Green University of Bangladesh

Department of Computer Science and Engineering (CSE)
Faculty of Sciences and Engineering
Semester: Spring, Year: 2022, B.Sc. in CSE (DAY)

Project Report

Course Code: CSE 104 **Section: CSE 213 - DB (PC)**

Project Title:

Academic Performance and Result (Marksheet) Generation System.

Student Details

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Submission Date: 14th May, 2022

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[For Teacher's use only: Don't write anything inside this box]

Lab Report Status

Marks:	**Signature:**
Comments:	**Date:**

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Chapter 1

Introduction

1. Introduction

Academic Performance and Result (Marksheet) Generation System is a software solution for tracking and having a glance at a student's academic performance and result**. (**A.P.R.G.S.) is specifically designed for educational instituitions, and its many features enable school's efficient functioning on a daily basis. The computerization of the student result according to each semester will improve the efficiency and reduce human stress, and also indirectly improve the human recourses. This system helps the user to show subject-wise results and the percentage of students.

2. Design Goals/Objective

- The main focus of this project is to reduce time and lessen human efforts.
- To provide a user-friendly environment where a user can be serviced better easy.
- To gathers all the valuable student-related mark information on a single platform, enables quick retrieval of essential data, and filters their availability by the access level**.**
- To replace a complex net of educational bureaucracy and provide efficient communication channels on all levels.
- To keep all the mark related information organized and show them in a batter place, and reduce the chance of mistake.

Chapter 2

1. Student Record System Design

The Academic Performance and Result (Marksheet) Generation System I made using C program will be look like this.

1. Interface

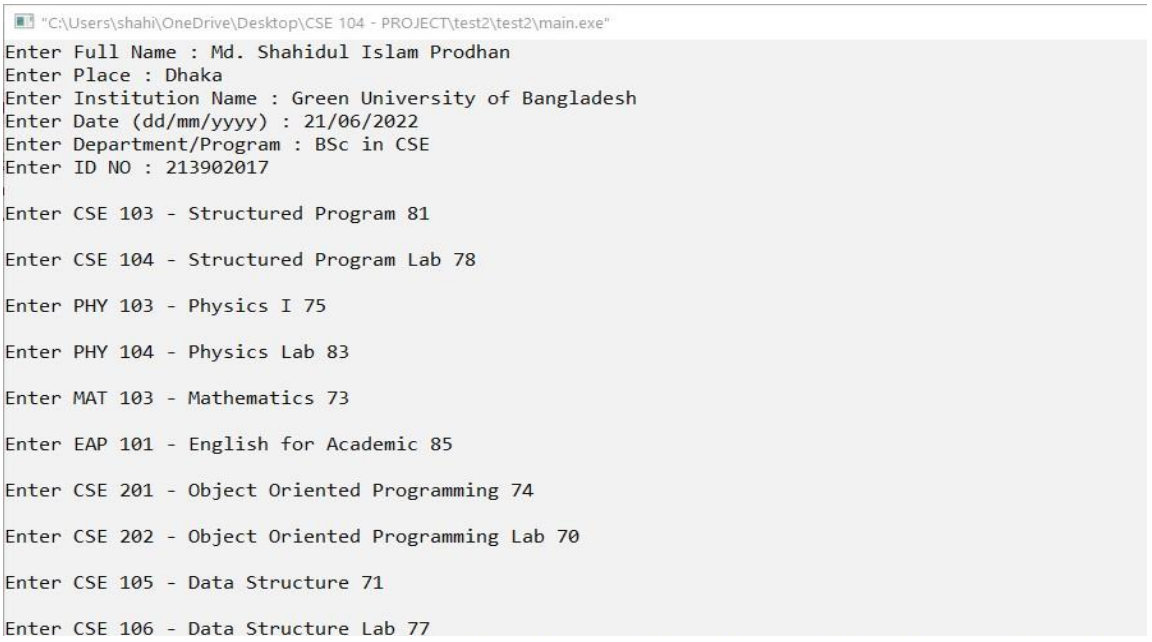


Figure 1.1: A.P.R.G.S.

