("cls");
37     switch(c)
38     {
39       case '1':
40         {
41           mainmenu();
42           break;
43         }
44       case '2':
45         {
46           cout << "\t\t\t\t\tTHANK YOU FOR USING THIS SOFTWARE"<<endl;
47           cout << "\n\n";
48           cout<<"\t\t\tGROUP MEMBERS(DEVELOPERS)";
49           cout << "\n\n";
50           cout << "\t\tNAME\t\tRollno.\t\t\n\n";
51           cout << "\t\t1. KUSHAL\t\t2K19/SE/066\t\t\n\n";
52           cout << "\t\t2. LAKSHAY\t\t2K19/SE/067\t\t\n\n";
53           cout << "\n\n";
54           cout<<"\t\t\t\t\t\t\tSUBMITTED TO:\t\tINDU MAM\n\n";
55           cout << "\n\n";
56         }
57       }while(c!='2');
58       return 0;
59   }

```

FUNCTION FOR ACCEPTING DATA

```
60 void acceptdata()
61 { system("cls");
62   student s;
63   ofstream outfile;
64   outfile.open("Report.txt",ios::app|ios::binary);
65   if(outfile.fail())
66   {
67     cout<<"THE FILE COULD NOT BE OPEN...press enter key";
68     cin.ignore();
69     cin.get();
70   }
71   cout<<"\n\n";
72   cout<<"\t\t\t\t\t=====CREATE A REPORT CARD===== \n\n";
73   cout<<"ENTER YOUR FULL NAME :";
74   cin.ignore();
75   cin.getline(s.name,80);
76   cout<<"ENTER YOUR Rollno : ";
77   cin.ignore();
78   cin.get(s.batch,80);
79   cout<<"ENTER YOUR BATCH NUMBER :";
80   cin>>s.roll;
81   cout<<"ENTER YOUR DATA STRUCTURE MARK :";
82   cin>>s.dsa;
83   cout<<"ENTER YOUR OPERATING SYSTEM MARK :";
84   cin>>s.os;
85   cout<<"ENTER YOUR SIMULATION AND MODELLING MARK :";
86   cin>>s.mands;
87   cout<<"ENTER YOUR ANALOG ELETRONICS MARK :";
88   cin>>s.analog;
89   s.sum=s.dsa+s.os+s.mands+s.analog;
90   s.average=(s.sum/4);
91   outfile.write(reinterpret_cast<char *> (&s), sizeof(student));
92   outfile.close();
93   cout<<endl;
94   cout<<"\t\t\t\t\tTHE FILE IS SUCCESSFULLY SAVED"<<endl;
95   cout<<endl;
96   cout<<"press any key to continue...";
97   cin.ignore();
98   cin.get();
99 }
```

FUNCTION FOR THE INTRODUCTION

```
101 void intro()
102 {
103     cout << "\n\n\n";
104     Sleep(300);
105     cout << "\t\t\t\t * * * **** *      **** *** ** * **** " << endl;
106     Sleep(300);
107     cout << "\t\t\t\t * * * *      *      * * * * * " << endl;
108     Sleep(300);
109     cout << "\t\t\t\t * * * ***** *      * * * * * ***** " << endl;
110     Sleep(300);
111     cout << "\t\t\t\t * * * *      *      * * * * * " << endl;
112     Sleep(300);
113     cout << "\t\t\t\t *** **** ***** **** *** * * * **** " << endl;
114     Sleep(300);
115     cout<<endl;
116     cout<<"\t\t\t\t===== "<<endl;
117     Sleep(500);
118     cout<<"\t\t\t\tTHIS IS STUDENT REPORT CARD MANEGEMENT SYSTEM"<<endl;
119     Sleep(500);
120     cout<<"\t\t\t\t===== "<<endl;
121     Sleep(500);
122     cout<<"press any key to continue...";
123     cin.ignore();
124     cin.get();
125 }
126
127
128
```

FUNCTION FOR MAIN MENU

```
129 void mainmenu()
130
131 {
132     system("color c");
133     char cc;
134     cout<<"\t\t\t\t\t=====MAIN MENU=====\\n\\n"<<endl;
135     Sleep(300);
136     cout<<"\t\t\t\t\t1. CREATE STUDENT REPORT CARD\\n\\n"<<endl;
137     Sleep(300);
138     cout<<"\t\t\t\t\t2. VIEW ALL STUDENTS REPORT CARD\\n\\n"<<endl;
139     Sleep(300);
140     cout<<"\t\t\t\t\t3. VIEW A SINGLE STUDENT REPORT CARD\\n\\n"<<endl;
141     Sleep(300);
142     cout<<"\t\t\t\t\t4. MODIFY REPORT CARD\\n\\n"<<endl;
143     Sleep(300);
144     cout<<"\t\t\t\t\t5. RESULT\\n\\n"<<endl;
145     Sleep(300);
146     cout<<"\t\t\t\t\t6. DELETE RECORD\\n\\n"<<endl;
147     Sleep(300);
148     cout<<"\t\t\t\t\t=====\\n\\n"<<endl;
149     Sleep(300);
150     cout<<"\t\t\t\t\tENTER YOUR CHOICE...:) <1-6> :";
151     Sleep(300);
152     cin>>cc;
153     cout<<endl;
154     switch(cc)
155     {
156     case '1':
157     {
158         acceptdata();
159         break;
160     }
161     case '2':
162     {
163         viewall();
164         break;
165     }
166     case '3':
167     {
168         int n;
```



```

169         cout<<"ENTER YOUR ROLL NUMBER :";
170         cin>>n;
171         view_Specific(n);
172         break;
173     }
174     case '4':
175     {
176         int n;
177         cout<<"ENTER YOUR ROLL NUMBER :";
178         cin>>n;
179         modify(n);
180         break;
181     }
182
183     case '5':
184     {
185         int n;
186         cout<<"ENTER YOUR ROLL NUMBER :";
187         cin>>n;
188         cout<<endl;
189         result(n);
190         break;
191     }
192     case '6':
193     {
194         int n;
195         cout<<"ENTER YOUR ROLL NUMBER :";
196         cin>>n;
197         cout<<endl;
198         deleterecord(n);
199         break;
200     }
201 }
202
203

```

FUNCTION FOR DISPLAYING ALL RECORDS

```
204 void viewall()
205
206 {
207     system("cls");
208     student s;
209     ifstream infile;
210     bool check=false;
211     infile.open("Report.txt",ios::app|ios::binary);
212     if(infile.fail())
213     {
214         cout<<"THE FILE COULD NOT BE OPENED.....press enter key...";
215         cin.ignore();
216         cin.get();
217     }
218     cout<<"\n\n";
219     cout<<"\t\t\t\t\tALL STUDENTS REPORT CARDS"<<endl;
220     cout<<"===== "<<endl;
221     while(infile.read(reinterpret_cast<char*>(&s),sizeof(student)))
222     {
223         cout<<"\t\t\t\t\tSTUDENT NAME : "<<s.name<<endl<<endl;
224         cout<<"\t\t\t\t\tSTUDENT BATCH NUMBER : "<<s.batch<<endl<<endl;
225         cout<<"\t\t\t\t\tSTUDENT ROLL NUMBER : "<<s.roll<<endl<<endl;
226         cout<<"\t\t\t\t\tDATA STRUCTURE MARK : "<<s.dsa<<endl<<endl;
227         cout<<"\t\t\t\t\tOPERATING SYSTEM MARK : "<<s.os<<endl<<endl;
228         cout<<"\t\t\t\t\tSIMULATION AND MODELLING MARK : "<<s.mands<<endl<<endl;
229         cout<<"\t\t\t\t\tANALOG ELETRONICS MARK : "<<s.analog<<endl<<endl;
230         cout<<"\t\t\t\t\tSUM : "<<s.sum<<endl<<endl;
231         cout<<"\t\t\t\t\tAVERAGE : "<<s.average<<endl<<endl;
232         cout<<"===== "<<endl;
233         check=true;
234     }
235     infile.close();
236     if(check==false)
237     cout<<"\t\t\t\t\tNO RECORD FOUND..."<<endl<<endl;
238     cout<<"press any key to continue....";
239     cin.ignore();
240     cin.get();
241 }
242
```

FUNCTION FOR DISPLAYING SPECIFIC RECORD

```
243 void view_Specific(int n)
244 {
245     system("cls");
246     student s;
247     ifstream infile;
248     infile.open("Report.txt",ios::app|ios::binary);
249     if(infile.fail())
250     {
251         cout<<"THE FILE COULD NOT BE OPENED...";
252
253         cin.ignore();
254         cin.get();
255     }
256     bool equality=false;
257     cout<<"\t\t\t\t\t=====VIEW A SINGLE STUDENT REPORT=====\n\n";
258     while(infile.read(reinterpret_cast<char*>(&s),sizeof(student)))
259     {
260         if(s.roll==n)
261         {
262             cout<<"\t\t\t\t\tSTUDENT NAME : "<<s.name<<endl;
263             cout<<"\t\t\t\t\tSTUDENT BATCH NUMBER : "<<s.batch<<endl;
264             cout<<"\t\t\t\t\tSTUDENT ROLL NUMBER : "<<s.roll<<endl;
265             cout<<"\t\t\t\t\tDATA STRUCTURE MARK : "<<s.dsa<<endl;
266             cout<<"\t\t\t\t\tOPERATING SYSTEM MARK : "<<s.os<<endl;
267             cout<<"\t\t\t\t\tSIMULATION AND MODELLING MARK : "<<s.mands<<endl;
268             cout<<"\t\t\t\t\tANALOG ELETRONICS MARK : "<<s.analog<<endl;
269             cout<<"\t\t\t\t\tSUM : "<<s.sum<<endl;
270             cout<<"\t\t\t\t\tAVERAGE : "<<s.average<<endl;
271             cout<<"\t\t\t\t\t===== "<<endl;
272             equality=true;
273         }
274     }
275     infile.close();
276     if(equality==false)
277     {
278         cout<<"\t\t\t\t\tRECORD NOT FOUND..."<<endl;
279         cout<<endl;
280         cout<<"press any key to continue...";
281         cin.ignore();
282         cin.get();
283     }
284 }
```

FUNCTION FOR RESULT OF THE STUDENT

```
283 void result(int n)
284
285 {
286     system("cls");
287     student s;
288     ifstream infile;
289     infile.open("Report.txt",ios::app|ios::binary);
290     if(infile.fail())
291     {
292         cout<<"THE FILE COULD NOT BE OPENED..."<<endl;
293         cin.ignore();
294         cin.get();
295     }
296     bool eq=false;
297     cout<<"\t\t\t\t\t=====VIEW A SINGLE STUDENT RESULT=====\\n\\n";
298     while(infile.read(reinterpret_cast<char*>(&s),sizeof(student)))
299     {
300         if(s.roll==n)
301         {
302             cout<<"\t\t\t\t\tSTUDENT NAME : "<<s.name<<endl<<endl;
303             cout<<"\t\t\t\t\tDATA STRUCTURE MARK : "<<s.dsa<<endl<<endl;
304             cout<<"\t\t\t\t\tOPERATING SYSTEM MARK : "<<s.os<<endl<<endl;
305             cout<<"\t\t\t\t\tSIMULATION AND MODELLING MARK : "<<s.mands<<endl<<endl;
306             cout<<"\t\t\t\t\tANALOG ELETRONICS MARK : "<<s.analog<<endl<<endl;
307             cout<<"\t\t\t\t\tSUM : "<<s.sum<<endl<<endl;
308             cout<<"\t\t\t\t\tAVERAGE : "<<s.average<<endl<<endl;
309             cout<<"\t\t\t\t\t=====\\n\\n";
310             eq=true;
311         }
312     }
313     infile.close();
314     if(eq==false)
315     {
316         cout<<"\t\t\t\t\tRECORD NOT FOUND..."<<endl;
317         cout<<endl;
318         cout<<"press any key to continue...";
319         cin.ignore();
320         cin.get();
321     }
```

FUNCTION FOR MODIFYING STUDENT RECORD

```
322 void modify(int n)
323
324 {
325     system("cls");
326     student s;
327     fstream infile;
328     infile.open("Report.txt",ios::binary|ios::in|ios::out);
329     if(infile.fail())
330     {
331         cout<<"THE FILE COULD NOT BE OPENED..."<<endl;
332         cin.ignore();
333         cin.get();
334     }
335     bool checker=false;
336     cout<<"\t\t\t\t\t=====MODIFY A REPORT CARD=====\\n\\n";
337     while(!infile.eof() && checker==false)
338     {
339         infile.read(reinterpret_cast<char*>(&s),sizeof(student));
340         {
341             if(s.roll==n)
342             {
343                 cout<<"\t\t\t\t\tSTUDENT NAME : "<<s.name<<endl<<endl;
344                 cout<<"\t\t\t\t\tSTUDENT BATCH NUMBER : "<<s.batch<<endl<<endl;
345                 cout<<"\t\t\t\t\tSTUDENT ROLL NUMBER : "<<s.roll<<endl<<endl;
346                 cout<<"\t\t\t\t\tDATA STRUCTURE MARK : "<<s.dsa<<endl<<endl;
347                 cout<<"\t\t\t\t\tOPERATING SYSTEM MARK : "<<s.os<<endl<<endl;
348                 cout<<"\t\t\t\t\tSIMULATION AND MODELLING MARK : "<<s.mands<<endl<<endl;
349                 cout<<"\t\t\t\t\tANALOG ELETRONICS MARK : "<<s.analog<<endl<<endl;
350                 cout<<"=====\\n\\n";
351                 cout<<"\t\t\tENTER THE NEW INFORMATION"<<endl;
352                 cout<<"=====\\n\\n";
353                 cout<<"ENTER YOUR FULL NAME : ";
354                 cin.ignore();
355                 cin.getline(s.name,80);
356                 cout<<"ENTER YOUR BATCH NUMBER : ";
357                 cin.ignore();
358                 cin.get(s.batch,80);
359                 cout<<"ENTER YOUR ROLL NUMBER : ";
```

```

360     cin>>s.roll;
361     cout<<"ENTER YOUR DATA STRUCTURE MARK :";
362     cin>>s.dsa;
363     cout<<"ENTER YOUR OPERATING SYSTEM MARK :";
364     cin>>s.os;
365     cout<<"ENTER YOUR SIMULATION AND MODELLING MARK :";
366     cin>>s.mands;
367     cout<<"ENTER YOUR ANALOG ELETRONICS MARK :";
368     cin>>s.analog;
369     s.sum=s.dsa+s.os+s.mands+s.analog;
370     s.average=(s.sum/4);
371     int pos=(-1)*static_cast<int>(sizeof(student));
372     infile.seekp(pos,ios::cur);
373     infile.write(reinterpret_cast<char *> (&s), sizeof(student));
374     cout<<endl;
375     cout<<"\t\t\t\tTHE FILE IS SUCCESSFULLY updated"<<endl;
376     checker=true;
377     }
378 }
379 }
380 infile.close();
381 if(checker==false)
382     cout<<"\t\t\t\tRECORD NOT FOUND"<<endl;
383     cout<<endl;
384     cout<<"press any key to continue...";
385     cin.ignore();
386     cin.get();
387 }
388

```

PASSWORD FOR MODIFYING STUDENT RECORD

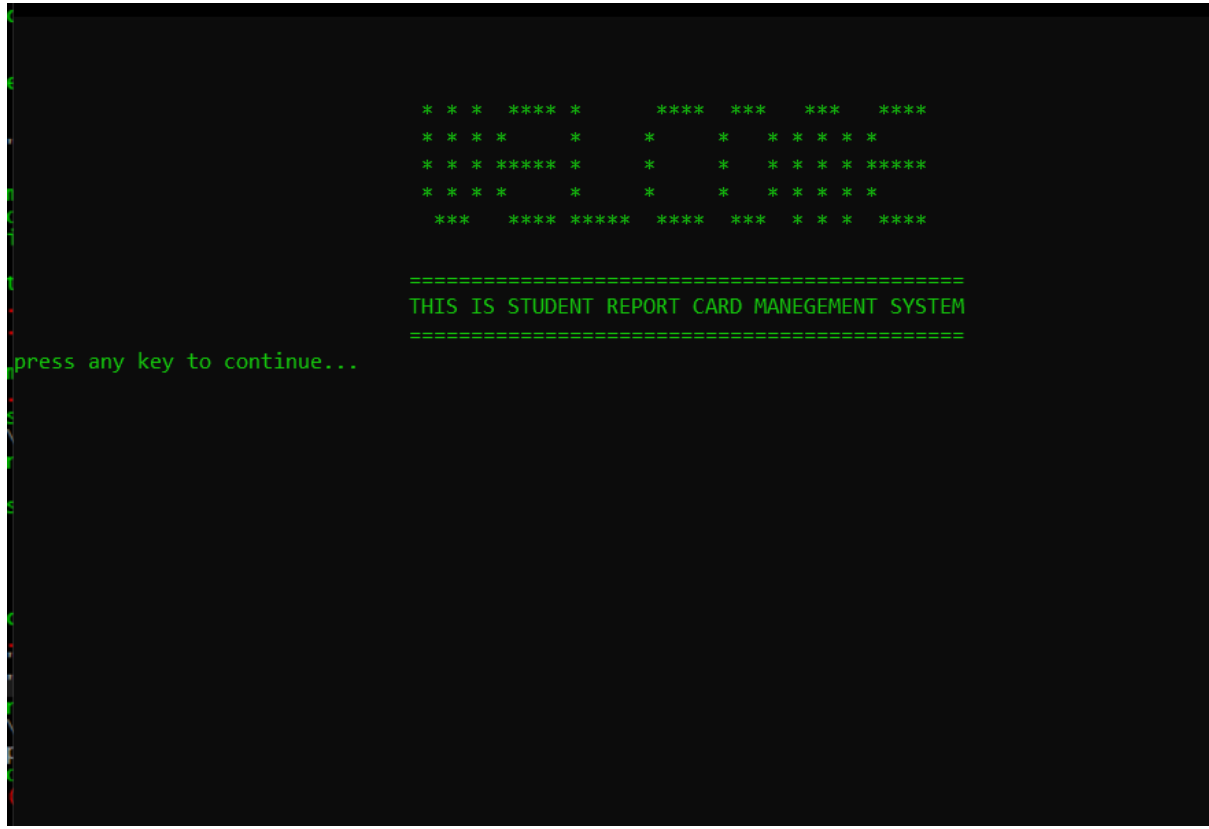
```
20 ▼ void passwd()  
21 ▼ {  
22     string f;  
23     cout << "Enter Password:\n";  
24     cin>>f;  
25     if(f == "password")  
26     {  
27         cout << "\nAccess granted \n";  
28     }  
29     else  
30 ▼ {  
31         cout << "\nAccess aborted... \n";  
32         exit(0);  
33     }  
34 }
```

FUNCTION FOR DELETING RECORD

```
389 void deleterecord(int n)
390
391 {
392     system("cls");
393     student s;
394     ifstream infile;
395     infile.open("Report.txt",ios::binary);
396     if(!infile)
397     {
398         cout<<"THE FILE COULD NOT BE OPENED..."<<endl;
399         cin.ignore();
400         cin.get();
401     }
402     ofstream outfile;
403     outfile.open("Record2.txt",ios::binary);
404     infile.seekg(0,ios::beg);
405     cout<<"\t\t\t\t\t=====DELETE A REPORT CARD=====\\n\\n";
406     while(infile.read(reinterpret_cast<char*>(&s),sizeof(student)))
407     {
408         if(s.roll!=n)
409         {
410             outfile.write(reinterpret_cast<char*>(&s),sizeof(student));
411         }
412     }
413     infile.close();
414     outfile.close();
415     remove("Report.txt");
416     rename("Record2.txt","Report.txt");
417     cout<<endl;
418     cout<<"\t\t\t\t\tRECORD SUCCESSFULLY DELETED"<<endl;
419     cout<<"press any key to continue...";
420     cin.ignore();
421     cin.get();
422 }
```


OUTPUT SCREENS

OUTPUT FOR THE INTRODUCTION



OUTPUT FOR CHOOSING OPTION



OUTPUT FOR MAIN MENU

```
=====MAIN MENU=====

1. CREATE STUDENT REPORT CARD

2. VIEW ALL STUDENTS REPORT CARD

3. VIEW A SINGLE STUDENT REPORT CARD

4. MODIFY REPORT CARD

5. RESULT

6. DELETE RECORD

=====
ENTER YOUR CHOICE...:) <1-6> :
```

OUTPUT FOR CREATING STUDENT REPORT CARD

```
=====CREATE A REPORT CARD=====

ENTER YOUR FULL NAME :Rohan
ENTER YOUR Rollno : 77
ENTER YOUR BATCH NUMBER :5
ENTER YOUR DATA STRUCTURE MARK :77
ENTER YOUR OPERATING SYSTEM MARK :66
ENTER YOUR SIMULATION AND MODELLING MARK :87
ENTER YOUR ANALOG ELETRONICS MARK :78

THE FILE IS SUCCESSFULLY SAVED

press any key to continue...
```

OUTPUT FOR DISPLAYING ALL RECORDS

```
=====
      STUDENT NAME :Kushal

      STUDENT BATCH NUMBER ::6

      STUDENT ROLL NUMBER :2

      DATA STRUCTURE MARK :87

      OPERATING SYSTEM MARK :98

      SIMULATION AND MODELLING MARK :65

      ANALOG ELETRONICS MARK :87

      SUM :337

      AVERAGE :84.25

=====
      STUDENT NAME :Rohan

      STUDENT BATCH NUMBER ::7

      STUDENT ROLL NUMBER :5

      DATA STRUCTURE MARK :77

      OPERATING SYSTEM MARK :66

      SIMULATION AND MODELLING MARK :87

      ANALOG ELETRONICS MARK :78

      SUM :308

      AVERAGE :77

=====
press any key to continue...
```

OUTPUT FOR DISPLAYING SPECIFIC RECORD

```
=====VIEW A SINGLE STUDENT REPORT=====

STUDENT NAME :lakshay
STUDENT BATCH NUMBER ::2
STUDENT ROLL NUMBER :67
DATA STRUCTURE MARK :78
OPERATING SYSTEM MARK :87
SIMULATION AND MODELLING MARK :89
ANALOG ELETRONICS MARK :98
SUM :352
AVERAGE :88
=====

press any key to continue...
```

OUTPUT FOR RESULT OF THE STUDENT

```
=====VIEW A SINGLE STUDENT RESULT=====

STUDENT NAME :Rohan

DATA STRUCTURE MARK :77

OPERATING SYSTEM MARK :66

SIMULATION AND MODELLING MARK :87

ANALOG ELETRONICS MARK :78

SUM :308

AVERAGE :77

=====

press any key to continue...
```

OUTPUT FOR MODIFYING STUDENT RECORD

```
=====MODIFY A REPORT CARD=====

STUDENT NAME :Rohan

STUDENT BATCH NUMBER ::

STUDENT ROLL NUMBER :5

DATA STRUCTURE MARK :77

OPERATING SYSTEM MARK :66

SIMULATION AND MODELLING MARK :87

ANALOG ELETRONICS MARK :78

=====
ENTER THE NEW INFORMATION
=====
ENTER YOUR FULL NAME :Rohan
ENTER YOUR BATCH NUMBER : :22
ENTER YOUR ROLL NUMBER :77
ENTER YOUR DATA STRUCTURE MARK :76
ENTER YOUR OPERATING SYSTEM MARK :87
ENTER YOUR SIMULATION AND MODELLING MARK :98
ENTER YOUR ANALOG ELETRONICS MARK :88

THE FILE IS SUCCESSFULLY updated

press any key to continue...
```

PASSWORD FOR MODIFYING STUDENT RECORD

```
=====MAIN MENU=====

1. CREATE STUDENT REPORT CARD

2. VIEW ALL STUDENTS REPORT CARD

3. VIEW A SINGLE STUDENT REPORT CARD

4. MODIFY REPORT CARD

5. RESULT

6. DELETE RECORD

=====
ENTER YOUR CHOICE...:) <1-6> :4

ENTER YOUR ROLL NUMBER :2
Enter Password:
password
```

OUTPUT FOR DELETING RECORD

```
=====DELETE A REPORT CARD=====

RECORD SUCCESSFULLY DELETED

press any key to continue...
```

OUTPUT FOR EXITING SCREEN

```
THANK YOU FOR USING THIS SOFTWARE

GROUP MEMBERS(DEVELOPERS)

NAME                Rollno.
1. KUSHAL            2K19/SE/066
2. LAKSHAY           2K19/SE/067

SUBMITTED TO:  INDU MAM

-----
Process exited after 16.14 seconds with return value 0
Press any key to continue . . .
```

ADVANTAGES

- It saves the time of teacher to calculate the percentage, grade
- Makes easy to handle records
- Reduce the paper work
- Can easily change the records without cutting and any mess

DISADVANTAGES

- This is limited to small scale only
- This cannot be operated in networking over internet
- Password is visible

REFERENCES

- <https://www.programiz.com/>
- Computer Science With C++ by Sumita Arora
- Object-Oriented Programming With C++ by E. Balagurusamy
- <https://stackoverflow.com>