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)	

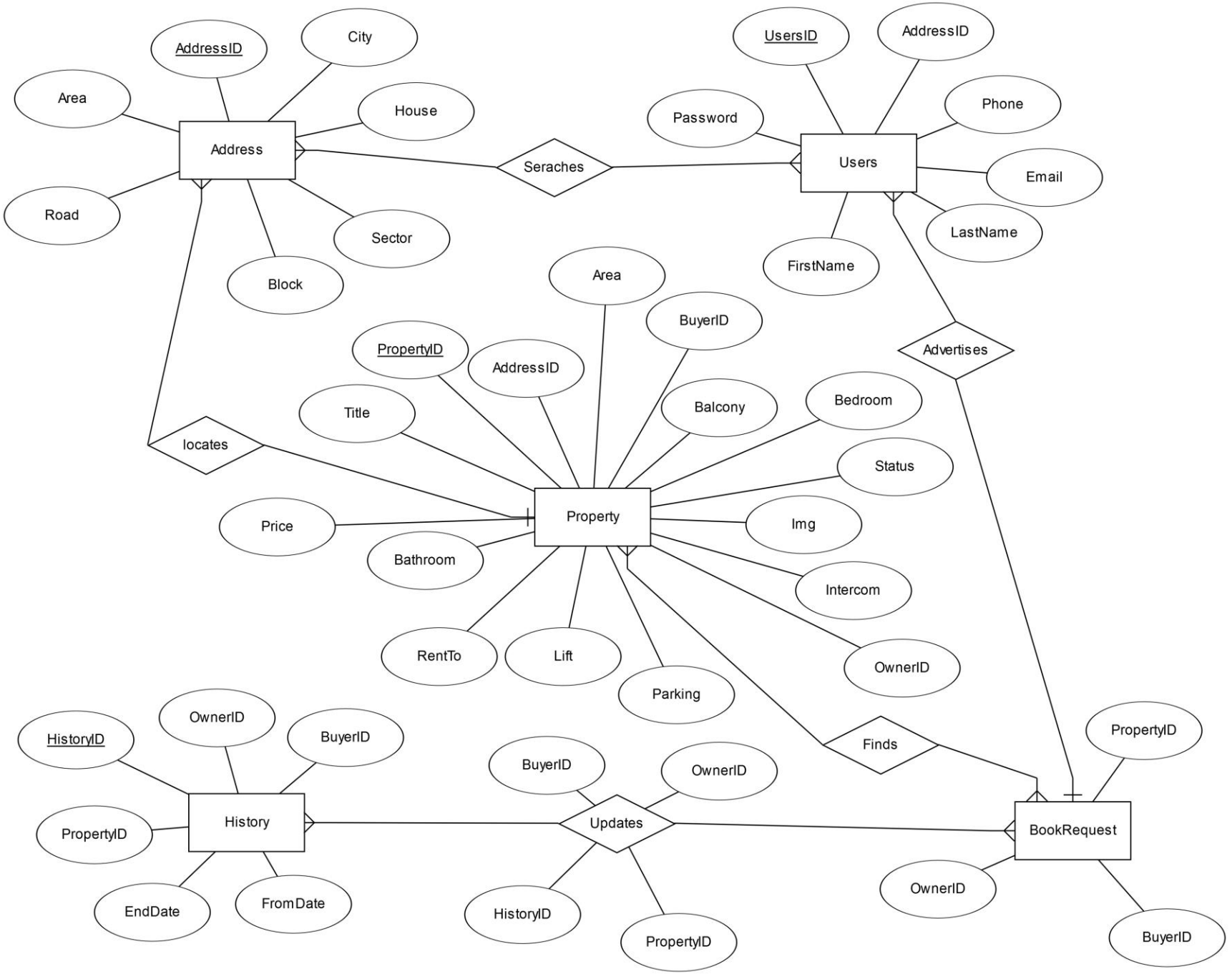
Table 04: BookRequest

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(
   UsersID 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 (UsersID),
        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 (UsersID),
        BuyerID int NOT NULL FOREIGN KEY REFERENCES Users (UsersID),
        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 (UsersID),
        BuyerID int NOT NULL FOREIGN KEY REFERENCES Users (UsersID),
        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:

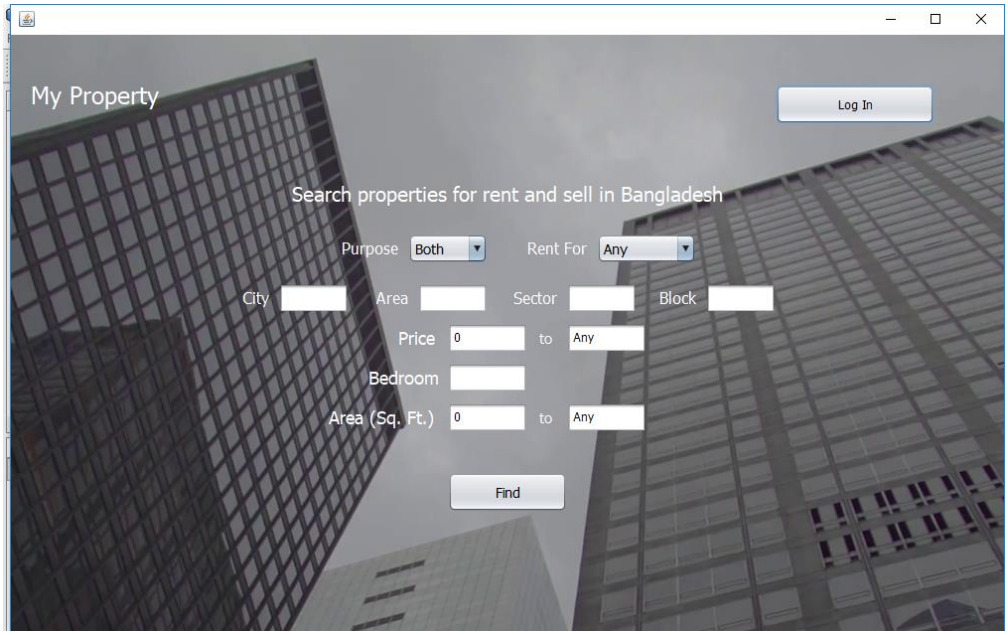


Image 01: Home Page

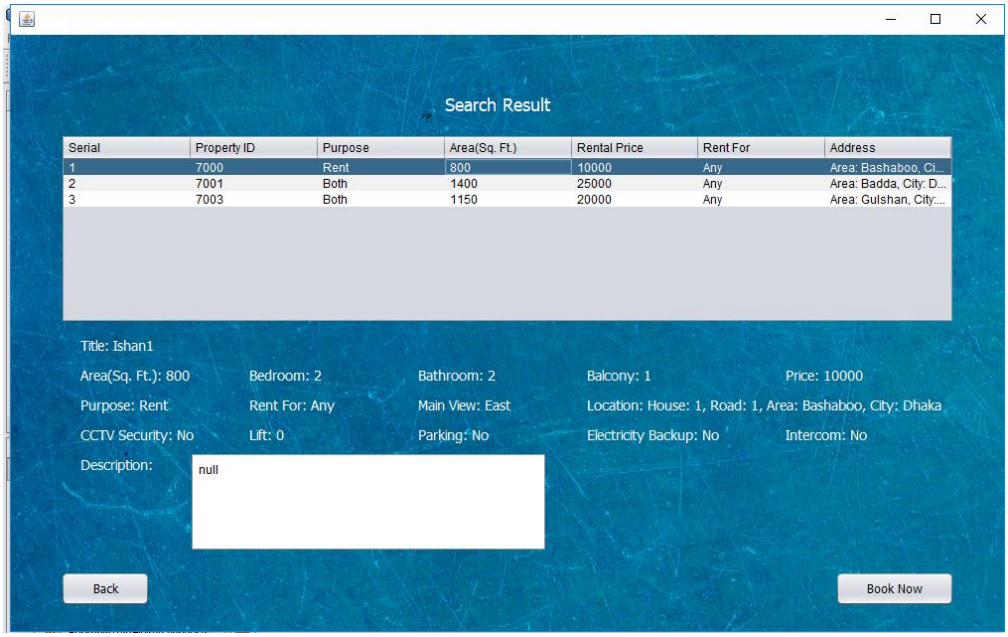


Image 02: Search result page

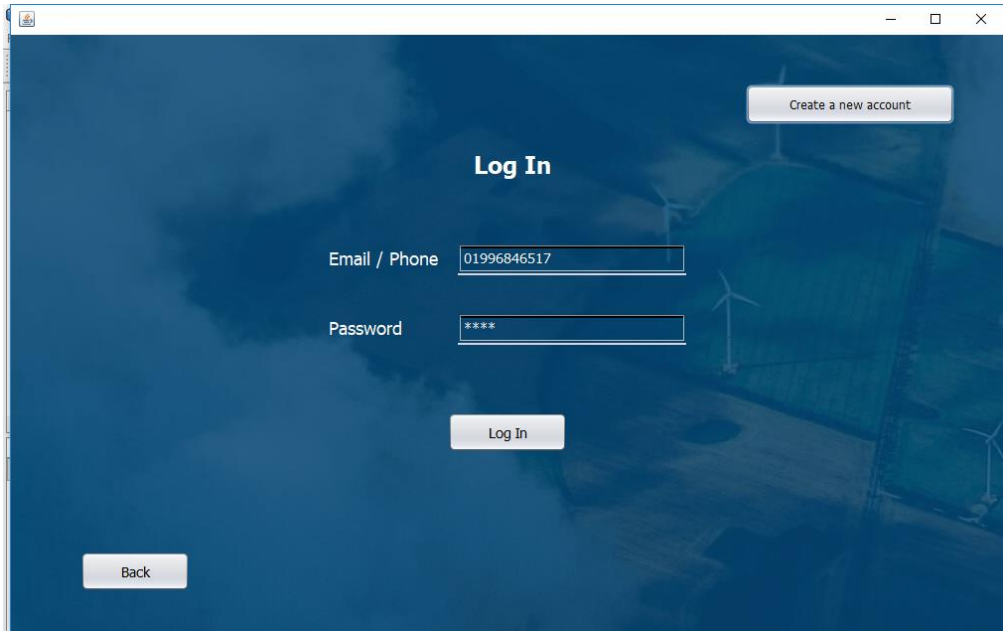


Image 03: login page

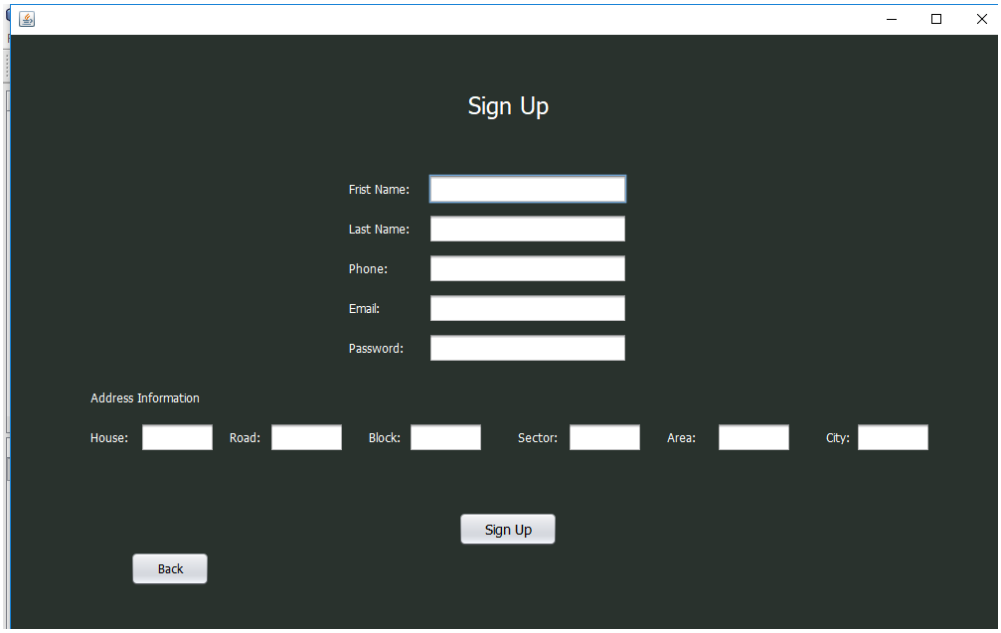


Image 04: Sign up page

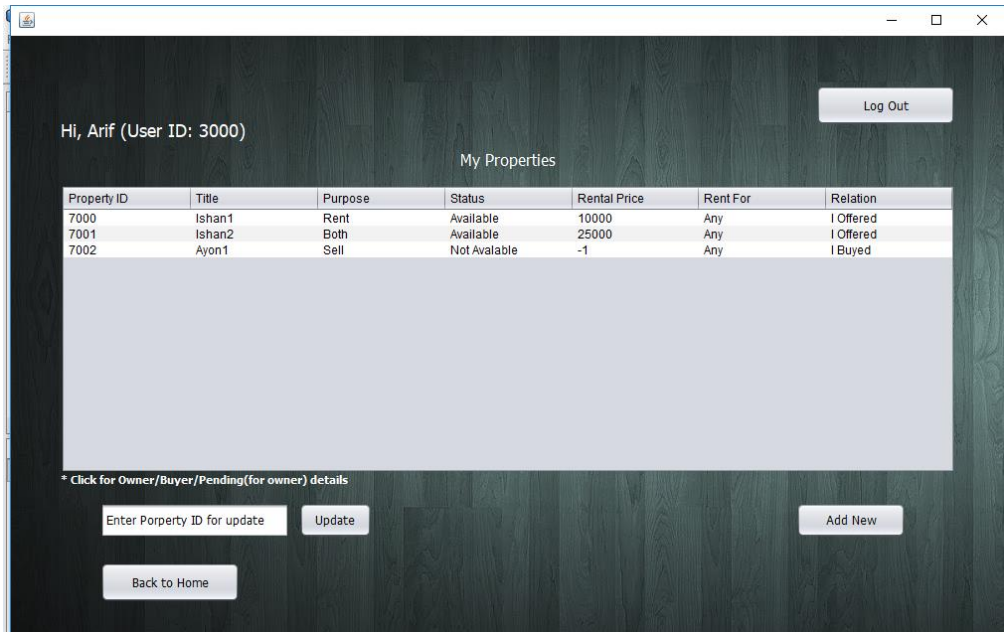


Image 05: Profile page