3. Implementation of the Project:

- **Start of the code:**

```
#include<stdio.h>
#include<string.h>
#include<stdlib.h>
void input();
int calculations();
void show();

void cse103();
void cse104();
void phy103();
void phy104();
void mat103();
void eap101();

void result();
void remark();
```

- **typedef struct student**

this will contain the data in a single data type

```

int c1,c2,p1,p2,m,en,oop1,oop2,ds1,ds2,id,total,per,t1,t2,t3,t4,t5,t6,t7,t8,t9,t10;
char b[20],ch[20],a[50],e[8],d[30],grade,res[5],rem[16],q,r,k,t,u,v,w,x,y,z;
char s[] = "Pass";
char s1[] = "Fail";
char s3[] = "CONGRATULATIONS !";
char s4[] = "      ";

int main(){
    input();
    calculations();
    cse103();
    cse104();
    phy103();
    phy104();
    mat103();
    eap101();

    result();
    remark();
    show();
    return 0;

```

- **Taking user input of the student**

this will contain the data in a single data type

```
void input(){
    printf("Enter Full Name : ");
    gets(ch);
    printf("Enter Place : ");
    gets(b);
    printf("Enter Institution Name : ");
    gets(a);
    printf("Enter Date (dd/mm/yyyy) : ");
    gets(d);
    printf("Enter Department/Program : ");
    gets(e);
    printf("Enter ID NO : ");
    scanf("%d",&id);
```

- **Void input ()**

  This function is used for taking individual subject wise mark.

```
54      ayu:
55          printf("\nEnter CSE 103 - Structured Program ");
56          scanf("%d",&c1);
57          if(c1>=100){
58                  printf("\nplz enter less than 100 ");
59                  goto ayu;
60          }
61          ayus:
62          printf("\nEnter CSE 104 - Structured Program Lab ");
63          scanf("%d",&c2);
64          if(c2>=100){
65                  printf("\nplz enter less than 100 ");
66                  goto ayus;
67          }
68      ayu1:
69          printf("\nEnter PHY 103 - Physics I ");
70          scanf("%d",&p1);
71          if(p1>=100){
72                  printf("\nplz enter less than 100 ");
73                  goto ayu1;
74          }
75          ayus1:
76          printf("\nEnter PHY 104 - Physics Lab ");
77          scanf("%d",&p2);
78          if(p2>=100){
79                  printf("\nplz enter less than 100 ");
80                  goto ayus1;
81          }
82      ayu2:
83          printf("\nEnter MAT 103 - Mathematics ");
```

```
89          ayus2:
90          printf("\nEnter EAP 101 - English for Academic ");
91          scanf("%d",&en);
92          if(en>=100){
93                  printf("\nplz enter less than 100 ");
94                  goto ayus2;
95          }
96      ayu3:
97          printf("\nEnter CSE 201 - Object Oriented Programming ");
98          scanf("%d",&oop1);
99          if(oop1>=100){
100                 printf("\nplz enter less than 100 ");
101                 goto ayu3;
102         }
103         ayus3:
104         printf("\nEnter CSE 202 - Object Oriented Programming Lab ");
105         scanf("%d",&oop2);
106         if(oop2>=100){
107                 printf("\nplz enter less than 100 ");
108                 goto ayus3;
109         }
110     ayu4:
111         printf("\nEnter CSE 105 - Data Structure ");
112         scanf("%d",&ds1);
113         if(ds1>=100){
114                 printf("\nplz enter less than 100 ");
115                 goto ayu4;
116         }
117         ayus4:
118         printf("\nEnter CSE 106 - Data Structure Lab ");
119         scanf("%d",&ds2);
```

- **void show ()**

  this function will show the result of that student.

```
125  void show(){
126      int i=0,il=0,j=0,jl=0,k=0,kl=0,l=0,ll=0;
127      while(il<113){
128          printf("*");
129          il++;}
130      printf("\n|");
131      printf("\n| \t\t\t 2nd Semester of BSc in Computer Science & Engineering, GUB  ,  SPRING 2022 ");
132      printf("\n|\n");
133      while(i<113){
134          printf("-");
135          i++;
136      }
137      printf("\n| NAME : %s \t \t",ch);
138      printf("\n| DATE : %s  \t\t\t\t\t\t  PLACE : %s",d,b);
139      printf("\n| INSTITUTON NAME : %s \t \t ",a);
140      printf("\n| DEPARTMENT : %s \t \t \t \t \t  ID NO. : %d \n",e,id);
141      while(j<113){
142          printf("-");
143          j++;
144      }
145      printf("\n|\t SUBJECTS\t\t\t\t\t| marks\t\t\t\t\t \t|\n");
146      while(k<113){
147          printf("-");
148          k++;
149      }
150      printf("\n| CSE103 - Structured Program\t\t\t\t| %d\t",c1,c2,c1+c2,q);
151      printf("\n| CSE104 - Structured Program Lab\t\t\t| %d\t",p1,p1,r);
152      printf("\n| PHY103 - Physics I \t\t\t\t\t| %d\t",p2,p2,k);
153      printf("\n| PHY104 - Physics Lab\t\t\t\t\t| %d\t",m,m,t);
154      printf("\n| MAT103 - Math  \t\t\t\t\t| %d\t",en,en,u);
155      printf("\n| EAP101 - English\t\t\t\t\t| %d\t",oop1,oop1,v);
156      printf("\n| CSE201 - Object Oriented Programming \t\t\t| %d\t",oop1,oop1,w);
157      printf("\n| CSE202 - Object Oriented Programming Lab\t\t| %d\t",oop1,oop1,x);
158
159      printf("\n| CSE 105 - Data Structure \t\t\t\t| %d\t",oop2,oop2,y);
160      printf("\n| CSE106 - Data Structure Lab \t\t\t\t| %d\t\n",ds1,ds2,ds1+ds2,z);
161      while(l<113){
```

- **calculation ()**

  This function will calculate the input marks of that student.

```
187  int calculations(){
188
189      char res[20];
190      t1=c1;
191      t2=c2;
192      t3=p1;
193      t4=p2;
194      t5=m;
195      t6=en;
196      t7=oop1;
197      t8=oop2;
198      t9=ds1;
199      t10=ds2;
200      total = t1+t2+t3+t4+t5+t6+t7+t8+t9+t10;
201      per = total/10;
202
203
204      if(per>= 80)
205            grade = 'A+';
206      else if(per>= 79)
207            grade = 'A';
208      else if(per>= 74)
209            grade = 'A-';
210      else if(per>= 69)
211            grade = 'B+';
212      else if(per>= 64)
213            grade = 'B';
214              else if(per>= 59)
215            grade = 'B-';
216              else if(per>= 54)
217            grade = 'C+';
218              else if(per>= 49)
219            grade = 'C';
220              else if(per>= 44)
221            grade = 'D';
222      else
223            grade = 'F';
224  }
```

This condition will determine the grade of that student.

```
204         if(per>= 80)
205               grade = 'A+';
206         else if(per>= 79)
207               grade = 'A';
208         else if(per>= 74)
209               grade = 'A-';
210         else if(per>= 69)
211               grade = 'B+';
212         else if(per>= 64)
213               grade = 'B';
214                 else if(per>= 59)
215               grade = 'B-';
216                 else if(per>= 54)
217               grade = 'C+';
218                 else if(per>= 49)
219               grade = 'C';
220                 else if(per>= 44)
221               grade = 'D';
222         else
223               grade = 'F';
224   }
```

```
243   void phy103(){
244       if(t3<40){
245           y ='#';
246           fflush(stdin);
247       }
248       else
249           y = ' ';
250       fflush(stdin);
251   }
252   void phy104(){
253       if(t4<40){
254           u ='#';
255           fflush(stdin);
256       }
257       else
258           u = ' ';
259       fflush(stdin);
260   }
261   void mat103(){
262       if(t5<40){
263           v ='#';
264           fflush(stdin);
265       }
266       else
267           v = ' ';
268       fflush(stdin);
269   }
270
271   void eap101(){
272       if(t5<40){
273           v ='#';
274           fflush(stdin);
275       }
276       else
277           v = ' ';
278       fflush(stdin);
279   }
280
```

