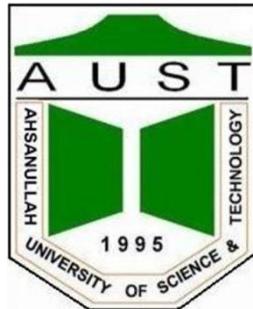


# Ahsanullah University of Science and Technology

## Department of Computer Science and Engineering



**Project Name : My Property**

**Couse Name:** Database Lab

**Couse ID:** CSE 3104

**Semester :** FALL 2018

**Student ID : Student Name**

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**Introduction:**

**My property** is a software where anyone can find flats/apartments by searching on different parameters. Anyone can book/buy flats on this platform. Also a flat owner can give flats advertisement for his flats. We the one where bachelors also find flats and can get on rent.

**Motivation and Objective:**

Our objective is to digitalize the flat searching tradition.

**Database Tables:****Table 01: Address**

| Field     | Type        | Constraint  |
|-----------|-------------|-------------|
| AddressId | Int         | P.K (IS: 1) |
| City      | Varchar(50) | Not Null    |
| Area      | Varchar(50) | Not Null    |
| Road      | Varchar(5)  | Not Null    |
| Block     | Varchar(5)  |             |
| Sector    | Varchar(5)  |             |
| House     | Varchar(5)  | Not Null    |

**Table 02: Users**

| Field     | Type        | Constraint     |
|-----------|-------------|----------------|
| UsersID   | Int         | P.K (IS: 3000) |
| AddressID | int         | Not Null       |
| FirstName | Varchar(30) | Not Null       |
| LastName  | Varchar(30) | Not Null       |
| phone     | Varchar(20) | Not Null       |
| Email     | Varchar(30) |                |
| Password  | Varchar(15) | Not Null       |

**Table 03: Property**

| Field      | Type        | Constraint       |
|------------|-------------|------------------|
| PropertyID | Int         | P.K (IS: 7000,1) |
| AddressID  | Varchar(80) | F.K.(AddressID)  |

|                   |               |              |
|-------------------|---------------|--------------|
| OwnerID           | Varchar(80)   | F.K.(UserID) |
| BuyerID           | Int           |              |
| Title             | Varchar(300)  | Not Null     |
| Purpose           | Varchar(4)    | Not Null     |
| Status            | Varchar(15)   | Not Null     |
| RentTo            | Varchar(15)   | Not Null     |
| RentalPrice       | Int           |              |
| AdvancePrice      | Int           |              |
| SellingPrice      | Int           |              |
| Img               | Image         |              |
| Area              | Int           | Not Null     |
| Bedroom           | Int           | Not Null     |
| Bathroom          | Int           | Not Null     |
| Balcony           | Int           | Not Null     |
| MainView          | Varchar(20)   |              |
| Lift              | Int           |              |
| Parking           | Varchar(3)    |              |
| ElectricityBackup | Varchar(3)    |              |
| CCTVSecurity      | Varchar(3)    |              |
| Intercom          | Varchar(3)    |              |
| Description       | Varchar(1000) |              |

