

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)	
CCTVSecuirity	Varchar(3)	
Intercom	Varchar(3)	
Description	Varchar(1000)	

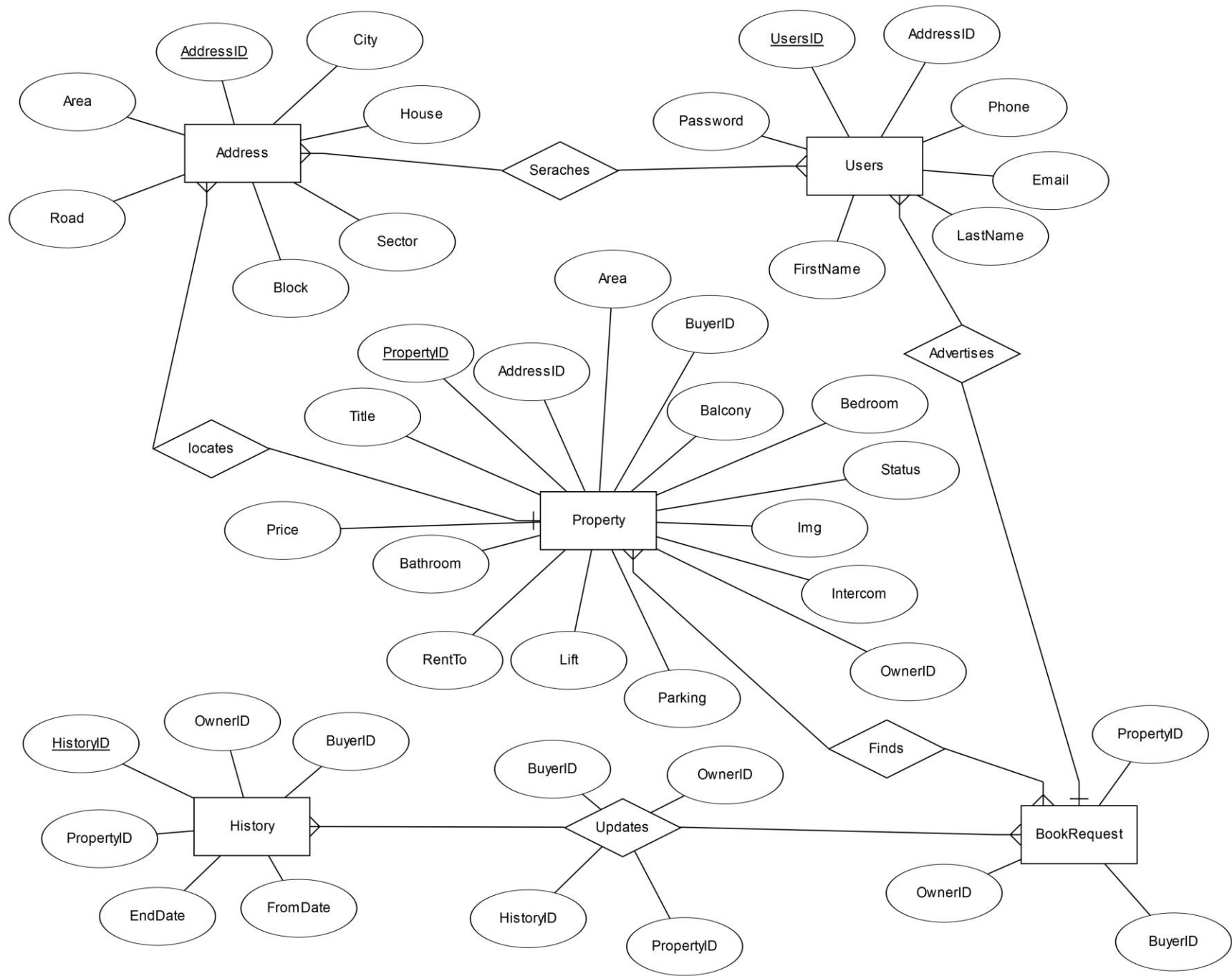
Table 04: BookRequest

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

Table 05: History

Field	Type	Constraint
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/Bachelor/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.getUserID()+'', ''+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.getUserID() + ",  
" + 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:

The Home Page interface features a background image of modern skyscrapers. At the top left, the text "My Property" is displayed. A "Log In" button is located at the top right. The main heading is "Search properties for rent and sell in Bangladesh". Below this, there are several search filters: "Purpose" (a dropdown menu set to "Both"), "Rent For" (a dropdown menu set to "Any"), "City" (a text input field), "Area" (a text input field), "Sector" (a text input field), "Block" (a text input field), "Price" (a range selector with "0" and "Any" inputs and a "to" label), "Bedroom" (a text input field), and "Area (Sq. Ft.)" (a range selector with "0" and "Any" inputs and a "to" label). A "Find" button is positioned at the bottom center of the search filters.

Image 01: Home Page

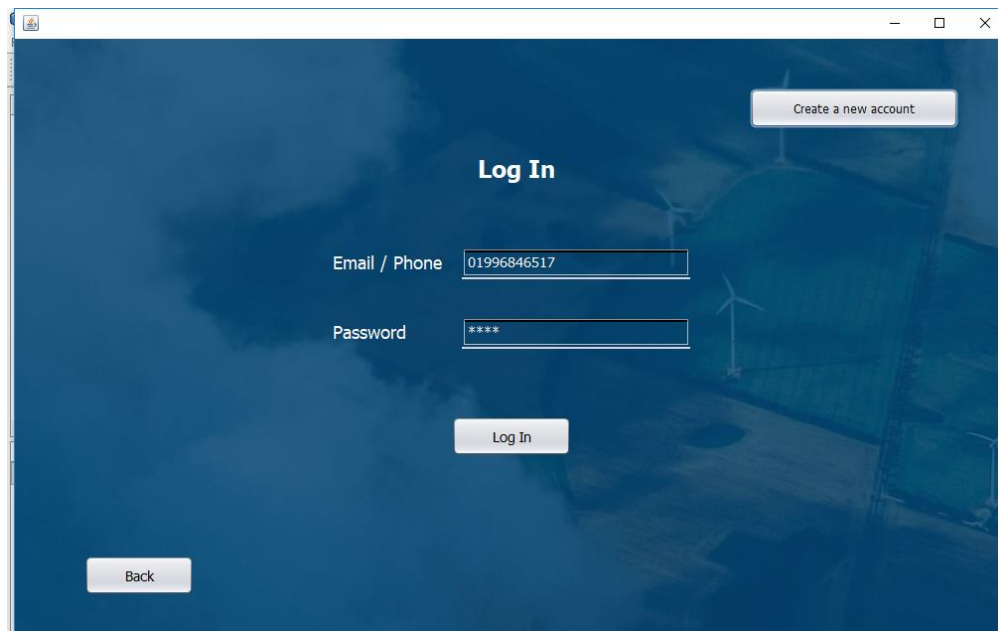
The Search Result page has a blue textured background. At the top, it says "Search Result". Below this is a table with 7 columns: Serial, Property ID, Purpose, Area(Sq. Ft.), Rental Price, Rent For, and Address. The table contains 3 rows of data. Below the table, there is a detailed view for a specific property (Serial 1). This view includes fields for Title, Area(Sq. Ft.), Bedroom, Bathroom, Balcony, Price, Purpose, Rent For, Main View, Location, CCTV Security, Lift, Parking, Electricity Backup, Intercom, and a Description field with a text input area. At the bottom, there are "Back" and "Book Now" buttons.

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...

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

Back Book Now

Image 02: Search result page



Create a new account

Log In

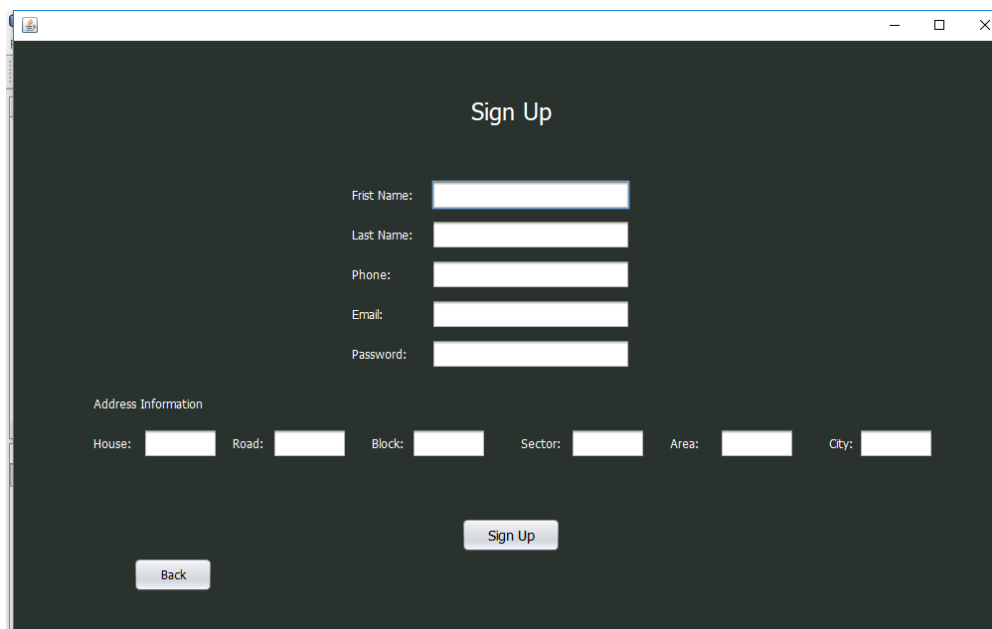
Email / Phone

Password

Log In

Back

Image 03: login page



Sign Up

First Name:

Last Name:

Phone:

Email:

Password:

Address Information

House: Road: Block: Sector: Area: City:

Sign Up

Back

Image 04: Sign up page

Hi, Arif (User ID: 3000)

