PROJECT C++ : Laundry Store

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```cpp
#include <iostream>

#include <iomanip>


using namespace std;


FILE *file_receipt = fopen("Transaction.txt","w");


int using_account_no;


void status(string status_method){

    if(status_method == "active"){

        cout << "☑ active";

    }else if(status_method == "busy"){

        cout << " ☒ busy";

    }

}


void println(int fix_length){

    for(int loop_length=0;loop_length<fix_length;loop_length++){

        cout << "|";

    }

    cout << endl;

}
```

```cpp
void newspace(){

    cout << endl;

}


void showExit(){

    cout << "  Note : Press (0) to Leave Mode " << endl;

}


struct account_database{


    string username;

    string password;

    int userid;


}account_folder[100];


class Laundry_Management{

  public:

    float washing_cost;

    float drying_cost;

    string name;

    int laundryID;

    string tel;

  public:
```

```cpp
    Laundry_Management(string main_name,int main_laundryID){                    // Overloading;

      name = main_name;

      laundryID = main_laundryID;

    }

    Laundry_Management(string main_name,int main_laundryID,string main_tel){

      name = main_name;

      laundryID = main_laundryID;

      tel = main_tel;

    }

    void setCost(float main_washing_cost,float main_drying_cost){               // Overloading;

        this->washing_cost = main_washing_cost;

        this->drying_cost = main_drying_cost;

    }

    void setCost(float main_cost,bool status_method){

        if(status_method == true){

            this->washing_cost = main_cost;

        }else if(status_method == false){

            this->drying_cost = main_cost;

        }

    }



};
```

```cpp
class Store_Management : public Laundry_Management{

    public:

        float total;

        string A01,A02,B01,B02;

        char approve_status;

        Store_Management(string main_name,int main_laundryID) :
Laundry_Management(main_name,main_laundryID){

        }

        Store_Management(string main_name,int main_laundryID,string main_tel) :
Laundry_Management(main_name,main_laundryID,main_tel){

        }

        string calculate_Price(string machine_select){

            total = 0;

            if(machine_select == "A01" and A01 == "active"){

                total += Laundry_Management::washing_cost;

                approve_status = showReceipt(total,machine_select);

                if(approve_status == 'y' or approve_status == 'Y'){

                    A01 = "busy";

                    fprintf(file_receipt,"UserID : %d  A01 : %.2f  LaundryID :
%d\n",account_folder[using_account_no].userid,Laundry_Management::washing_cost,Laundry_Management::laun
dryID);

                    return "success";

                }else if(approve_status == 'n' or approve_status == 'N'){

                    cout <<"  Note : ⊠ Cancel Approving! " << endl;

                }
```

```cpp
            else{

                cout << "  Note : ERROR#!2 | Try Again!  " << endl;

            }

        }else if(machine_select == "A02" and A02 == "active"){

            total += Laundry_Management::washing_cost;

            approve_status = showReceipt(total,machine_select);

            if(approve_status == 'y' or approve_status == 'Y'){

                A02 = "busy";

                fprintf(file_receipt,"UserID : %d  A02 : %.2f  LaundryID :
%d\n",account_folder[using_account_no].userid,Laundry_Management::washing_cost,Laundry_Management::laun
dryID);

                return "success";

            }else if(approve_status == 'n' or approve_status == 'N'){

                cout <<"  Note : ☒ Cancel Approving! " << endl;

            }else{

                cout << "  Note : ERROR#!2 | Try Again!  " << endl;

            }

        }else if(machine_select == "B01" and B01 == "active"){

            total += Laundry_Management::drying_cost;

            approve_status = showReceipt(total,machine_select);

            if(approve_status == 'y' or approve_status == 'Y'){

                B01 = "busy";

                fprintf(file_receipt,"UserID : %d  B01 : %.2f  LaundryID :
%d\n",account_folder[using_account_no].userid,Laundry_Management::washing_cost,Laundry_Management::laun
dryID);
```

```cpp
                return "success";

            }else if(approve_status == 'n' or approve_status == 'N'){

                cout <<"  Note : ☒ Cancel Approving! " << endl;

            }else{

                cout << "  Note : ERROR#!2 | Try Again!  " << endl;