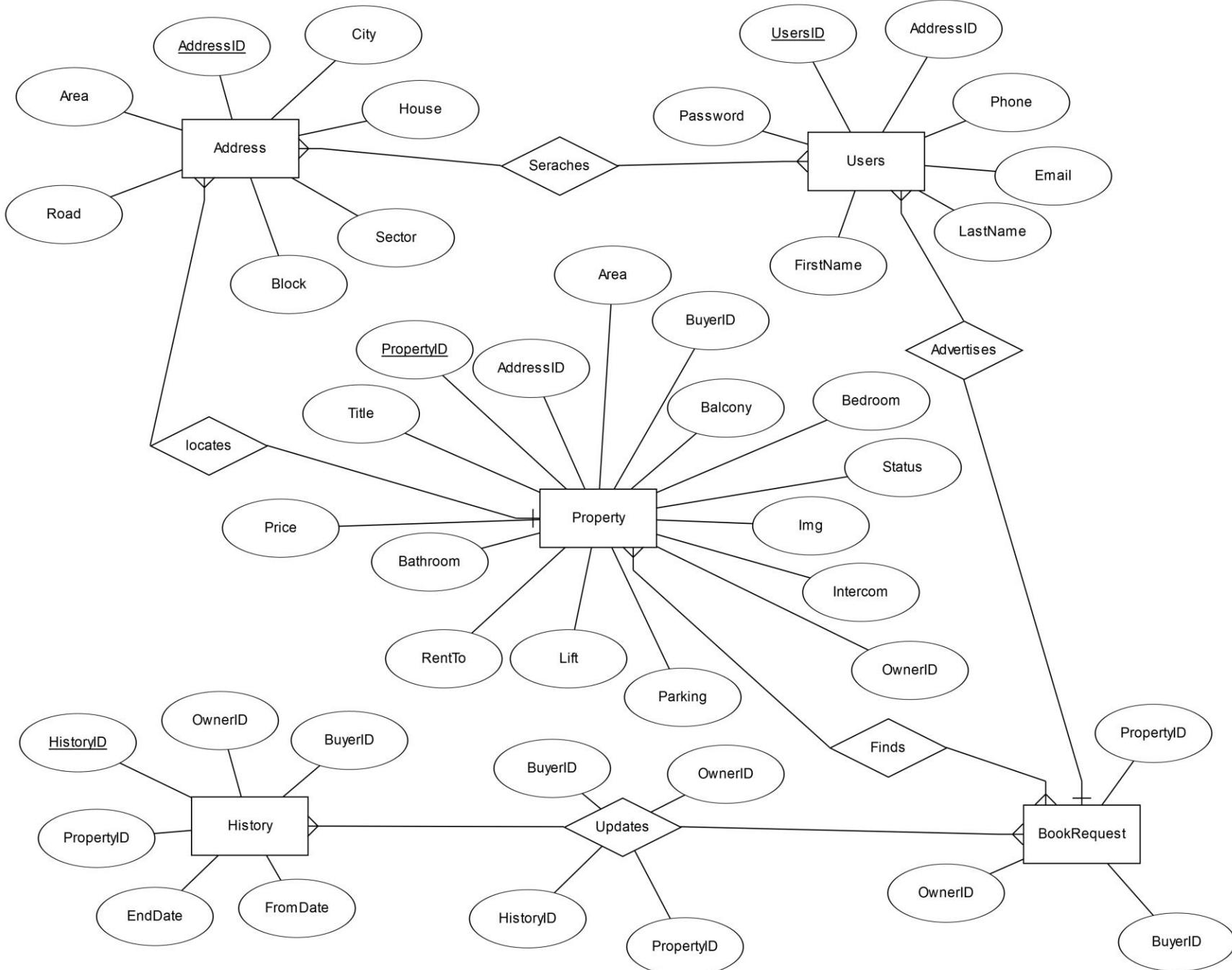
**Table 04: BookRequest**

| Field      | Type | Constraint       |
|------------|------|------------------|
| OwnerID    | Int  | F.K.(UsersID)    |
| BuyerID    | Int  | F.K.(UsersID)    |
| PropertyID | int  | F.K.(PropertyID) |

**Table 05: History**

| <b>Field</b> | <b>Type</b> | <b>Constraint</b> |
|--------------|-------------|-------------------|
| HistoryID    | Int         | P.K.(IS: 10000,1) |
| OwnerID      | Int         | F.K.(UsersID)     |
| BuyerID      | Int         | F.K.(UsersID)     |
| PropertyID   | Int         | F.K.(PropertyID)  |
| FromDate     | dateTime    | Not Null          |
| EndDate      | dateTime    |                   |

## Entity Relationship Diagram:



## Query Tables Construction

```
CREATE TABLE Address(
    AddressID int IDENTITY(1, 1) PRIMARY KEY,
    City varchar(50) NOT NULL,
    Area varchar(50) NOT NULL,
    Road varchar(5) NOT NULL,
    Block varchar(5),
    Sector varchar(5),
    House varchar(5) NOT NULL
);
```

```
CREATE TABLE Users(
    UserID int IDENTITY(3000,1) PRIMARY KEY,
    AddressID int NOT NULL FOREIGN KEY REFERENCES Address (AddressID),
    FirstName varchar(30) NOT NULL,
    LastName varchar(30) NOT NULL,
    Phone varchar(20) NOT NULL,
    Email varchar(30),
    Password varchar(15) NOT NULL
);
```

```
CREATE TABLE Property(
    PropertyID int IDENTITY(7000,1) PRIMARY KEY,
    AddressID int NOT NULL FOREIGN KEY REFERENCES Address (AddressID),
    OwnerID int NOT NULL FOREIGN KEY REFERENCES Users (UserID),
    BuyerID int,
    Title varchar(300) NOT NULL,
    Purpose varchar(4) NOT NULL, --Rent/Sell/Both
    Status varchar(15) NOT NULL, --Available or not
    RentTo varchar(15) NOT NULL, --Family/Bachalor/Both
    RentalPrice int,
    AdvancePrice int,
    SellingPrice int,
    Img image,
    Area int NOT NULL, --Sq. Ft.
    Bedroom int NOT NULL,
    Bathroom int NOT NULL,
    Balcony int NOT NULL,
    MainView varchar(20), --Ex: South/East etc.
```

```

Lift int,
Parking varchar(3), --YES/NO
ElectricityBackup varchar(3), --Yes/No
CCTVSecurity varchar(3), --Yes/No
Intercom varchar(3), --Yes/No
Description varchar(1000)
);

CREATE TABLE BookRequest(
    OwnerID int NOT NULL FOREIGN KEY REFERENCES Users (UserID),
    BuyerID int NOT NULL FOREIGN KEY REFERENCES Users (UserID),
    PropertyID int NOT NULL FOREIGN KEY REFERENCES Property (PropertyID)
);

CREATE TABLE History(
    HistoryID int IDENTITY(10000,1) PRIMARY KEY,
    OwnerID int NOT NULL FOREIGN KEY REFERENCES Users (UserID),
    BuyerID int NOT NULL FOREIGN KEY REFERENCES Users (UserID),
    PropertyID int NOT NULL FOREIGN KEY REFERENCES Property (PropertyID),
    FromDate datetime NOT NULL,
    EndDate datetime
);

```

### **Query Insertion of Data**

```

INSERT INTO Address VALUES ('Dhaka', 'Basabo', '1', '', '', '56');
INSERT INTO Users VALUES ('1', 'Arif', 'Hasan', '01996846517',
'arif.ishan05@gmail.com', '1234')

```

```

INSERT INTO Property VALUES ('1', '3000', null, 'Sample room', 'Both', 'Available',
'Any', '10000', null, '16000', null, '1200', '3', '2', '2', 'South', '0', 'Yes', 'No', 'No', 'Yes',
'Good day.');

```

Insert into BookRequest values ('3002', '3000', '7001')

Insert into History values(""+user.getUsersID()+"", ""+buyerID+"", ""+pid+"",
""+dateFormat.format(date)+"", null, '0')

```

INSERT INTO Property(AddressID, OwnerID, Title, Purpose, Status, RentTo,
RentalPrice, AdvancePrice, SellingPrice, Img, Area, Bedroom, Bathroom, Balcony,
MainView, Lift, Parking, ElectricityBackup, CCTVSecurity, Intercom, Description)
+ "VALUES (?,?,?,?,?,?,?,?,?,?,?,?,?,?,?,?)"

```

```
INSERT INTO Address VALUES (" + address.getCity() + ", " + address.getArea() + ",  
" + address.getRoad() + ", "+ address.getBlock() + ", " + address.getSector() + ", "+  
address.getHouse());
```

```
Insert into BookRequest values (" + rs.getInt("OwnerID") + ", "+user.getUsersID() +,  
"+rs.getInt("PropertyID") +")
```

```
INSERT INTO " + tableName + " VALUES(" + user.getAddressID() + ", " +  
user.getFirstName() + ", " + user.getLastName() + ", " + user.getPhone() + ", " +  
user.getEmail() + ", " + user.getPassword());
```

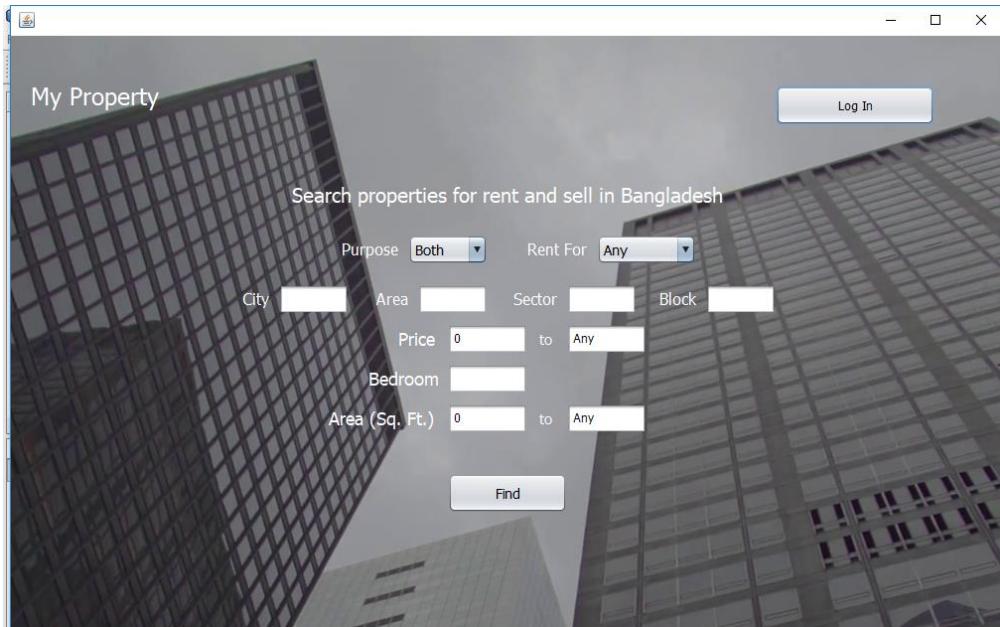
## Query for Value Update, Setting Constraints and Rules

```
UPDATE Property set Title='"+property.getTitle()+"',
Purpose='"+property.getPurpose()+"',
Status='"+property.getStatus()+"',RentTo='"+property.getRentTo()+"',RentalPrice='"+
+property.getRentalPrice()+"',SellingPrice='"+property.getSellingPrice()+"',Advance
Price='"+property.getAdvancePrice()+"',
Area='"+property.getArea()+"',Bedroom='"+property.getBedroom()+"',Bathroom='"+
+property.getBathroom()+"', Balcony='"+property.getBalcony()+"',
MainView='"+property.getMainView()+"', Lift='"+property.getLift()+"',
Parking='"+property.getParking()+
      "', ElectricityBackup='"+property.getElectricityBackup()+"',
CCTVSecurity='"+property.getCCTVSecurity()+"',
Intercom='"+property.getIntercom()+"', Description='"+property.getDescription()+"'
WHERE PropertyID='"+property.getPropertyID()+"';
statement.execute(sql);
```

"Update Property set BuyerID=NULL where  
PropertyID='"+property.getPropertyID()+"'"';

Update History set EndDate='"+dateFormat2.format(date2)+"'.000', Flag='1' where  
PropertyID='"+property.getPropertyID()+"' and Flag='0'"Query for Aggregate  
functions you have used

## Screen Shots of my project interface design:



**Image 01: Home Page**

The screenshot shows the search results page. The title is "Search Result". A table displays three properties with the following columns: Serial, Property ID, Purpose, Area(Sq. Ft.), Rental Price, Rent For, and Address. The properties are:

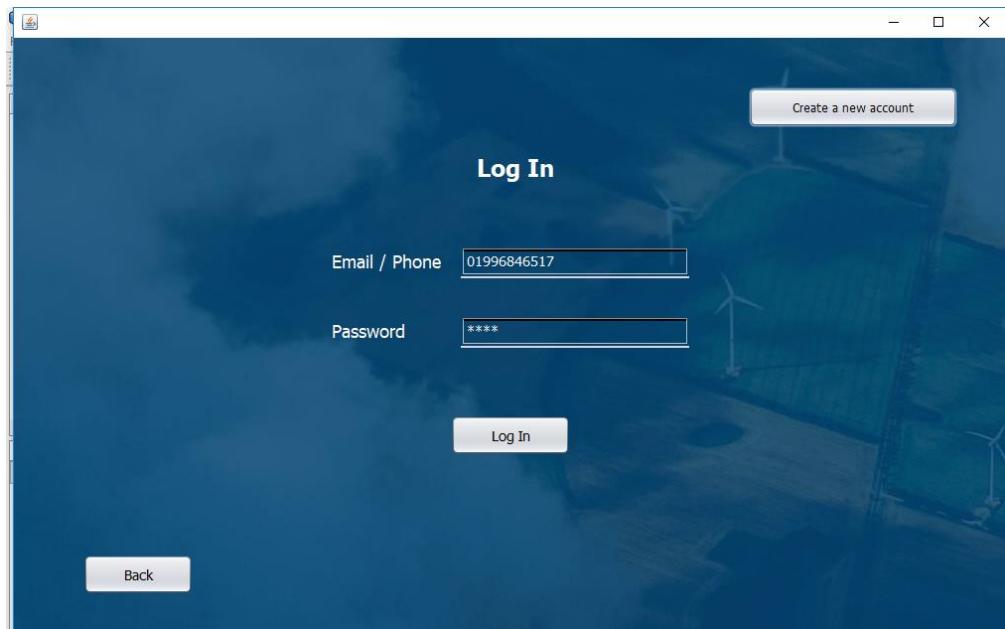
| Serial | Property ID | Purpose | Area(Sq. Ft.) | Rental Price | Rent For | Address                 |
|--------|-------------|---------|---------------|--------------|----------|-------------------------|
| 1      | 7000        | Rent    | 800           | 10000        | Any      | Area: Bashaboo, Ci...   |
| 2      | 7001        | Both    | 1400          | 25000        | Any      | Area: Badda, City: D... |
| 3      | 7003        | Both    | 1150          | 20000        | Any      | Area: Gulshan, City...  |

Below the table, detailed information for the first property is shown:

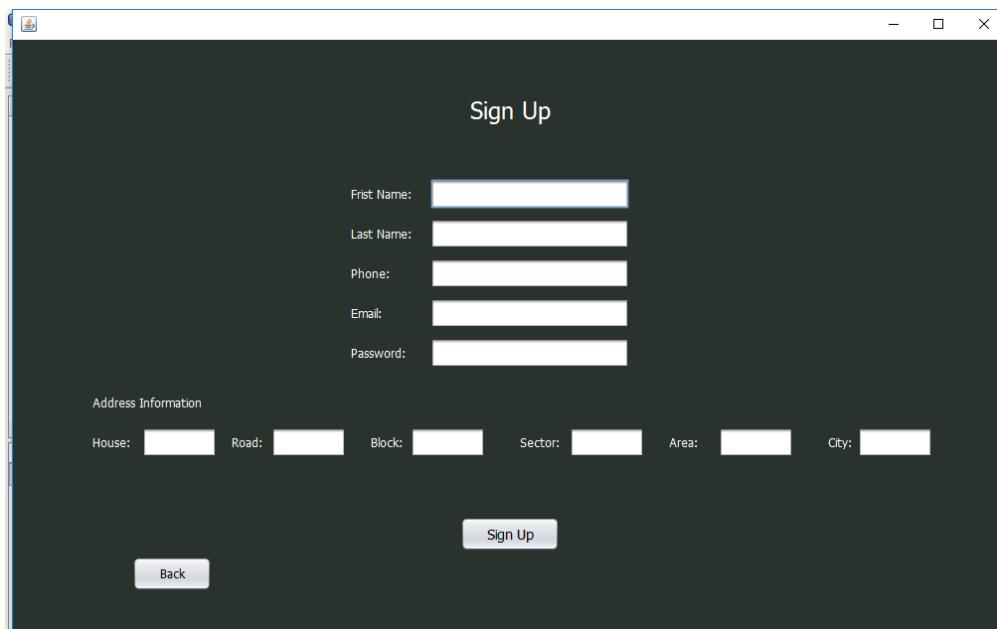
Title: Ishan1  
Area(Sq. Ft.): 800 Bedroom: 2 Bathroom: 2 Balcony: 1 Price: 10000  
Purpose: Rent Rent For: Any Main View: East Location: House: 1, Road: 1, Area: Bashaboo, City: Dhaka  
CCTV Security: No Lift: 0 Parking: No Electricity Backup: No Intercom: No  
Description: null

At the bottom are "Back" and "Book Now" buttons.

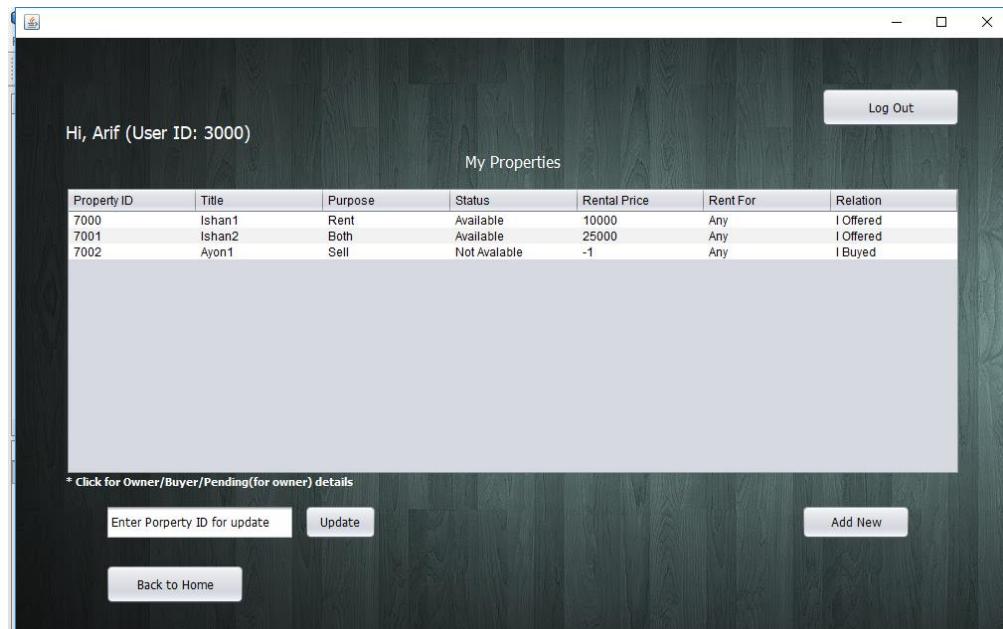
**Image 02: Search result page**



**Image 03: login page**



**Image 04: Sign up page**



**Image 05: Profile page**

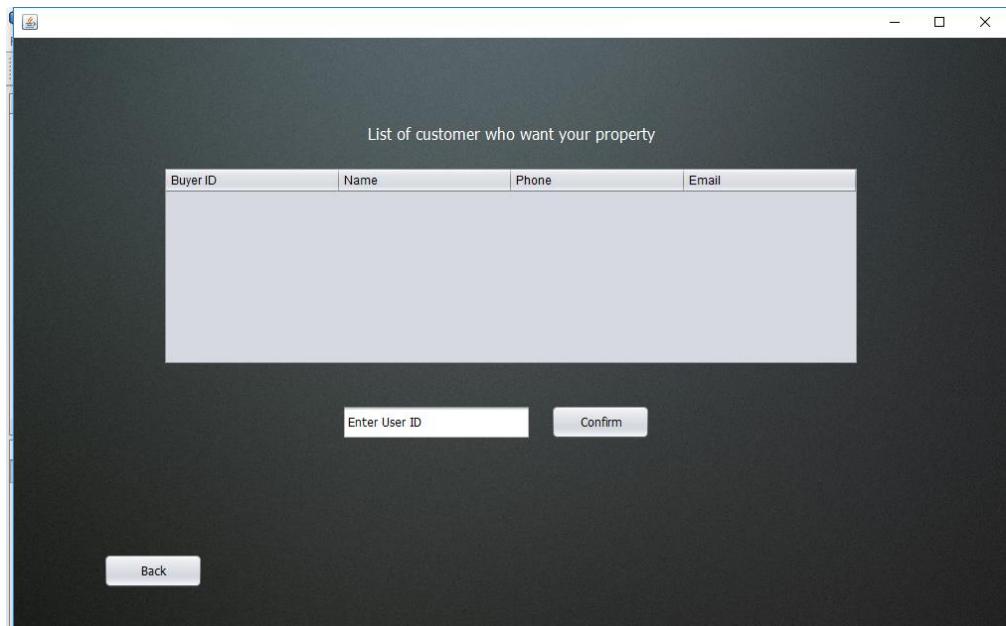
The screenshot shows a Windows application window titled "Property Form". It has several input fields and dropdown menus for entering property details. At the top right is a "Upload Image" button with a plus sign icon. Below the title are fields for "Title", "Purpose" (with options "Select", "Rent", "Sell", "Both"), "Rent For" (dropdown), and "Status" (dropdown). There is also a "Back" button at the bottom left and an "Add Property" button at the bottom right.

**Address Information**

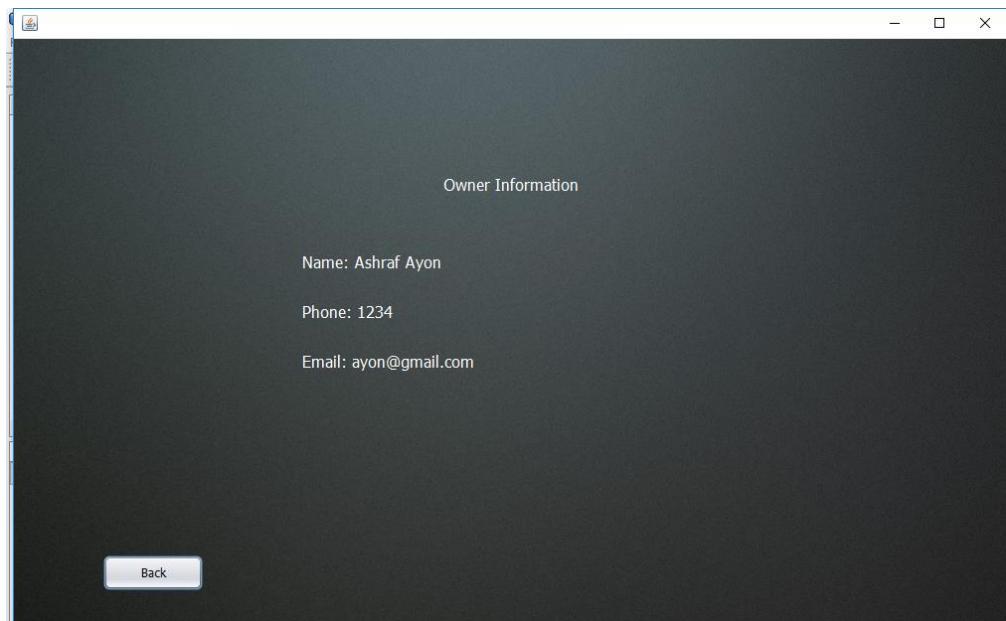
|              |                      |          |                      |                     |                      |           |                      |                |                      |       |                      |
|--------------|----------------------|----------|----------------------|---------------------|----------------------|-----------|----------------------|----------------|----------------------|-------|----------------------|
| House:       | <input type="text"/> | Road:    | <input type="text"/> | Block:              | <input type="text"/> | Sector:   | <input type="text"/> | Area:          | <input type="text"/> | City: | <input type="text"/> |
| Area (sqft): | <input type="text"/> | Bedroom: | 0                    | Bathroom:           | 0                    | Balcony:  | 0                    | View:          | East                 |       |                      |
| Lift:        | 0                    | Parking: | Select               | Electricity Backup: | Select               | Intercom: | Select               | CCTV Security: | Select               |       |                      |

Description:

**Image 06: Property Form**



**Image 07: List of buyer who want to buy**



**Image 08: List of Owner/ Buyer Information Page**

## **Conclusion:**

Our future goal is to integrate Real Estate Company. That's way we choose to reduce peoples flat searching troubles.

## **Contribution:**

