



LECTURER : DR. NOR HAFEIZAH BINTI HASSAN

QUESTION : 4.Staff registration and salary payment for a kindergarten

GROUP : GROUP 11 (ALPHA MALE)

GROUP MEMBERS :

| Members ID | Members Name |
|------------|---------------------------------|
| B032110302 | DINESHWAREN A/L RAJEN (L) |
| B032110400 | TARRSHAN A/L TAMILARASU |
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1.0 PSEUDOCODE

i) Main module main()

1. Start
2. Read option selected by user, choice
3. if (choice == 1) call login()
4. else if (choice == 2) call registr()
5. else if (choice == 3)
 display goodbye message
6. else
 display error message
7. endif
8. End

ii) void login()

1. start
2. initialize count = 0
3. read employee's username,user and password,pass
4. access file ("database.txt")
5. compare username with u, password with p
6. if (u == user && p == pass)
 count = 1
7. close system
8. if (count == 1)
 read option selected by employee, opt
9. if (opt==1)
 call payment1()
10. else if (opt == 2) call main()
11. else display error message
 call login()
12. else

display error message display try again or return

to main menu message read employee's

selection, option

13. close system

14. if (option == 1)

call main()

15. else if (option == 2)

call login()

16. else pause system

17. End

iii) void payment()

1. Start

2. initialize array int days_per_month

3. initialize day_pay = 10*8 4. read month

while (month > 12 || month <= 0)

display message to re-enter

4. read number of working days, days

5. if (days <= 0 || days >= 29)

display message to re-enter

6. endif

7. Display message according to values saved in array (days_per_month)

8. End

iv) void registr()

1. Start

2. initialize Maxlc = 12 & Maxph = 11

3. read employee's details, name, lc, gender, phone, address, email

while (ic.size() > maxlc || ic.size() < maxlc)

display message to re-enter

while (phone.size() > maxPh || phone.size() < 10)

display message to re-enter

4. access file ("details.txt")
5. display message to create account
6. read username, reguser and password, regpass
7. access file ("database.txt")
8. system close
9. Display login message
10. call main()
11. End

2.0 SOURCE CODE

```
//STAFF REGISTRATION AND SALARY CHECK FOR ALPHA MALE KINDERGARTEN

#include<iostream>

#include<fstream>

#include<stdlib.h>

#include<string>

using namespace std;

void login(); //function prototype for login

void registr(); // function prototype for registration

void payment1(string user); // function with argument of a user with type string

string user;

int main()

{

    int choice;

    cout << "//////////////////////////////////////////\n\n\n";

    cout << "          ALPHA MALE Staff Portal          \n\n";

    cout << "//////////      MENU      //////////////////////////////////\n\n";

    cout << "1.LOGIN" << endl;

    cout << "2.REGISTER" << endl;

    cout << "3.Exit" << endl; /// main menu display

    cout << "\nEnter your choice :";

    cin >> choice;

    cout << endl;

    switch (choice)//switch statement for choice entered by user

    {

        case 1:

            login();

            break;

        case 2:

            registr();
```

```

        break;
case 3:
    cout << "Hope to see you again\n\n";
    break;
default:
    system("cls");
    cout << "Please ,Try again..\n" << endl; // error message when a bad choice is added
    main();
}
}

```

```

void login() // function header of login type void
{
    int count = 0;//true
    string user, pass, u, p;
    cout << "Please enter your username and password" << endl;
    cout << "USERNAME :";
    cin >> user;
    cout << "PASSWORD :";
    cin >> pass;

    ifstream input("database.txt"); // searches on file "database.txt"
    while (input >> u >> p)
    {
        if (u == user && p == pass)
        {
            count = 1;//true
            system("cls"); //system closes the terminal
        }
    }
}

```

```

if (count == 1)//login successful note
{
    int opt;

    cout << "\nHi " << "#" << user << "\n<<LOGIN SUCCESSFUL>>" << endl;

    cout << "1. Check payment \n2. Exit to main menu" << endl;

    cout << "Choice : ";

    cin >> opt;

    if (opt == 1)
    {
        payment1(user);
    }

    else if (opt == 2)
    {
        main();
    }

    else
    {
        cout << "Try again !" << endl;

        login();
    }
}

else //retry menu if password or username is wrong
{
    int option;

    cout << "\nLOGIN ERROR\nPlease check your username and password" << endl << endl;

    cout << "Do you want to try again or proceed to main menu ?" << endl;

    cout << " 1 . Main menu \n 2 . Login Page \n Option : ";

    cin >> option;

    system("cls");

    if (option == 1)
    {

```

```

        main();
    }
    else if (option == 2)
    {
        login();
    }

    else
    {
        system("PAUSE");
    }
}
}

```

void registr() // function header

```

{
    string name, ic, ru, rp, phone, address, email;
    char gender;
    string reguser, regpass;
    int age;
    int maxIC=12;
    int maxPh = 11;

    system("cls");
    cout << "Enter your Name as Per IC : " << endl;
    getline(cin.ignore(100, '\n'), name);
    cout << "\nEnter your Identification Card Number : " << endl;
    cin >> ic;

    while (ic.size() > maxIC || ic.size() < maxIC)
    {

```



```

        //validates the ic number entered

        cout << "Incorrect Identification Card Number." << endl;

        cout << "Enter your Identification Card Number :" << endl;

        cin >> ic;

    }

    cout << "Please enter your age :" << endl;

    cin >> age;

    if(age < 20 || age > 58)
    {
        cout << "SORRY ! You are not eligible for this staff recruitment !" << endl;
        main();
    }

    do // does the function as long M m F f is entered
    {
        cout << "\nEnter Your Gender (m/f) :";

        cin >> gender;

        if (gender == 'm' || gender == 'M')
        {
            cout << "Male" << endl;
        }

        else if (gender == 'f' || gender == 'F')
        {
            cout << "Female" << endl;
        }

    }

} while (!(gender == 'm' || gender == 'M' || gender == 'f' || gender == 'F'));

//executes do while 'while' statements is true

```

```

cout << "\nEnter your phone number : " << endl;
cin >> phone;
while (phone.size() > maxPh || phone.size() < 10) // validates the size of phone number
{

    cout << "Incorrect Phone Number!" << endl;
    cout << "Enter your Phone Number : " << endl;
    cin >> phone;

}

cout << "\nEnter your address : " << endl;
getline(cin.ignore(1, '\n'), address); // get address with spaces as well
cout << "\nEnter your email address : " << endl;
cin >> email;

ofstream read("details.txt", ios::app); // outputs the given details in "details.txt" with
append mode

read << "NAME\t\t\t : " << name << endl << "IDENTIFICATION CARD NUMBER : " << ic <<
endl << "AGE\t\t\t : " << age << endl << "GENDER\t\t\t : " << gender << endl << "PHONE
NUMBER\t\t\t : " << phone << endl << "ADDRESS\t\t\t : " << address << endl << "EMAIL ID\t\t\t : " <<
email << endl << endl;

cout << "Please create a account for further uses " << endl;

string usern;

cout << "Username : ";
cin >> reguser; "\n";

cout << "Password : ";
cin >> regpass;

// output user and passwords registered into "database.txt" with mode append mode
ofstream reg("database.txt", ios::app);

reg << reguser << ' ' << regpass << endl; // formats the user and password with a space

```

```

        system("cls");

        cout << "\nRegistration Sucessful\n";

        cout << "You may now login" << endl;

        main();

    }

void payment1(string user)//uses argument as user from login
{
    //array to make a comparison on days worked
    int days_per_month[12] = { 31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31 };

    int month;

    int days, total;

    int day_pay = 10 * 8;

    cout << "Month number [enter a number] :";

    cin >> month;

    while (month > 12 || month <= 0)//disallows user to input month less than equal 0 and more than
12
    {
        cout << "Please enter a valid month number " << endl;

        cout << "Month number [enter a number] :";

        cin >> month;

    }

    cout << "How many days did you work in month "<<month<<" " << user << " :";

    cin >> days;

    //days of work as not above 29 days selected and less than equal 0 days aren't allowed

    while (days <= 0 || days >= 29)

    {

        cout << "Please enter a valid value" << endl;

        cout << "To retry please press enter " << endl;

        cout << "How many days did you work in month " << month << " " << user << " :";

        cin >> days;}

```

```
//moduled to show days comparison x/y (12 out of 31 days) according to the days in a month
if (month != days_per_month[month - 1])
{
    cout << "\nYou worked " << days << " out of " << days_per_month[month - 1] << " days in
month " << month;

    // calculation of salary
    total = days * day_pay;

    cout << "\n" << "Your salary for month " << month << " is RM " << total << endl;

    cout << "Returning to main menu ..... ";

    system("PAUSE");

    main(); // return to main function
}
}
```

3.0 OUTPUT OF PROGRAM

```
C:\Users\wink\Desktop\Program\FYP_KindergartenRegister\Debug\FYP_KindergartenRegister.exe
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
                                     ALPHA MALE Staff Portal
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
                                     MENU                                     //
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
1.LOGIN
2.REGISTER
3.Exit
Enter your choice :
```

(main menu of program)

```
C:\Users\wink\Desktop\Program\FYP_KindergartenRegister\Debug\FYP_KindergartenRegister.exe
Please ,Try again..
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
                                     ALPHA MALE Staff Portal
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
                                     MENU                                     //
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
1.LOGIN
2.REGISTER
3.Exit
Enter your choice :
```

(when a wrong option number is selected)

```
C:\Users\wink\Desktop\Program\FYP_KindergartenRegister\vs64\Debug\FYP_KindergartenRegister.exe
Enter your Name as Per IC :
HERISH CHAUDRAY

Enter your Identification Card Number :
0212231008034
Incorrect Idetification Card Number.
Enter your Identification Card Number :
```

(registering while wrong ic number is input)

```
C:\Users\wink\Desktop\Program\FYP_KindergartenRegister\vs64\Debug\FYP_KindergartenRegister.exe
Enter your Name as Per IC :
HERISH CHAUDRAY

Enter your Identification Card Number :
0212231008034
Incorrect Idetification Card Number.
Enter your Identification Card Number :
021223100803
Please enter your age :
24

Enter Your Gender (m/f) :m
Male

Enter your phone number :
010668027546
Incorrect Phone Number!
Enter your Phone Number :
```

(registering while wrong phone number is added)

```
C:\Users\wink\Desktop\Program\FYP_KindergartenRegister\src\Debug\FYP_KindergartenRegister.exe
Enter your Name as Per IC :
HERISH CHAUDRAY

Enter your Identification Card Number :
0212231008034
Incorrect Identification Card Number.
Enter your Identification Card Number :
021223100803
Please enter your age :
24

Enter Your Gender (m/f) :m
Male

Enter your phone number :
010668027546
Incorrect Phone Number!
Enter your Phone Number :
0106680274

Enter your address :
NO 4 JALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your email address :
herishiscool@gmail.com
Please create a account for further uses
Username :herish
Password :herish12
```

(account registration)

```
C:\Users\wink\Desktop\Program\FYP_KindergartenRegister\src\Debug\FYP_KindergartenRegister.exe

Registration Successful
You may now login
////////////////////////////////////

                ALPHA MALE Staff Portal

////////////////////////////////////
                MENU                //////////////////////////////////////

1.LOGIN
2.REGISTER
3.Exit

Enter your choice :1

Please enter your username and password
USERNAME :herish
PASSWORD :herish12
```

(post registration)

```
C:\Users\wink\Desktop\Program\FYP_KindergartenRegister\x64\Debug\FYP_KindergartenRegister.exe

Hi #herish
<<LOGIN SUCCESSFUL>>
1. Check payment
2. Exit to main menu
Choice : 1
Month number [enter a number] :10
How many days did you work in month 10 herish :2999
Please enter a valid value
To retry please press enter
How many days did you work in month 10 herish :300
Please enter a valid value
To retry please press enter
How many days did you work in month 10 herish :10

You worked 10 out of 31 days in month 10
Your salary for month 10 is RM 800
Returning to main menu ..... Press any key to continue . . .
```

(login with registered account and checking payment with extreme values)

```
Microsoft Visual Studio Debug Console

Hi #herish
<<LOGIN SUCCESSFUL>>
1. Check payment
2. Exit to main menu
Choice : 1
Month number [enter a number] :10
How many days did you work in month 10 herish :2999
Please enter a valid value
To retry please press enter
How many days did you work in month 10 herish :300
Please enter a valid value
To retry please press enter
How many days did you work in month 10 herish :10

You worked 10 out of 31 days in month 10
Your salary for month 10 is RM 800
Returning to main menu ..... Press any key to continue . . .
////////////////////////////////////
                                ALPHA MALE Staff Portal
////////////////////////////////////
                                MENU
                                .
1.LOGIN
2.REGISTER
3.Exit

Enter your choice :3

Hope to see you again

C:\Users\wink\Desktop\Program\FYP_KindergartenRegister\x64\Debug\FYP_KindergartenRegister.exe (process 18152) exited with code 0.
Press any key to close this window . . .
```

(checking payment and exiting program)


```
database - Notepad
File Edit Format View Help
user  pass

herish 123
roshini roshini08
herish 2312
herish 231202
herish 123
herish herish23
HERISH HERISH23
herish herish23
123 123
124 124
winnie winnie23
123 123
123 123
herish 12345
mynamejeff
12345
0 0
herish 34
spiderman 69
herish 1234
test test
rames mur
tharu 12
aqua 3938
rambu rambu
herish23 123
herish herish12

Ln 1, Col 1 100% Windows (CRLF) UTF-8
```

(database.txt file where usernames and passwords are stored)

```
*details - Notepad
File Edit Format View Help
NAME :ALI KHAN
IDENTIFICATION CARD NUMBER :710723105890
AGE :51
GENDER :f
PHONE NUMBER :019885678
ADDRESS :No. 39, Lorong Jelutong 36R
EMAIL ID :aquaaga09@yahoo.com

NAME :KAMBU BIN UMBU
IDENTIFICATION CARD NUMBER :023092302930
AGE :34
GENDER :F
PHONE NUMBER :2343444
ADDRESS :JALAN SURIA 4 , 13-C BLOK KASTURI
EMAIL ID :rambu@gmail.com

NAME :HERISH CHAUDRAY AL RAVANTHERAN
IDENTIFICATION CARD NUMBER :021223108003
AGE :20
GENDER :m
PHONE NUMBER :0106680274
ADDRESS :NO 4 TAMAN SAUJANA PUCHONG BANDAR PUTRA PERMAIN 47110 SELANGOR
EMAIL ID :herish_23@gmail.com

NAME :HERISH CHAUDRAY
IDENTIFICATION CARD NUMBER :021223100803
AGE :24
GENDER :m
PHONE NUMBER :0106680274
ADDRESS :NO 4 JALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR
EMAIL ID :herishiscool@gmail.com

Ln 56, Col 34 100% Windows (CRLF) UTF-8
```

(details.txt file where usernames and passwords are stored)