



COMPUTER PROGRAMMING 1

(ITC111L)

Classroom Management System

GRADE

Submitted by:



Boncalos, John Emhar
BSIT
CEIT-37-102A



Evasco, Darlyn Mae A.
BSIT
CEIT-37-102A



Lau-a, Ma. Lourdes E.
BSIT
CEIT-37-102A



Pabiona, Michael John O.
BSIT
CEIT-37-102A



Talinao, Nicole J.
BSIT
CEIT-37-102A



Zamora, Kimverly A.
BSIT
CEIT-37-102A

Submitted to:

MS. MAY BACERLONA FIGUEROA

Date of Defense



I. INTRODUCTION

The modern world is now ruled by technology, which has the capability to make human labor simple and efficient. Systems were developed for variety of goals and uses. Setting up a system for a business is one step closer to innovation, and another way of creating a productive workplace for all employees and consumer. A traditional way of listing or gathering information from a student is to write it on a class record. But, because we live in a modern world and want to help teachers with less paperwork, we came up with this system.

As developers, they create a classroom management system that makes information management more accessible at all times. They imply that this system will help the faculty, parents, and students to easily access information for a certain person or for personal use and to have a greater potential for higher student engagement.

II. DESCRIPTION OF THE PROJECT

A classroom management system is a digital method to display every student's information. It is also to help lessen the teacher's paperwork by storing and keeping track of the students' information. Their project features a log-in system where everyone can create an



account to register themselves, a student library where students can encode their information (name, age, gender, address, email account and contact number), all of which is stored in the exterior file of the system, and lastly, it features a way to display all the student's data.

III. OBJECTIVES

The main objective of their system is to develop a classroom management using C++ that can serve as a modern or digital way of sorting and displaying information about different students.

IV. SIGNIFICANCE OF THE STUDY

As developers, they want to have a more convenient way to keep information on track and secure. In their study, they gave importance to those three reasons. The system can benefit teachers, faculty, and students by reducing paperwork and allowing them to easily access the data they require at any time and from any location. Also, it is secure because a significant other can only access the data with the account she or he registers in the system. It is relevant at this time because we are surrounded by technology, and as a result, many people are looking for



other ways to be more convenient about keeping their information but in a safe way.

V. SCOPE AND DELIMITATIONS

The system focuses on providing teachers and students a more efficient, easy, and secure way to keep data on every student in a classroom. The study has its own limitations, namely that the system is just for the encoding and viewing of basic information about a student and does not cover the subjects taken by the student.

VI. SCREEN OUTPUT

```
-----  
Rizal Technological University  
Pasig and Mandaluyong Campus  
-----  
CLASSROOM MANAGEMENT SYSTEM  
-----  
Please Select:  
  
Press [1] to Login  
Press [2] to Register  
Press [3] Forgot Password  
Press [4] to Exit  
-----  
Enter your choice:
```

Figure 1. Home Page

Figure 1 shows the option you may choose that include the following:



1. **LOGIN** - this option will let you login in your registered account.
2. **REGISTER** - this option will let you register or create your account.
3. **FORGOT PASSWORD** - this option will let you see your password if it happens that you forgot your password.
4. **EXIT** - this option will let you exit the home page.

```
1  -----
    LOGIN
-----
Enter Username: kimzamora
Enter Password: *****
-----
Login successfull.
Hi, kimzamora. Welcome !

Press any key to proceed . . .
```

```
2  -----
    REGISTER
-----
Enter Username: kimzamora
Enter Password: 12345
-----
Registration successfull !

Press any key to proceed . . .
```

```
3  -----
    FORGOT PASSWORD
-----
Please Select:

Press [1] to search your ID by Username
Press [2] to go back in Main Menu
-----
Enter your choice: 1
-----
Enter your username: kimzamora

Your Account has been found.

Your Password is: 12345
-----

Press any key to proceed . . .
```

```
4  -----
Are you sure you want to exit?
-----
Please Select:

Press [1] if Yes
Press [2] if No
-----
Enter your choice: 1
```

```
-----
Thank you for using our program!
-----
```

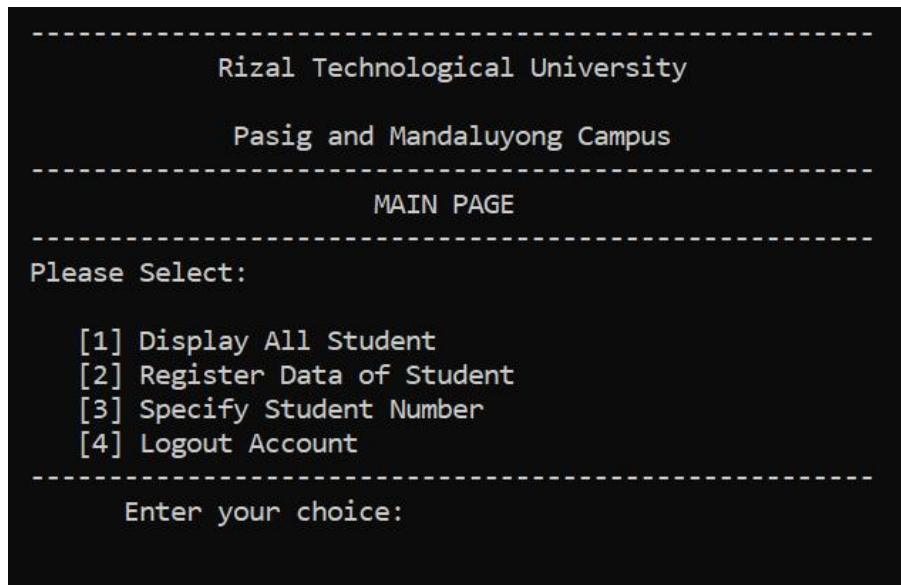


Figure 2. Main Page

Figure 2 shows the main page after you register and login in your account, the following option you can choose are:

- 1. DISPLAY ALL STUDENT** - this option will let you view or display all the registered data of all students.
- 2. REGISTER DATA OF STUDENT** - this option will let you register your data or information.
- 3. SPECIFY STUDENT NUMBER** - this option will let you find or search someone's data using his/her specific student number.
- 4. LOGOUT ACCOUNT** - this option will let you log out on your account.



1

```
-----
Rizal Technological University
Pasig and Mandaluyong Campus
-----
S T U D E N T   D A T A
-----
Student ID: 2022-102956
Name: Kimverly A. Zamora
Age: 19
Gender: Female
Address: Block 4 Lot 8 Sec 17 Muzon, San Jose del Monte
Program & Year: BSIT-2022
Email: 2022-102956@rtu.edu.ph
Contact Number: 09457834046
-----

Student ID: 2022-102997
Name: Maria Lourdes Lau-a
Age: 19
Gender: Female
Address: Block 1 Lot 1 France Street, Mandaluyong City
Program & Year: BSIT-2022
Email: 2022-102997@rtu.edu.ph
Contact Number: 09682501409
-----

Student ID: 2022-102703
Name: Nicole J. Talinao
Age: 18
Gender: Female
Address: Block 1 Lot 1 France Street, Pasig City
Program & Year: BSIT-2022
Email: 2022-102703
Contact Number: 09205009851
-----

Student ID: 2022-102741
Name: Michael John O. Pabiona
Age: 19
Gender: Male
Address: Blk 1 Lot 1 France Street, Pasig City
Program & Year: BSIT-2022
Email: 2022-102741@rtu.edu.ph
Contact Number: 09120810709
-----

Student ID: 2022-102713
Name: John Emhar Boncalos
Age: 18
Gender: Male
Address: Blk 1 Lot 1 France Street, Makati City
Program & Year: BSIT-2022
Email: 2022-102713@rtu.edu.ph
Contact Number: 0964728832
-----

Press any key to go back to Main Page . . .
```

2

```
-----
Rizal Technological University
Pasig and Mandaluyong Campus
-----
R E G I S T E R   N E W   S T U D E N T
-----
Student ID: 12345

Student Name (First/Second, Middle, Last): John Emhar Boncalos

Student Age: 18

Student Gender (Male/Female): Male

Student Address (Block#, Lot#, Street, Barangay, City): Blk 05 Lot 10. Switzerland Street, Makati City

Program & Year: 2022-BSIT

Student Email: JEBoncalos@gmail.com

Contact Number: 0968635826
-----
Registration successfull !

Press any key to proceed . . .
```



3

```
-----
Rizal Technological University
Pasig and Mandaluyong Campus
-----
SEARCH STUDENT DATA
-----
Please Select:

Press [1] to search your student ID
Press [2] to go back in Main Page
-----
Enter your choice: 1
-----
Enter your Student ID: 2022-102956
Your Student ID has been found.
-----
Student ID: 2022-102956
Name: 0975386381783
Age: KIM
Gender: ZAMORA
Address: 19
Program & Year: FEMALE
Email: RANDOM
Contact Number: 2022-BSIT
-----
Press any key to proceed . . .
```