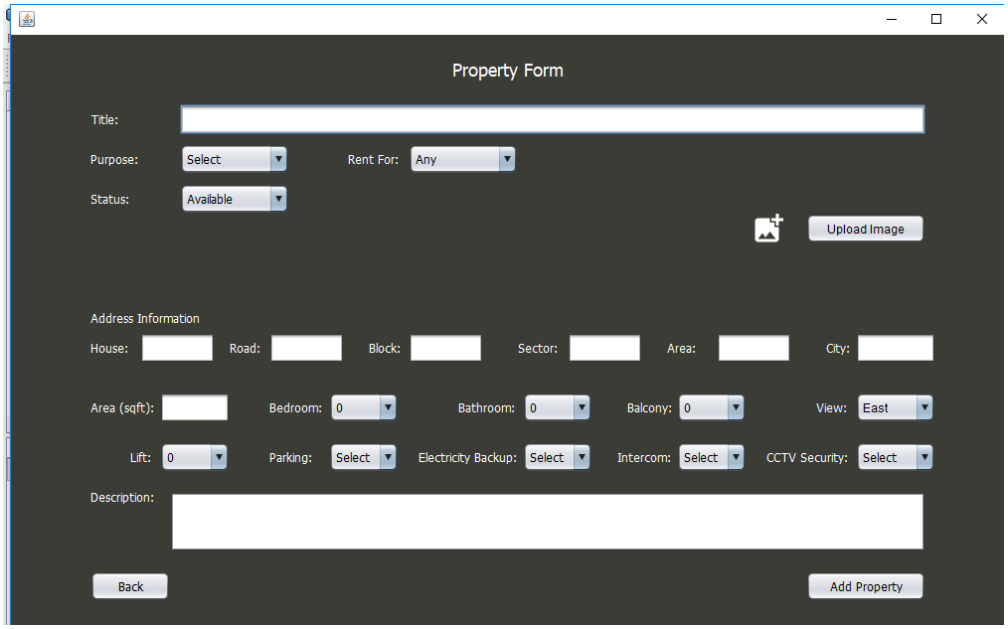


Image 06: Property Form

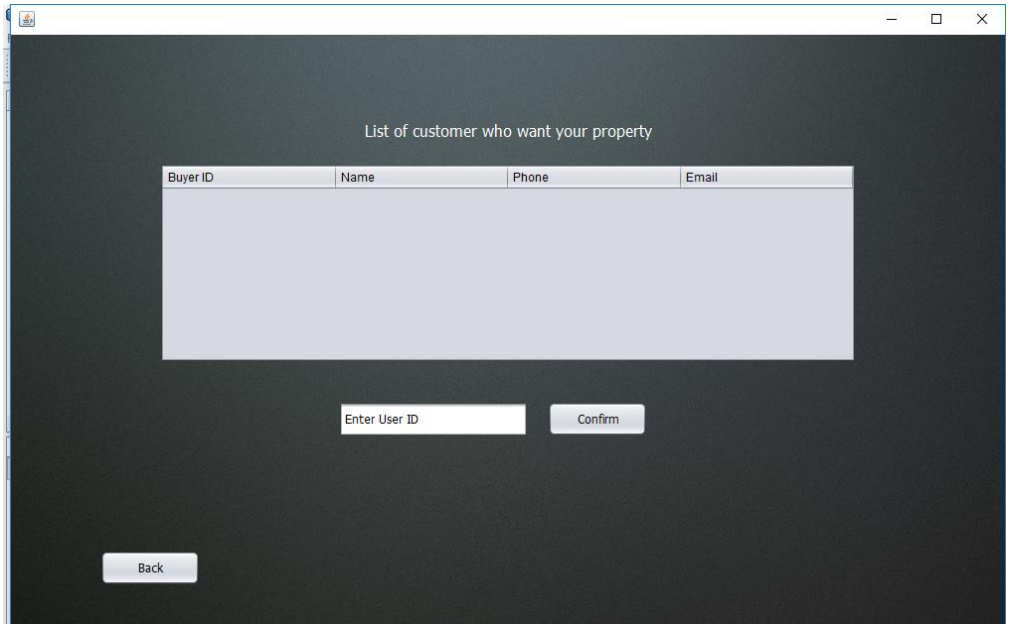


Image 07: List of buyer who want to buy

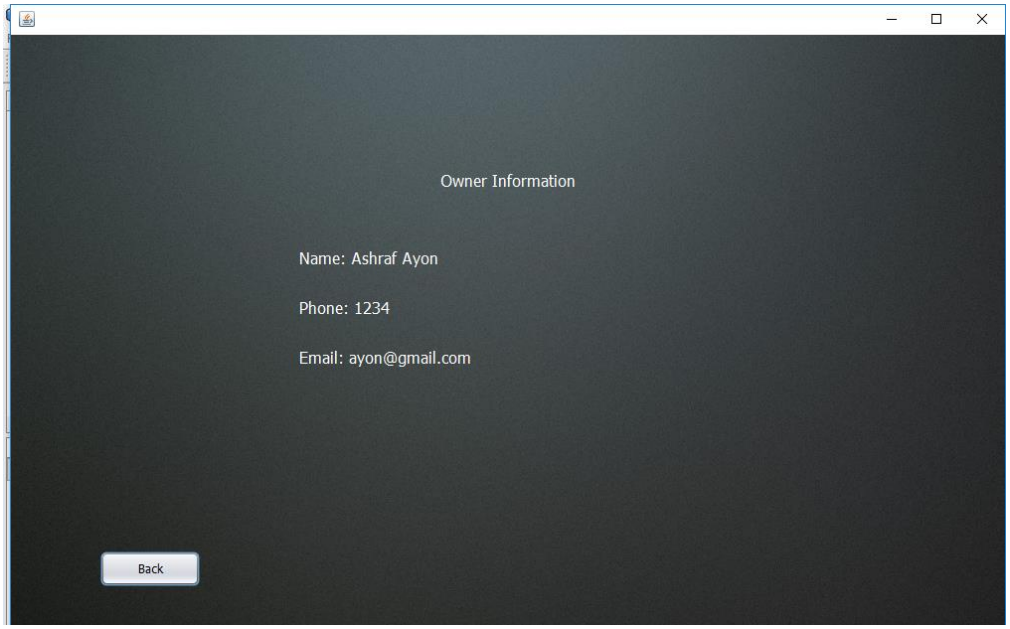


Image 08: List of Owner/ Buyer Information Page

Conclusion:

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

Contribution: