

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
B032110409	HERISH CHAUDRAY A/L RAVENTHERAN
B032110339	SUREND A/L ESVARAN

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

```
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 \mid | 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 MaxIc = 12 & Maxph = 11
3. read employee's details, name, Ic, 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 << "1.LOGIN" << endl;
 cout << "2.REGISTER" << endl;</pre>
 cout << "3.Exit" << endl; /// main menu display</pre>
 cout << "\nEnter your choice :";</pre>
 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";</pre>
    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;</pre>
  cout << "USERNAME :";</pre>
  cin >> user;
  cout << "PASSWORD :";</pre>
  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;</pre>
       cout << "Choice : ";</pre>
       cin >> opt;
       if (opt == 1)
       {
         payment1(user);
       }
       else if (opt == 2)
       {
         main();
       }
       else
       {
         cout << "Try again !" << endl;</pre>
         login();
      }
    }
    else //retry menu if password or username is wrong
    {
       int option;
       cout << "\nLOGIN ERROR\nPlease check your username and password" << endl << endl;</pre>
       cout << "Do you want to try again or proceed to main menu ?" << endl;</pre>
       cout << " 1 . Main menu \n 2 . Login Page \n Option : ";</pre>
       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;</pre>
       getline(cin.ignore(100, '\n'), name);
       cout << "\nEnter your Identification Card Number :" << endl;</pre>
       cin >> ic;
         while (ic.size() > maxIC | | ic.size() < maxIC)
         {
```

```
//validates the ic number entered
    cout << "Incorrect Idetification Card Number." << endl;</pre>
    cout << "Enter your Identification Card Number :" << endl;</pre>
    cin >> ic;
  }
cout << "Please enter your age :" << endl;</pre>
cin >> age;
if(age < 20 | | age > 58)
{
  cout << "SORRY ! You are not eligible for this staff recruitment !" << endl;</pre>
  main();
}
 do // does the function as long M m F f is entered
  {
    cout << "\nEnter Your Gender (m/f) :";</pre>
    cin >> gender;
    if (gender == 'm' || gender == 'M')
    {
       cout << "Male" << endl;
    }
    else if (gender == 'f' || gender == 'F')
       cout << "Female" << endl;</pre>
    }
  } while (!(gender == 'm' || gender == 'M' || gender == 'f' || gender == 'F'));
  //executes do while 'while' statements is true
```

```
cin >> phone;
         while (phone.size() > maxPh || phone.size()<10)//validates the size of phone number
        {
           cout << "Incorrect Phone Number!" << endl;</pre>
           cout << "Enter your Phone Number :" << endl;</pre>
           cin >> phone;
        }
         cout << "\nEnter your address :" << endl;</pre>
         getline(cin.ignore(1, '\n'), address); // get address with spaces as well
         cout << "\nEnter your email address :" << endl;</pre>
         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 :"<< phone << endl << "ADDRESS\t\t\t :" << address << endl << "EMAIL ID\t\t :" <<
email << endl << endl;
         cout << "Please create a account for further uses " << endl;</pre>
         string usern;
         cout << "Username :";</pre>
         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
```

cout << "\nEnter your phone number :" << endl;</pre>

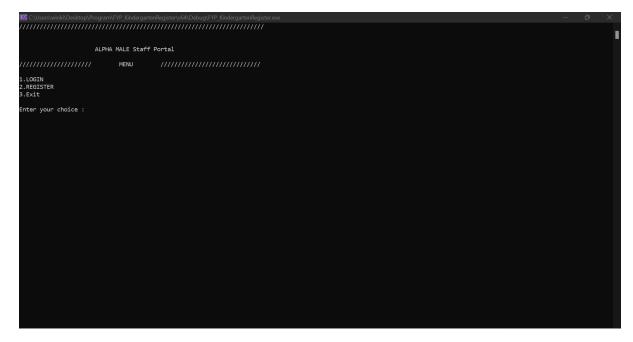
```
system("cls");
         cout << "\nRegistration Sucessful\n";</pre>
         cout << "You may now login" << endl;</pre>
         main();
     }
void payment1(string user)//uses argument as user from login
{
  //array to make a comparison on days worked
  int days_per_month[12] = { 31, 28, 31, 30, 31, 30, 31, 30, 31, 30, 31, };
  int month;
  int days, total;
  int day_pay = 10 * 8;
  cout << "Month number [enter a number] :";</pre>
  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;</pre>
    cout << "Month number [enter a number] :";</pre>
    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;</pre>
    cout << "To retry please press enter " << endl;</pre>
    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
}</pre>
```