4

```
Are you sure you want to logout your account?
-----
Please Select:

Press [1] if Yes
Press [2] if No
-----
Enter your choice: 1
```




VII. SOURCE CODE

```
#include <iostream>
```

```
#include <fstream>
```

```
#include <string>
```

```
#include <conio.h>
```

```
using namespace std;
```

```
//homepage//
```

```
void loginp();
```

```
void registrationp();
```

```
void forgotp();
```

```
void exitp();
```

```
void exitpg();
```

```
//mainpage//
```

```
void mainp();
```

```
void allstp();
```

```
void regstp();
```

```
void searchp();
```

```
void exlogp();
```

```
int main ()
```



INFORMATION TECHNOLOGY DEPARTMENT



```
{
```

case 1:

```
loginp();
```

```
break;
```

case 2:

```
registrationp();
```

```
break;
```

case 3:

```
forgotp();
```

```
break;
```

case 4:

```
exitp();
```

```
break;
```

default:

```
cout << "\t\t\t Invalid choice, select options given. \n" <<
```

```
endl;
```

```
cout<<"\n\t\t\t Press any key to proceed . . .";
```

```
getch();
```

```
system("cls");
```

```
main();
```



INFORMATION TECHNOLOGY DEPARTMENT



INFORMATION TECHNOLOGY DEPARTMENT



INFORMATION TECHNOLOGY DEPARTMENT





INFORMATION TECHNOLOGY DEPARTMENT



```
cout << "\t\t\t Enter your username: ";// User will be ask for
```

```
ifstream f2("log.txt");
```

 $\{$ $\{$
$$\}$$
$$\}$$
 $\{$
$$\}$$



INFORMATION TECHNOLOGY DEPARTMENT



INFORMATION TECHNOLOGY DEPARTMENT



```
break;
```

case 2:

```
break;
```

default:

```
cout << "\t\t\t Invalid choice, select options given. \n"
```

```
<< endl;
```

```
cout<<"\n\t\t\t\tPress any key to proceed . . .";
```

```
getch();
```

```
system("cls");
```

```
exitp();
```

}

$$\}$$

```
// Shows the exit page//
```

void exitpg()
$$\{$$

cout<<"\n\n\n\n\n\n\n\n\n\n\t\t\t **Thank you for using our**

```
program! ";
```




INFORMATION TECHNOLOGY DEPARTMENT



```
cout << endl;
```

```
switch (m)
```

```
{
```

```
    case 1:
```

```
        allstp();
```

```
        break;
```

```
    case 2:
```

```
        regstp();
```

```
        break;
```

```
    case 3:
```

```
        searchp();
```

```
        break;
```

```
    case 4:
```

```
        exlogp();
```

```
        break;
```

```
    default:
```

```
        cout << "\t\t\t Invalid choice, select options given. \n"
```

```
<< endl;
```



INFORMATION TECHNOLOGY DEPARTMENT



INFORMATION TECHNOLOGY DEPARTMENT



INFORMATION TECHNOLOGY DEPARTMENT



cin.getline(studentname, 50);// This will store and display the inputted value of the user//

cout << "\n\tStudent Age: "; // User will be asked for their age//

cin >> studentage;// This will store and display the inputted value of the user//

cout << "\n\tStudent Gender (Male/Female): ";// User will be asked for their gender//

cin >> studentgender;// This will stores and display the inputted value of the user//

**cout << "\n\tStudent Address (Block#, Lot#, Street, Barangay, City):
";//User will be asked for their address by the order provided//**

cin.ignore(256, '\n');

cin.getline(studentadd, 100);// This will store and display the inputted value of the user//

cout << "\n\tProgram & Year: ";//User will be asked on what program and year they are//

cin.getline(studentPY, 50);// This will store and display the inputted value of the user//

cout << "\n\tStudent Email: ";//User will be asked for their active email//



```
cin >> studentemail;// This will store and display the inputted value of the
user//
```

```
cout << "\n\tContact Number: ";//User will be asked for their contact
number//
```

```
cin >> studentnum;// This will store and display the inputted value of the
user//
```

```
cout << "\n\t-----
-----\n";
```

```
ofstream f3("information.txt", ios::app);

f3 << "\tStudent ID: " << studentid << '\n' << "\tName: " <<
studentname << '\n' << "\tAge: " << studentage << '\n'
<< "\tGender: " << studentgender << '\n' << "\tAddress: " <<
studentadd << '\n' << "\tProgram & Year: " << studentPY << '\n'
<< "\tEmail: " << studentemail << '\n' << "\tContact Number: "
<< studentnum << "\n\t-----
-----\n" << endl;
```

```
ofstream f4("information-spe.txt", ios::app);

f4 << studentid << '\n' << studentname << '\n' << studentage <<
'\n' << studentgender << '\n' << studentadd << '\n' << studentPY << '\n' <<
studentemail << '\n'
```





```
cout << "\n\t-----\n\n";

cout << "\tPlease Select:          \n" << endl;

cout << "\t Press [1] to search your student ID" << endl;

cout << "\t Press [2] to go back in Main Page " << endl;

cout << "\n\t-----\n\n";

cout << "\t Enter your choice: "; // User will be asked in what option they
want to access//

cin >> c; // This will input and display users chosen option//

switch (c)
{
    case 1: {
        int count;

        string  studentid,  sId,  studentname,  studentage,
studentgender, studentadd, studentPY, studentemail, studentnum;

        cout << "\n\t-----\n\n";

        cout << "\t Enter your Student ID: "; // User will be asked
for their Student ID//

        cin >> studentid; // This will input and display the inputted
value of the user //
```



```
        ifstream f5("information-spe.txt");

        while(f5 >> sId >> studentname >> studentage >>
studentgender >> studentadd >> studentPY >> studentemail >> studentnum)
        {

            if(sId == studentid){

                count = 0;

            }

        }

        f5.close();

        if (count != 1) {

            cout << "\n\t Your Student ID has been found. ";

            cout << "\n\t-----\n";

            -----\n";

            cout << "\n\t Student ID: " << studentid << "\n";

            cout << "\n\t Name: " << studentname << "\n";

            cout << "\n\t Age: " << studentage << "\n";

            cout << "\n\t Gender: " << studentgender << "\n";

            cout << "\n\t Address: " << studentadd << "\n";

            cout << "\n\t Program & Year: " << studentPY <<

"\n";

            cout << "\n\t Email: " << studentemail << "\n";
```



INFORMATION TECHNOLOGY DEPARTMENT



```
case 2: {  
  
    system("cls");  
  
    mainp();  
  
    break;  
  
}
```

default:

```
cout << "\n\t\t\t\t
```

Wrong choice, Please try

```
again " << endl;
```

```
cout<<"\n\t\t\t\t
```

Press any key to

```
proceed ...";
```

```
getch();
```

```
system("cls");
```

```
searchp();
```

```
}
```

```
}
```

```
// This the logout page of the program//
```

```
// After the user logout its account it will return to the homepage//
```

```
void exlogp()
```

```
{
```

```
    int l, y, n;
```

```
    system("cls");
```




```
cout<<"\n\n\n\n\n\n\n\t\t\tAre you sure you want to
```

```
cout << "\t\t\t Please Select: \n" << endl;
```

```
cout << "\t\t\t Press [2] if No \n" << endl;
```

```
cout << "\t\t\t\t\t Enter your choice: "; //User will be asked if they
```

```
cin >> l; //This will input and display users chosen option//
```

switch (l)

case 1:

```
main();
```

case 2:

```
mainp();
```

```
break;
```



```
cout << "\t\t\t\t\t Invalid choice, select options given. \n"
```

<< endl;

```
cout<<"\n\t\t\t\t\t Press any key to proceed . . .";
```

```
getch();
```

```
system("cls");
```

```
exlogp();
```

```
}
```

```
}
```



VIII. CONCLUSION

As developers, created this classroom management system they gave importance of applying more advance programming concepts therefore understanding and using advanced programming principles in the creation of systems using the C++ programming language is important since it can make certain activities simple and convenient. As developers, while using more advance programming techniques they faced some instances on a certain feature (*specify student number*), it is working but it needs more time to be 100% furnished, but the developers still included it on the system and for quite some time they will be working on that to make the system more efficient to use. Overall, they are aware that it can help the users of the system to lessen the paperwork and files that they should pass at school or university. Instead, with the help of the classroom management system, it is easy to encode and display various information for a certain user or student. And it also promotes a higher level of student engagement.