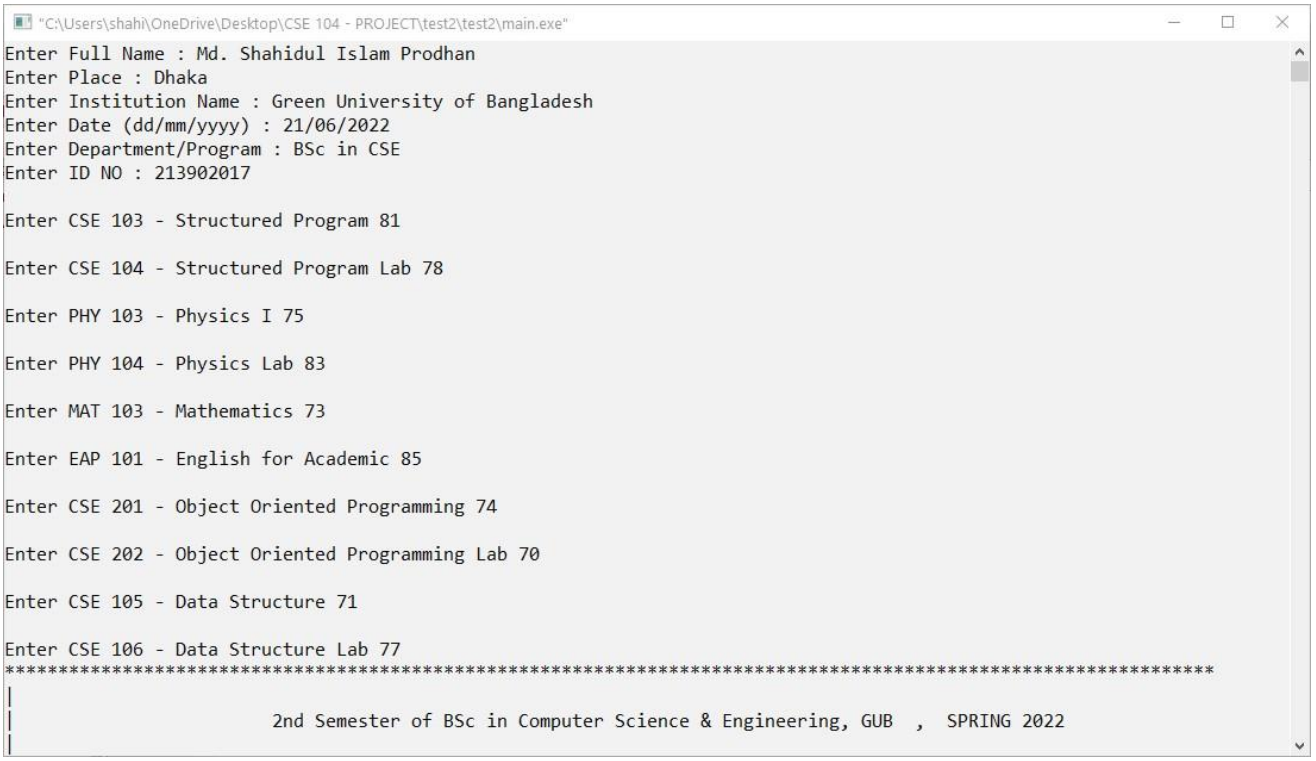
```
258           u = ' ';
259       fflush(stdin);
260   }
261   void mat103(){
262       if(t5<40){
263           v ='#';
264           fflush(stdin);
265       }
266       else
267           v = ' ';
268       fflush(stdin);
269   }
270
271   void eap101(){
272       if(t5<40){
273           v ='#';
274           fflush(stdin);
275       }
276       else
277           v = ' ';
278       fflush(stdin);
279   }
280
281   void result(){
282       if(per>40){
283           strcpy(res,s);
284       }
285       else
286           strcpy(res,s1);
287   }
288   void remark(){
289       if(per>40){
290           strcpy(rem,s3);
291       }
292       else
293           strcpy(rem,s4);
294   }
295
```

Chapter 3
Performance Evaluation

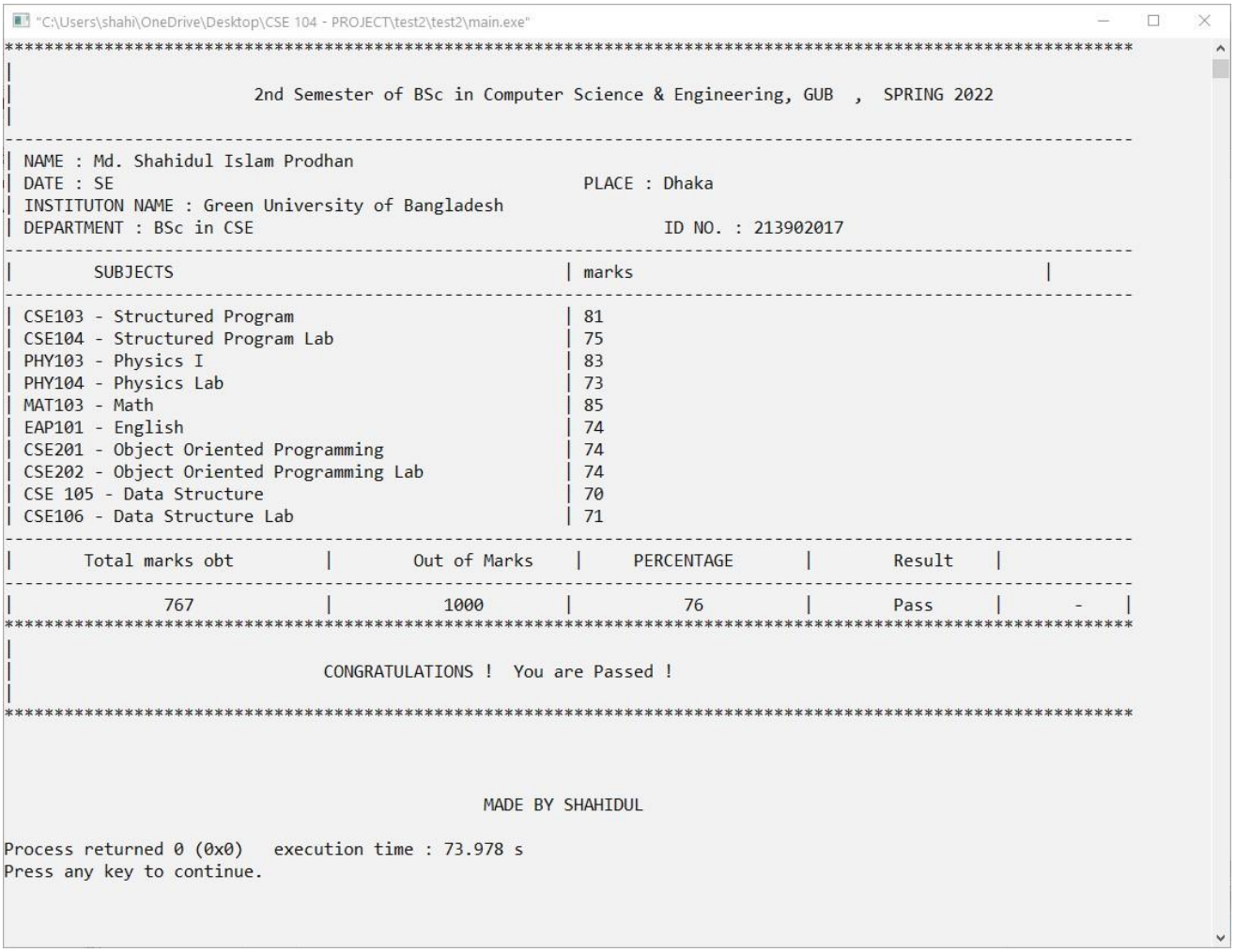
Results and Discussions

1. Output

- This is the main panel of the system. From here the software will take user input.



❖ If the user enter valid input then the output will look like this:



```
"C:\Users\shahi\OneDrive\Desktop\CSE 104 - PROJECT\test2\test2\main.exe"
********************************************************************************************************************
|
|                        2nd Semester of BSc in Computer Science & Engineering, GUB  ,  SPRING 2022
|
--------------------------------------------------------------------------------------------------------------------
| NAME : Md. Shahidul Islam Prodhan
| DATE : SE                                              PLACE : Dhaka
| INSTITUTON NAME : Green University of Bangladesh
| DEPARTMENT : BSc in CSE                                        ID NO. : 213902017
--------------------------------------------------------------------------------------------------------------------
|        SUBJECTS                                    | marks                                              |
--------------------------------------------------------------------------------------------------------------------
| CSE103 - Structured Program                        | 81
| CSE104 - Structured Program Lab                    | 75
| PHY103 - Physics I                                 | 83
| PHY104 - Physics Lab                               | 73
| MAT103 - Math                                      | 85
| EAP101 - English                                   | 74
| CSE201 - Object Oriented Programming               | 74
| CSE202 - Object Oriented Programming Lab           | 74
| CSE 105 - Data Structure                           | 70
| CSE106 - Data Structure Lab                        | 71
--------------------------------------------------------------------------------------------------------------------
|       Total marks obt         |        Out of Marks    |     PERCENTAGE       |        Result    |
--------------------------------------------------------------------------------------------------------------------
|              767              |           1000         |           76         |        Pass      |       -    |
********************************************************************************************************************
|
|                              CONGRATULATIONS !  You are Passed !
|
********************************************************************************************************************



                                            MADE BY SHAHIDUL

Process returned 0 (0x0)   execution time : 73.978 s
Press any key to continue.
```

3.2.2 Analysis and Outcome

The project is build using C programming language. We do the coding on codeblocks 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 students and the teachers. So fer we do the project using the course knowledge of structured programming.

Chapter 4

Conclusion

4.1 Introduction

The Academic Performance and Result (Marksheet) Generation System to be computerized to reduce human errors and to increase efficiency. By computerized the system we can do the work lesser errors. This project is built for calculate a students subject wise mark and showing marksheet. And track the result information quickly.

1. Practical Implications

The Academic Performance and Result (Marksheet) Generation System helps the educational institutions to publishing and grading result of the students.

2. Scope of Future Work

In future this can be the most useful product in the school, college and university. It will keep the student's information safe and synchronized. In future we can add more feature to this. Like add results of a student, billing history of a student, attendance of a student. This system can reduce the mistake and work more efficiently. In this way it can be helpful for our work.