Log Out

My Properties

Property ID	Title	Purpose	Status	Rental Price	Rent For	Relation
7000	Ishan1	Rent	Available	10000	Any	I Offered
7001	Ishan2	Both	Available	25000	Any	I Offered
7002	Ayon1	Sell	Not Available	-1	Any	I Bought

* Click for Owner/Buyer/Pending(for owner) details

Enter Porperty ID for update

Update

Add New

Back to Home

Image 05: Profile page

Property Form

Title:

Purpose:

Select

Rent For:

Any

Status:

Available

Upload Image

Address Information

House:

Road:

Block:

Sector:

Area:

City:

Area (sqft):

Bedroom:

0

Bathroom:

0

Balcony:

0

View:

East

Lift:

0

Parking:

Select

Electricity Backup:

Select

Intercom:

Select

CCTV Security:

Select

Description:

Back

Add Property

Image 06: Property Form

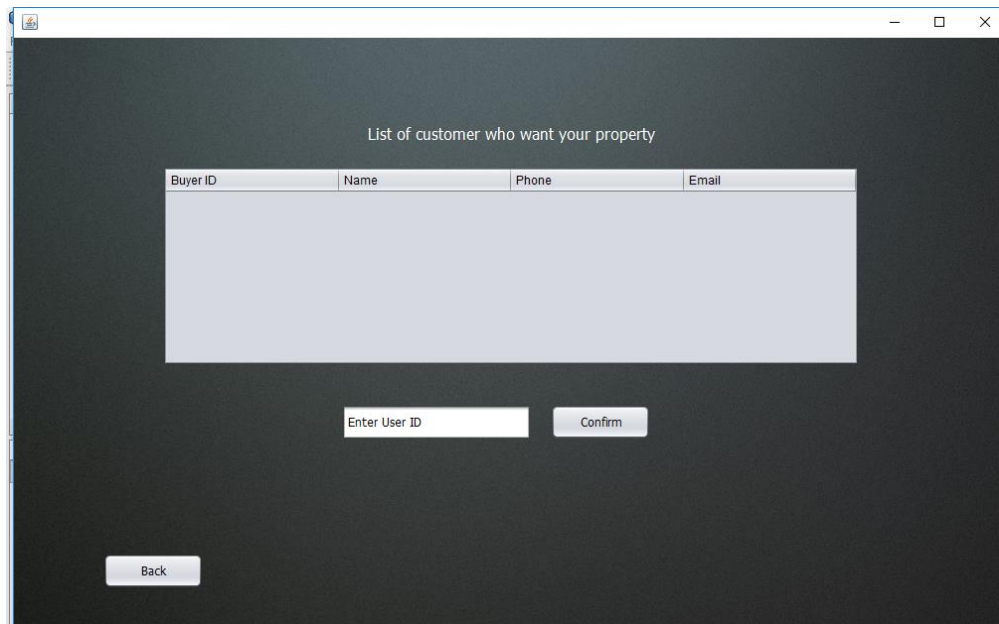


Image 07: List of buyer who want to buy

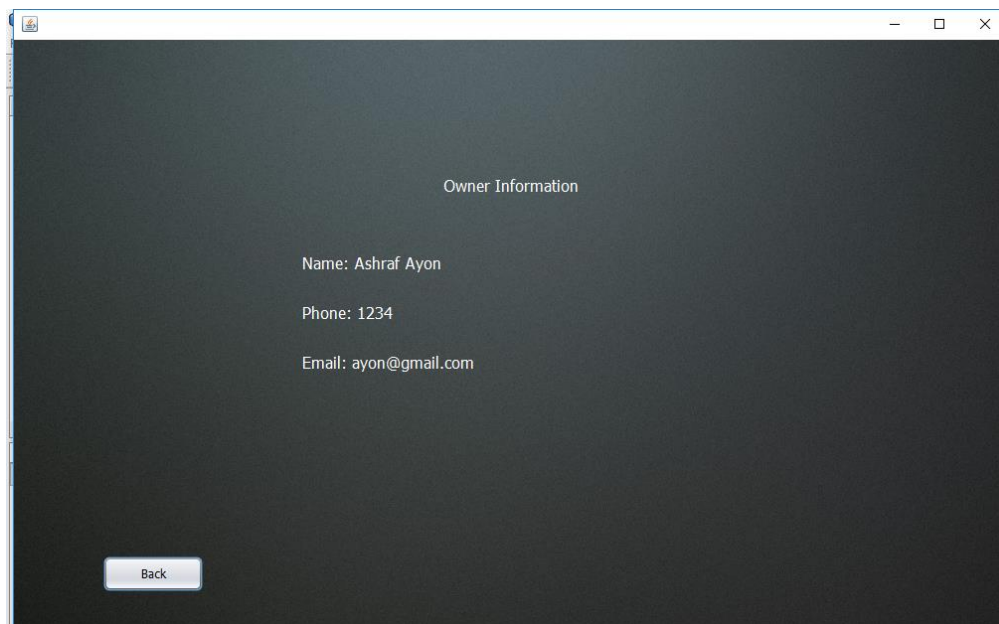


Image 08: List of Owner/ Buyer Information Page

Conclusion:

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

Contribution:

