//Main function--------------------------------------------------------------------

#include "security.h"

#include "user.h"

#include "administrator.h"

//Adding the function to the namespace Moon library

namespace Moon

{

void mainfunction();

}

//Defining mainfunction()

namespace Moon

{

void mainfunction()

{

/\*

\* Creating objects from other classes

\*/

Security secure;

Administrator admin;

User user;

/\*

\* Data members that will be used to gain user information

\*/

string username;

string password;

char ans;

cout << "This program is a mock program imitating a log in system.\n" << endl;

cout << "\tUsing separate files, this program imitates a security system with a given administrator, and two given users.";

cout << "\n\tAfter the validation process, the program will prompt the user";

cout << "\n\tif they would like to re-enter their username and password.";

cout << "\n\tIf they respond with 'y' or 'Y', the program will continue, else it will end.";

cout << endl;

//logic for output of program

do

{

//prompt user for input on username

cout << "\nEnter your username" << endl;

cin >> username;

//prompt user for password

cout << "Enter your Password" << endl;

cin >> password;

//Check system

cout << "\nSystem: ";

secure.validate(username, password);

cout << "Admin: ";

admin.Login1(username, password);

cout << "User: ";

user.Login2(username, password);

cout << "\nEnter again? y/n" << endl;

cin >> ans;

} while (ans == 'y' || ans == 'Y');

//Output friendly goodbye

cout << "\nGood-bye!" << endl;

}

}

/\*/

\* Main Method

\*\*/

using namespace Moon;

int main()

{

mainfunction();

return 0;

}

//Implementation file of administrator.cpp-----------------------------------------------

#include "administrator.h"

//Adding the method Login1() to namespace Moon

namespace Moon

{

bool Administrator::Login1(string adminName, string adminPassword)

{

if ((adminName == "Moon") && (adminPassword == "friday"))

{

cout << "Access granted!" << endl;

return true;

}

else

{

cout << "Not a admin." << endl;

return false;

}

}

}

//Implementation file of security.cpp---------------------------------------------------

#include "security.h"

//Adding the method validate() to namespace Moon

namespace Moon

{

int Security::validate(string username, string password)

{

if ((username == "abbott") && (password == "monday"))

{

cout << "Validated!" << endl;

return 1;

}

if ((username == "costello") && (password == "tuesday"))

{

cout << "Validated!" << endl;

return 2;

}

if ((username == "Moon") && (password == "friday"))

{

cout << "Validated!" << endl;

return 3;

}

else

{

cout << "User not found." << endl;

return 0;

}

}

}

//Implementation file of user.cpp--------------------------------------------------------

#include "user.h"

//Adding the method Login2() to namespace Moon

namespace Moon

{

bool User::Login2(string username, string userpassword)

{

if ((username == "Moon") && (userpassword == "friday"))//Admin information

{

cout << "Access granted!" << endl;

return true;

}

if ((username == "abbott") && (userpassword == "monday"))

{

cout << "Access granted!" << endl;

return true;

}

if ((username == "costello") && (userpassword == "tuesday"))

{

cout << "Access granted!" << endl;

return true;

}

else

{

cout << "Please enter a valid user." << endl;

return false;

}

}

}

//Header fore user.h-----------------------------------------------------------

#pragma once

#ifndef USER\_H

#define USER\_H

#include <iostream>

#include <string>

using namespace std;

namespace Moon

{

class User

{

public:

static bool Login2(string username, string userpassword);

};

}

#endif // !USER.H

//Header file for administrator.h-------------------------------------------------------

#pragma once

#ifndef ADMIN\_H

#define ADMIN\_H

#include <iostream>

#include <string>

using namespace std;

namespace Moon

{

class Administrator

{

public:

bool Login1(string adminName, string adminPassword);

};

}

#endif // !ADMIN\_H

//Header file for security.h---------------------------------------------------------------------------------------

#pragma once

#ifndef SECURE\_H

#define SECURE\_H

#include <iostream>

#include <string>

using namespace std;

namespace Moon

{

class Security

{

public:

static int validate(string username, string password);

};

}

#endif // !SECURE\_H