            }

        }else if(machine_select == "B02" and B02 == "active"){

            total += Laundry_Management::drying_cost;

            approve_status = showReceipt(total,machine_select);

            if(approve_status == 'y' or approve_status == 'Y'){

                B02 = "busy";

                fprintf(file_receipt,"UserID : %d  B02 : %.2f  LaundryID :
%d\n",account_folder[using_account_no].userid,Laundry_Management::washing_cost,Laundry_Management::laundryID);

                return "success";

            }else if(approve_status == 'n' or approve_status == 'N'){

                cout <<"  Note : ☒ Cancel Approving! " << endl;

            }else{

                cout << "  Note : ERROR#!2 | Try Again!  " << endl;

            }

        }else if(machine_select != "A01" and machine_select != "A02" and machine_select != "B01" and
machine_select != "B02"){

            cout << "  Not Found | Please Try Again!" << endl;

            return "fail";

        }else{
```

```cpp
            cout << "  Washer/Dryer are busy | Please Try Again!" << endl;

            return "fail";

        }

        return "fail";

    }

    char showReceipt(float total,string machine_select){

        newspace();

        println(45);

        cout << "|       " << Laundry_Management::name << " Receipt     |" << endl;

        println(45);

        newspace();

        cout << "UserID : " << account_folder[using_account_no].userid << "  " << machine_select << " : " <<
total << "฿  " << "LaundryID : " << Laundry_Management::laundryID;

        newspace();

        cout << " (Y) Approve (N) Cancel : "; cin >> approve_status;

        return approve_status;

    }

    void resetStatus(){

        A01 = "active";

        A02 = "active";

        B01 = "active";

        B02 = "active";

    }

    void showWash_Machine();
```

```cpp
        void showDry_Machine();

        void showThumbnil(){

            println(37);

            cout << "|      " << Laundry_Management::name << "       |"<< endl;

            println(37);

            newspace();

        }

};


void Store_Management :: showWash_Machine(){                                    // Scope Resolution;

    cout<<"      ";status(A01);

    cout<<"        ";status(A02);

    newspace();

    cout << "    |~~~~~~~~~~| |~~~~~~~~~~|" << endl;

    cout << "    |          | |          |" << endl;

    cout << "    |  Washing || Washing  |" << endl;

    cout << "    |  Machine || Machine  |" << endl;

    cout << "    |   A01    ||   A02    |" << endl;

    cout << "    |_____| |_____|" << endl;

}


void Store_Management :: showDry_Machine(){                                    // Scope Resolution;

    newspace();

    cout<<"      ";status(B01);
```

```cpp
    cout<<"        ";status(B02);

    newspace();

    cout << "    |~~~~~~~~~~| |~~~~~~~~~~|" << endl;

    cout << "    |          | |          |" << endl;

    cout << "    |   Dry    | |   Dry    |" << endl;

    cout << "    |  Machine | |  Machine |" << endl;

    cout << "    |   B01    | |   B02    |" << endl;

    cout << "    |_____| |_____|" << endl;

}



class Entrepreneur_Management : public Laundry_Management{

    public:

        string keys,keyword_input;

        float new_washing_cost,new_drying_cost;

        Entrepreneur_Management(string main_name,int main_laundryID) :
Laundry_Management(main_name,main_laundryID){

        }

        Entrepreneur_Management(string main_name,int main_laundryID,string main_tel) :
Laundry_Management(main_name,main_laundryID,main_tel){

        }

        void setKeys(string main_keys){

          keys = main_keys;

         }

        string loginSystem(){

            println(45);
```

```cpp
    cout << "| Laundry Store |  Entrepreneur Management  |" << endl;

    println(45);

    newspace();

    cout << "  Keys  : "; cin >> keyword_input;

    if(keyword_input == keys){

        cout << "  "; status("active"); newspace();

        newspace();

        return "success";

    }else if(keyword_input == "0"){

        return "exit";

    }else if(keyword_input != keys){

        showExit();

        return "fail";

    }

    return 0;

}

float editBothCost(){

    println(45);

    cout << "| Laundry Store |  Edit Cost Washing&Drying |" << endl;

    println(45);

    newspace();

    cout << " Washing Cost > "; cin >> new_washing_cost;

    cout << " Drying Cost > "; cin >> new_drying_cost;

    newspace();
```

```cpp
        return new_washing_cost,new_drying_cost;

}

float editWashingCost(){

    println(45);

    cout << "| Laundry Store |      Edit Cost Washing     |" << endl;

    println(45);

    newspace();

    cout << " Washing Cost > "; cin >> new_washing_cost;

    newspace();

    return new_washing_cost;

}

float editDryingCost(){

    println(45);

    cout << "| Laundry Store |      Edit Cost Drying      |" << endl;

    println(45);

    newspace();

    cout << " Drying Cost > "; cin >> new_drying_cost;

    newspace();

    return new_drying_cost;

}

void showMember(int main_account_no){

    println(40);

    cout << "| Laundry Store |  Account Database    |" << endl;

    println(40);
```

```cpp
            newspace();

            for(int account_no=0;account_no<main_account_no;account_no++){

                cout << "  User No." << account_folder[account_no].userid << endl;

                cout << "  Username : " << account_folder[account_no].username << endl;

                cout << "  Password : " << account_folder[account_no].password << endl;

                newspace();

            }

        }
};


string login_account(){

    string login_username,login_password;

    println(37);

    cout << "| Laundry Store |    Login System   |" << endl;

    println(37);

    newspace();

    cout << "  Username : "; cin >> login_username;

    if(login_username == "0"){

      return "exit";

    }

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

    if(login_password == "0"){

      return "exit";

    }
```

```cpp
    for(int account_no = 0;account_no < 100;account_no++){

        if(login_username == account_folder[account_no].username){

            if(login_password == account_folder[account_no].password){

                cout << " ☑ Login Success | Nice to see you! " << endl;

                newspace();

                using_account_no = account_no;

                return "success";

            }else{

                cout << " ☒ Password Incorrect | Try Again! " << endl;

                showExit();

                return "fail";

            }

        }else if(account_no == 99){

            cout << " ☒ Not Found | Try Again! " << endl;

            showExit();

            newspace();

            return "fail";

        }

    }

    return 0;

}


string create_account(int account_no){

    string create_username,create_password;
```

```cpp
println(37);

cout << "| Laundry Store |  Register System  |" << endl;

println(37);

newspace();

cout << "  Username : "; cin >> create_username;

if(create_username == "0"){

  return "exit";

}

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

if(create_password == "0"){

  return "exit";

}


for(int account_no=0;account_no < 100;account_no++){

  if(create_username == account_folder[account_no].username){

    cout << "  Note : Username has been using! " << endl;

    showExit();

    return "fail";

  }

}

account_folder[account_no].username = create_username;

account_folder[account_no].password = create_password;

account_folder[account_no].userid = rand();

cout << "  ☑ Register Success | Nice to see you! " << endl;
```

```
        newspace();

        using_account_no = account_no;

        return "success";

    }




int main(){


    float main_washing_cost,main_drying_cost;

    string func_status,machine_select,entrepreneur_status;

    int entrepreneur_mode;

    Store_Management Sriracha_store("Sriracha Laundry Store",05677777);

    Store_Management Pattaya_store("Pattaya Laundry Store ",45645767);

    Entrepreneur_Management Owner("Owner",17641,"066-112-6441");

    int main_mode,account_no = 0;


    Sriracha_store.setCost(float(40),float(40));

    Pattaya_store.setCost(float(40),float(40));


    Sriracha_store.resetStatus();

    Pattaya_store.resetStatus();


    while(true){

        println(37);
```

```cpp
cout << "| Laundry Store | Management System |" << endl;

println(37);

newspace();

cout << "  (1) Login Account " << endl;

cout << "  (2) Register Account " << endl;

cout << "  (3) Entrepreneur System " << endl;

cout << "  (0) Leave Program " << endl;

newspace();

while(true){

  cout << "  System Mode > ";

  cin >> main_mode;

  if(main_mode > 3 or main_mode < 0){

    cout << "  ⊠ Not Found | Try Again!" << endl;

  }else{

    break;

  }

}

if(main_mode == 1){

  while(true){

    newspace();

    func_status = login_account();

    if(func_status == "success"){

      break;

    }else if(func_status == "fail"){
```

```cpp
            continue;

        }else if(func_status == "exit"){

            newspace();

            break;

        }

    }

}else if(main_mode == 2){

    if(account_no < 100 and account_no >= 0){

        while(true){

            newspace();

            func_status = create_account(account_no);

            if(func_status == "success"){

                account_no++;

                break;

            }else if(func_status == "fail"){

                continue;

            }else if(func_status == "exit"){

                newspace();

                break;

            }

        }

    }else{

            cout << "  Note : ERROR#!7 | Full Memory!  " << endl;

            newspace();
```

```cpp
        }
    }else if(main_mode == 3){

        Owner.setKeys("9");

    while(true){

        newspace();

        entrepreneur_status = Owner.loginSystem();

        if(entrepreneur_status == "success"){

            while(true){

                println(37);

                cout << "| Laundry Store | Entrepreneur Mode |" << endl;

                println(37);

                newspace();

                cout << "  (1) Show User Account " << endl;

                cout << "  (2) Edit Cost " << endl;

                cout << "  (0) Leave Mode " << endl;

                newspace();

                cout << "  System Mode > "; cin >> entrepreneur_mode;

                newspace();

                if(entrepreneur_mode == 1){

                    newspace();

                    Owner.showMember(account_no);

                }else if(entrepreneur_mode == 2){

                    newspace();

                    println(37);
```

```cpp
cout << "| Laundry Store | Edit Machine Cost |" << endl;

println(37);

newspace();

cout << "  (1) Edit Washing Cost " << endl;

cout << "  (2) Edit Drying Cost " << endl;

cout << "  (3) Edit Both Cost " << endl;

cout << "  (0) Leave Mode " << endl;

newspace();

cout << "  System Mode > "; cin >> entrepreneur_mode;

newspace();

if(entrepreneur_mode == 1){

    main_washing_cost = Owner.editWashingCost();

    Pattaya_store.setCost(main_washing_cost,true);

    Sriracha_store.setCost(main_washing_cost,true);

}else if(entrepreneur_mode == 2){

    main_drying_cost = Owner.editDryingCost();

    Pattaya_store.setCost(main_drying_cost,false);

    Sriracha_store.setCost(main_drying_cost,false);

}else if(entrepreneur_mode == 3){

    main_washing_cost = Owner.editWashingCost();

    main_drying_cost = Owner.editDryingCost();

    Pattaya_store.setCost(main_washing_cost,main_drying_cost);

    Sriracha_store.setCost(main_washing_cost,main_drying_cost);

}else if(entrepreneur_mode == 0){
```

```cpp
                continue;

            }else{

                cout << "  Note : Try Again!" << endl;

                newspace();

            }

        }else if(entrepreneur_mode == 0){

            func_status = "fail";

            break;

        }else{

            cout << "  Note : Try Again!" << endl;

        }

    }

    break;

}else if(entrepreneur_status == "fail"){

    cout << "  ⊠ Keys Incorrect | Try Again! " << endl;

    continue;

}else if(entrepreneur_status == "exit"){

    newspace();

    func_status = "fail";

    break;

}

}

}else if(main_mode == 0){

    break;
```

```
    }

if(func_status == "success"){

    while(true){

        println(37);

        cout << "|  Laundry Store | Location Store   |" << endl;

        println(37);

        newspace();

        cout << "  (1) Sriracha Campus Store " << endl;

        cout << "  (2) Pattaya Beach Store " << endl;

        showExit();

        newspace();

        cout << "  System Mode > "; cin >> main_mode;

        if(main_mode == 1){

            while(true){

                newspace();

                Sriracha_store.showThumbnil();

                Sriracha_store.showWash_Machine();

                Sriracha_store.showDry_Machine();

                newspace();

                showExit();

                cout << "  Machine Select > "; cin >> machine_select;

                if(machine_select == "0"){

                    newspace();

                    break;
```

```cpp
                }else{

                    string func_status = Sriracha_store.calculate_Price(machine_select);

                    if(func_status == "success"){

                        break;

                    }

                }

            }

    }else if(main_mode == 2){

        while(true){

            newspace();

            Pattaya_store.showThumbnil();

            Pattaya_store.showWash_Machine();

            Pattaya_store.showDry_Machine();

            newspace();

            showExit();

            cout << "  Machine Select > "; cin >> machine_select;

            if(machine_select == "0"){

                newspace();

                break;

            }else{

                string func_status = Pattaya_store.calculate_Price(machine_select);

                if(func_status == "success"){

                    break;

                }
```

```cpp
                }

            }

        }else if(main_mode == 0){

            newspace();

            break;

        }else{

            cout << "  Note : ⊠ Try Again!" << endl;

        }

    }

  }

 }

}
```