}

3.0 OUTPUT OF PROGRAM



(main menu of program)



(when a wrong option number is selected)

```
SECULAR CONTROL (CARLO) (CARLO
```

(registering while wrong ic number is input)

```
Enter your false is per a C:

##RISH (CAUDAN)

Enter your false is per a C:

##RISH (CAUDAN)

Enter your false is per a C:

##RISH (CAUDAN)

Enter your false is per a C:

##RISH (CAUDAN)

Enter your false is per a C:

##RISH (CAUDAN)

Enter your false is per a C:

##RISH (CAUDAN)

Enter your false is per a C:

##RISH (CAUDAN)

##RISH (CAUDAN)
```

(registering while wrong phone number is added)

```
SECULAR Decision Programs PTP. Endergetenlegister/U-0-1 Decision case

Enter your Name as Per IC:

Enter your Sentification Card Number:

6212331088833

Incorrect Idetification Card Number:

6212331088833

Incorrect Identification Card Number:

621231088833

Incorrect Indentification Card Number:

6312321088833

Incorrect Price Senting Vour Beat Incorrect Price Number:

631263827346

Incorrect Price Number:

631263827346

Incorrect Price Number:

63126382734

Enter your Price Number:

63126382734

Enter your Price Number:

63126382734

Enter your Beat Bankol , PESIARAN METRO 47230 SELANGOR

Enter your entil address:

802 4 3 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address:

803 4 3 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address:

804 5 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address:

805 8 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address:

806 8 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address:

807 8 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address :

808 8 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address :

809 8 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address :

809 8 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address :

809 8 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address :

809 8 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address :

809 8 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address :

809 8 ALAN SP 5/9 TAMAN BARU BANGI , PESIARAN METRO 47230 SELANGOR

Enter your entil address :

809 8 ALAN SP 5
```

(account registration)



(post registration)

```
## CUbers weak Decktop Programs NT. Endergeten Register with Deck payment

## Amarish

**CLORIN SUCCESSFUL>>

1. Check payment

2. Exix 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

To retry please press enter

Now many days did you work in month 10 herish : 390

Please enter a valid value

To retry please press enter

Now many days did you work in month 10 herish : 19

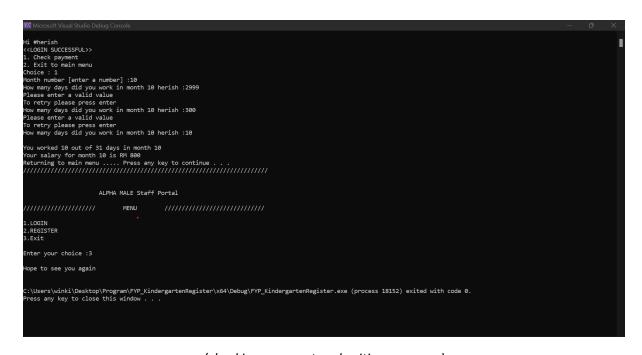
You worked 10 out of 31 days in month 10

You worked 10 out of 31 days in month 10

You salary for month 10 is RN 800

Returning to main menu .... Press any key to continue . . .
```

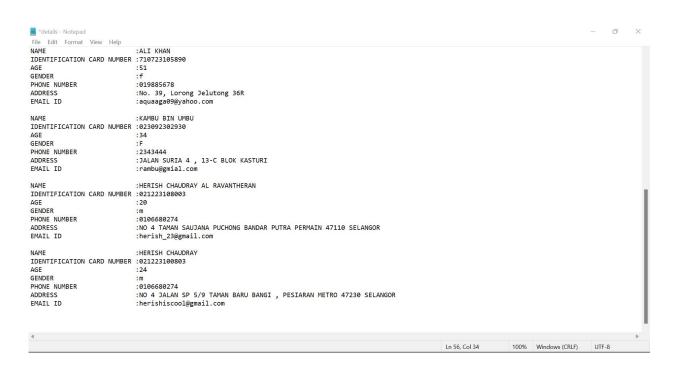
(login with registered account and checking payment with extreme values)



(checking payment and exiting program)



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



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