TE/IT/A-1

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Exp. 1: PROBLEM DEFINITION

PROPERTY MANAGEMENT SYSTEM

This is a basic system that will keep record of housing properties available on rent or for sale, and will work as connecting bridge between customer and property sellers.

Due to this system there is no need to visit various places in search of desired property. The information of various properties in various locations can be accessible at one place.

This system will provide a platform to home line property sellers and buyers. This will keep record of land, houses or flats available for sale or on rent with their rates and make this available to customers. Also will keep record of contact information of customer and will send necessary notices and/or reminders to customer.
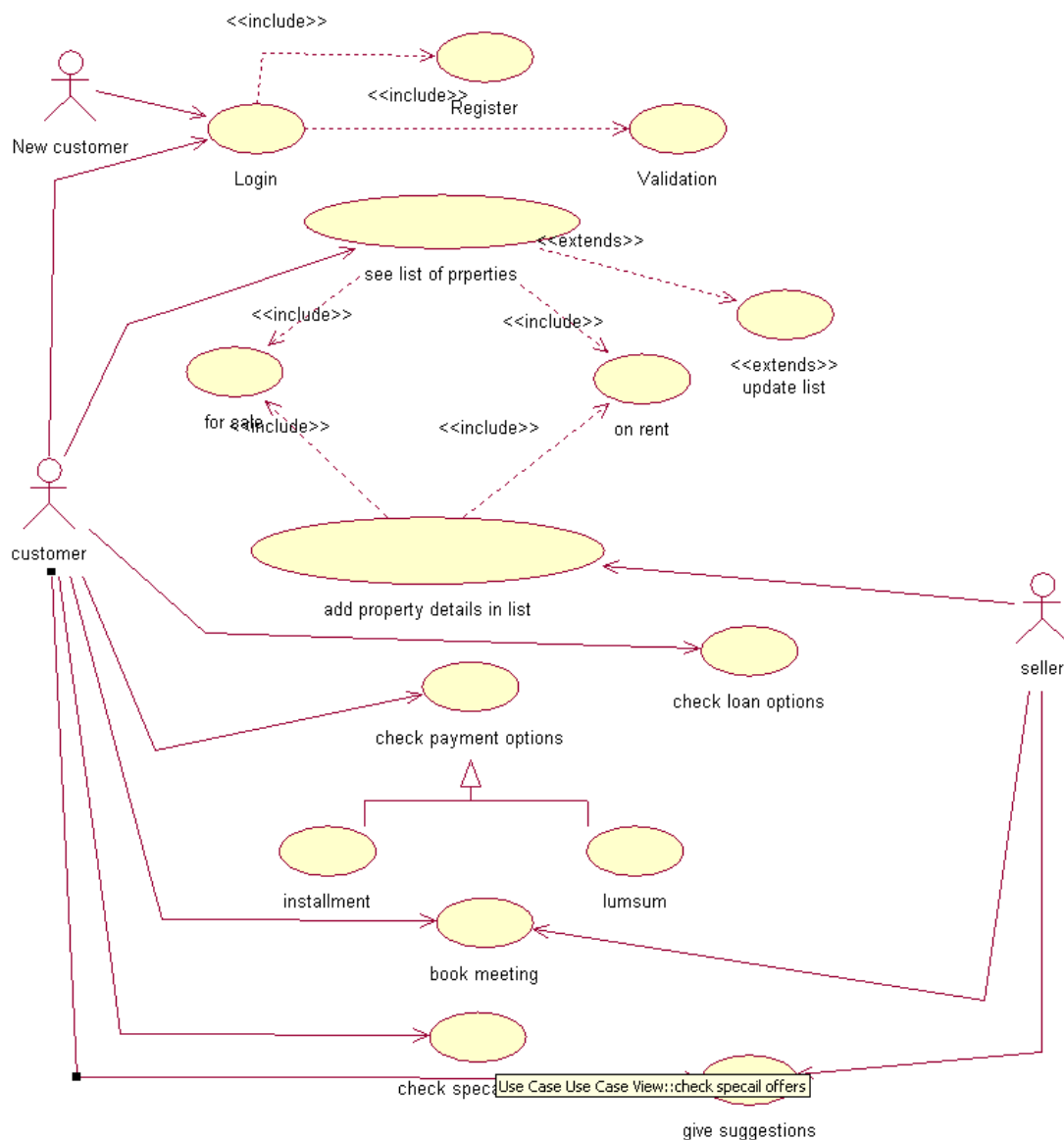
Exp. 2: REQUIREMENTS ANALYSIS

FUNCTIONAL REQUIREMENTS:

- Register.
- Validation.
- Keep clients record.
- Add property details.
- Provide the list of properties with necessary information.
- Loan options.
- Payment options.
- Special offers.
- Book appointment.
- Accept suggestions.

NON-FUNCTIONAL REQUIREMENTS:

- Improve the search facility and all users of property management system should get all the information in a second.
- The application should support the capability to use multi usre environment.
- Display search result in one second.
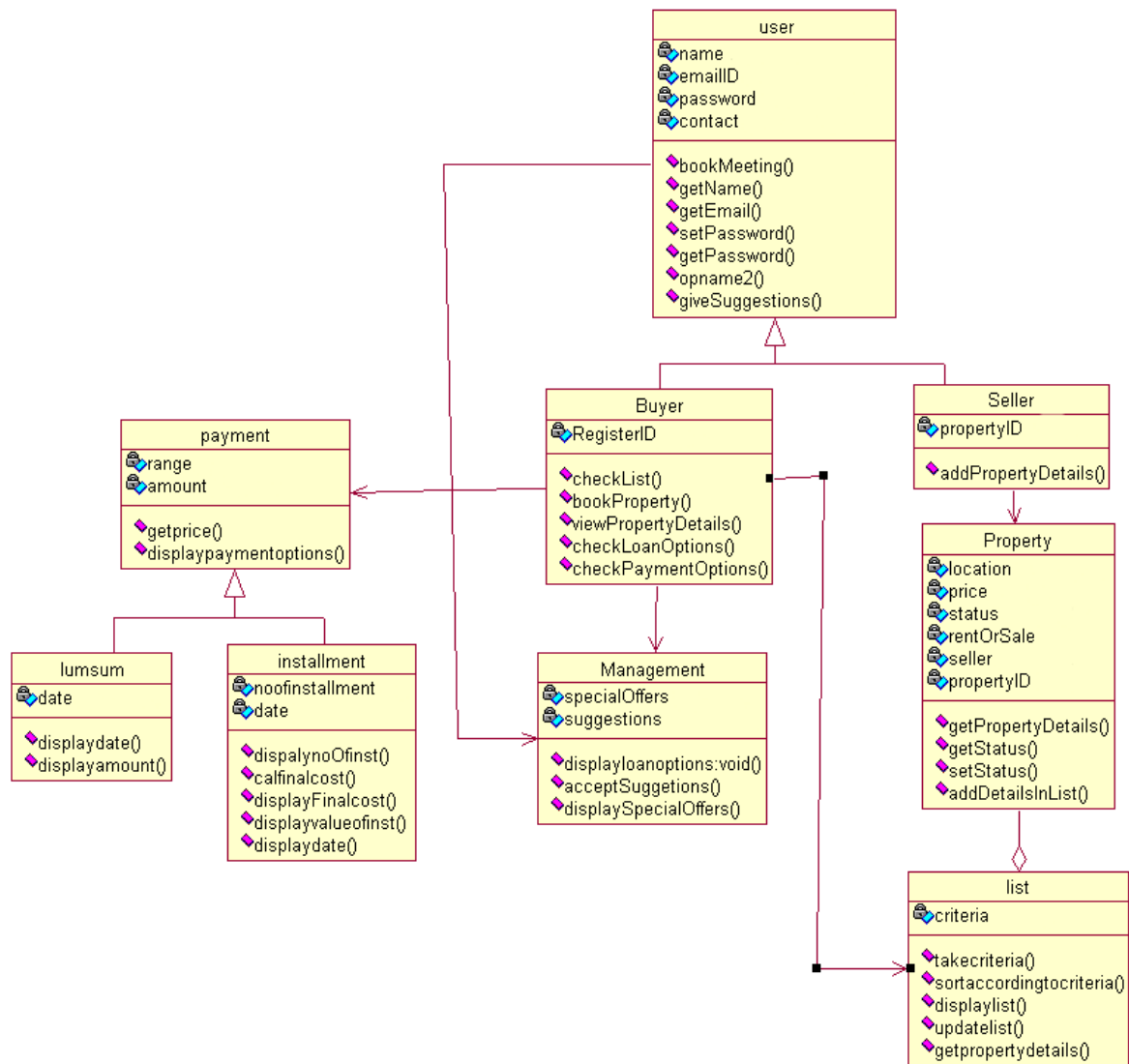- Update the list every hour.
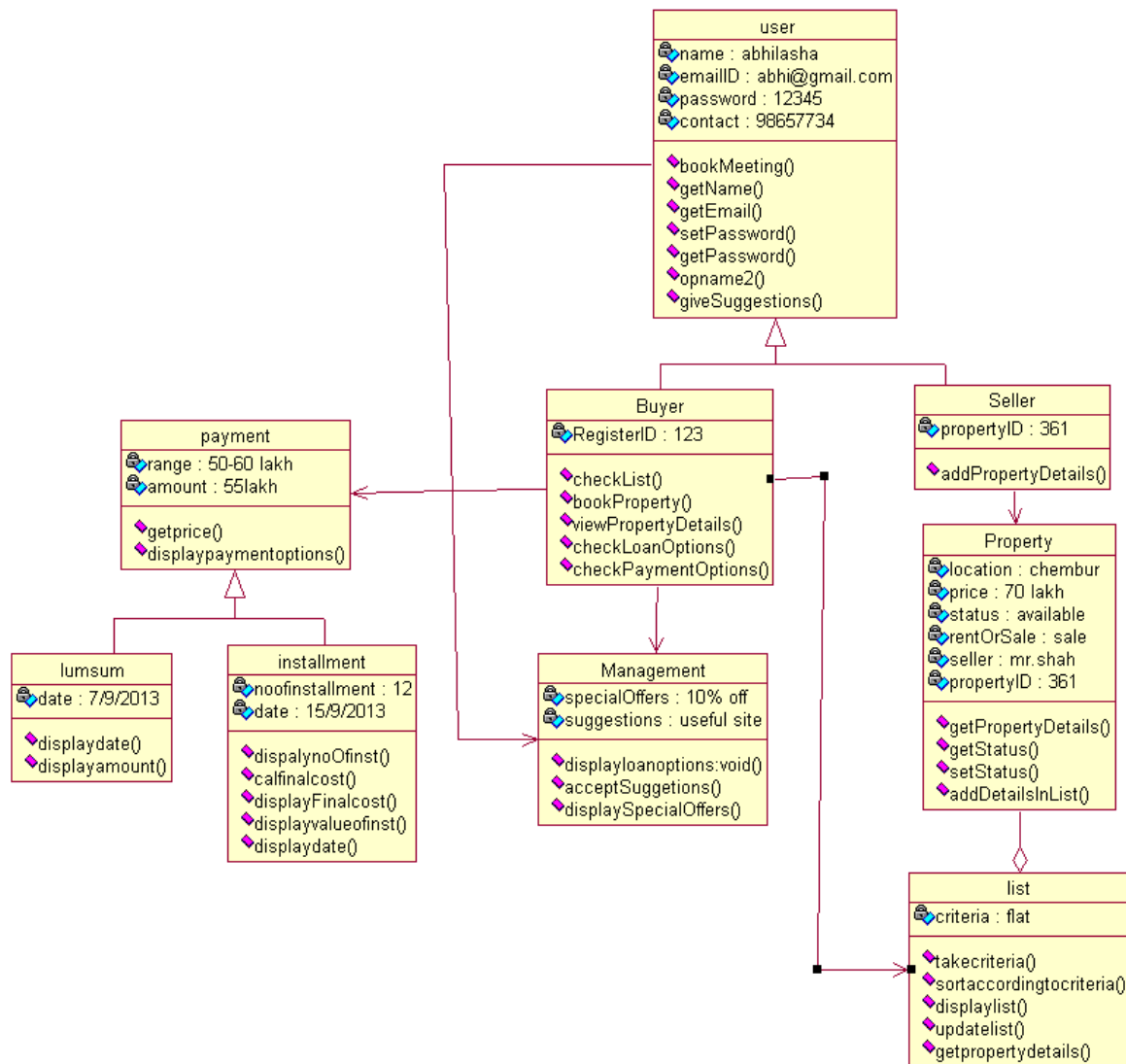- System should be available 24*7.

Exp. 3: USE CASE DIAGRAM
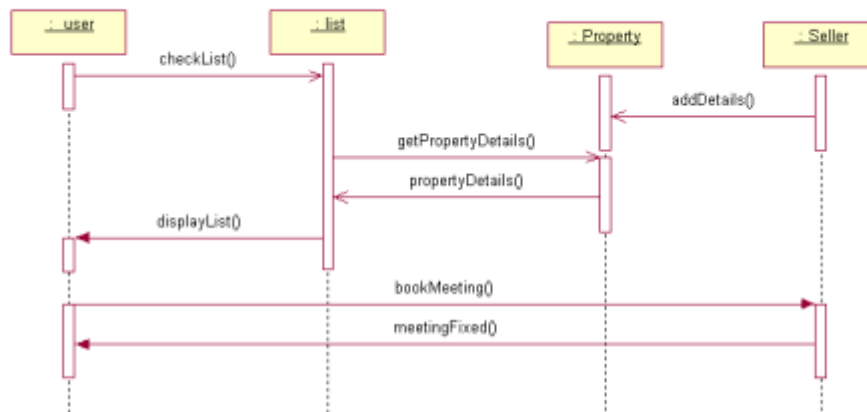
Exp.4: STRUCTURAL DIAGRAM

CLASS DIAGRAM:

OBJECT DIAGRAM:

user
- name : abhilasha
- emailID : abhi@gmail.com
- password : 12345
- contact : 98657734
- bookMeeting()
- getName()
- getEmail()
- setPassword()
- getPassword()
- opname2()
- giveSuggestions()

payment
- range : 50-60 lakh
- amount : 55lakh
- getprice()
- displaypaymentoptions()

Buyer
- RegisterID : 123
- checkList()
- bookProperty()
- viewPropertyDetails()
- checkLoanOptions()
- checkPaymentOptions()

Seller
- propertyID : 361
- addPropertyDetails()

Property
- location : chembur
- price : 70 lakh
- status : available
- rentOrSale : sale
- seller : mr.shah
- propertyID : 361
- getPropertyDetails()
- getStatus()
- setStatus()
- addDetailsInList()

lumsum
- date : 7/9/2013
- displaydate()
- displayamount()

installment
- noofinstallment : 12
- date : 15/9/2013
- dispalynoOfinst()
- calfinalcost()
- displayFinalcost()
- displayvalueofinst()
- displaydate()

Management
- specialOffers : 10% off
- suggestions : useful site
- displayloanoptions:void()
- acceptSuggetions()
- displaySpecialOffers()

list
- criteria : flat
- takecriteria()
- sortaccordingtocriteria()
- displaylist()
- updatelist()
- getpropertydetails()

Exp.5: INTERACTION DIAGRAM

SEQUENCE DIAGRAM:
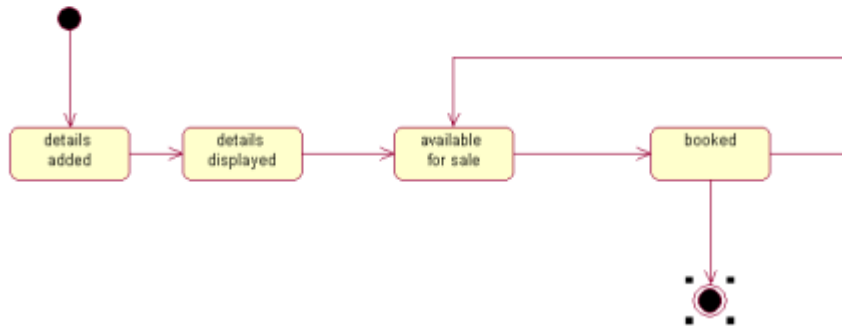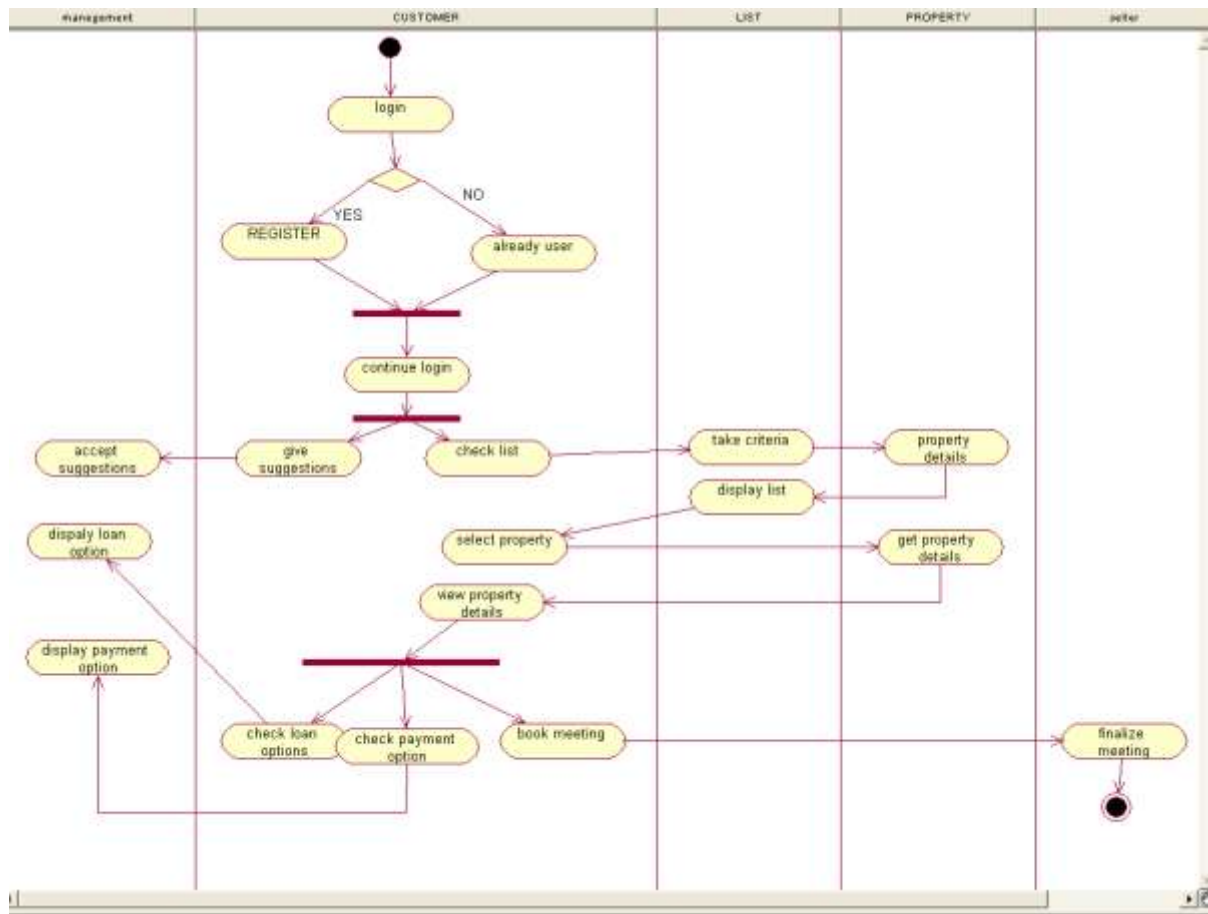
COLLABORATION DIAGRAM:
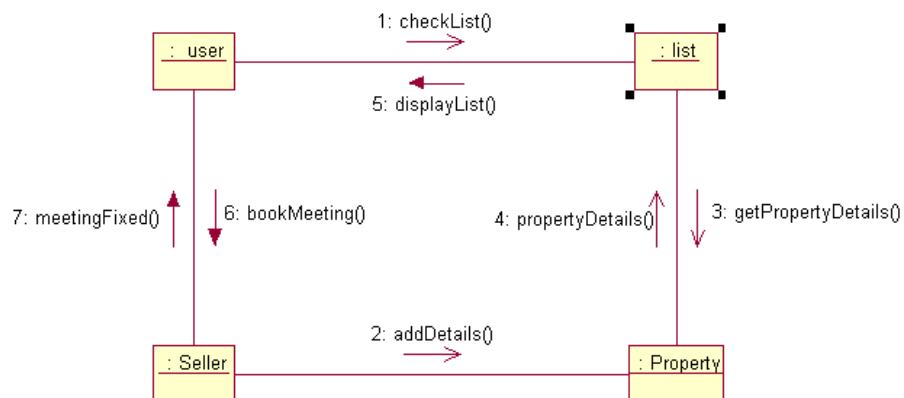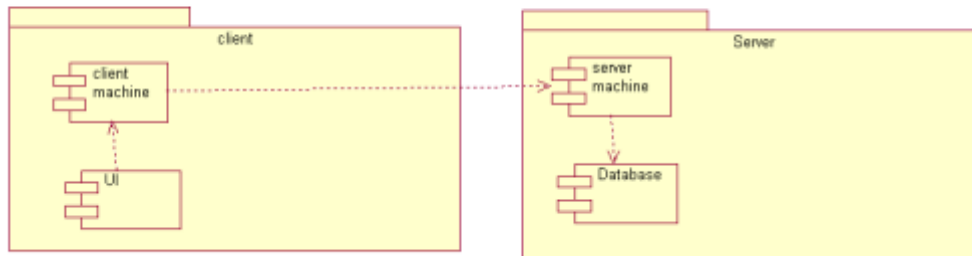
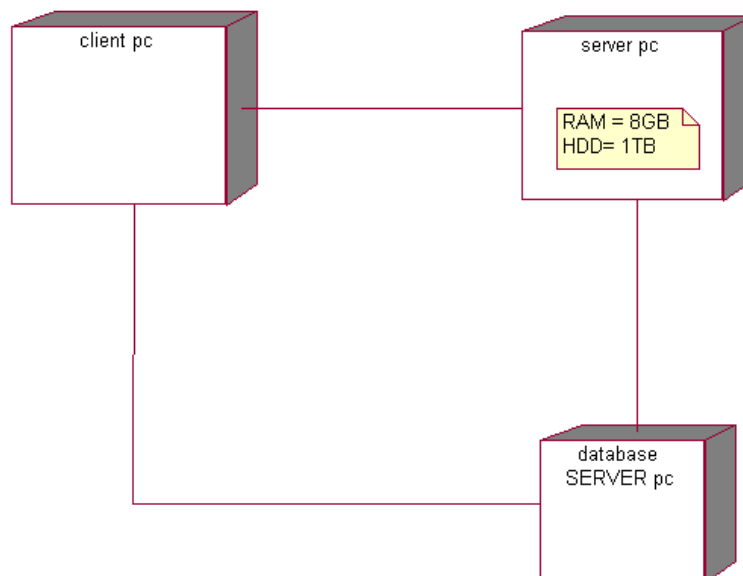# Exp.6: BEHAVIORAL DIAGRAM

STATE DIAGRAM:

ACTIVITY DIAGRAM:

Exp.7: ARCHITECTURAL DIAGRAM

COMPONENT DIAGRAM:

DEPLOYMENT DIAGRAM:

Exp.8: OBJECT MODEL TO DATABASE SCHEMA

INHERITANCE

Property

NAME	location	ID	TYPE	STATUS	OWENER	PRICE
AJAY	ANDHERI	D123	RENT	AVAILABLE	ABHILASHA	40,000
ASHOK	MULUND	D456	SALE	SOLD	CHARMI	50LAKHS

NOTE: ID is the primary key

MANY TO MANY RELATIONSHIP

CUSTOMER

NAME	EMAIL	CUSTOMER ID
PINKY	PINKY@GMAIL.COM	V85
MINKY	MINKY@HOTMAIL.COM	V86

NOTE: CUSTOMER ID is the primary key

SELLER

NAME	EMAIL	SELLER ID	PROPERTY
DR.PATEL	PATEL@YAHOO.COM	D78	PARADISE
DR.SMITA	SMITA@GMAIL.COM	D83	TAPASYA

NOTE: SELLER ID is the primary key

LINK TABLE

CUSTOMER ID	SELLER ID
D78	V85
D83	V86

Exp.9: USER INTERFACE DESIGNE

PRINCIPLES APPLIED IN USER INTERFACE:

1. Do not rely on usability guidelines – always test with users.
2. Base UI design on user task.
3. Ensure that the sequence of action to achieve a task are as simple as possible.
4. Ensure that user always knows what he or she can and should do next.
5. Provide good feedback encoding techniques.
6. User understandable encoding techniques.
7. Consider the needs of different groups of user.
8. Be consistent.

Exp.10: DEVELOPE THE TEST CASES FOR THE SYSTEM

TEST CASE ID	DESCRIPTION	INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
Case 1.1: Case 1.2:	User login	1: Username 2:Password	Appropriate message for invalid user Valid user should be directed to intended page after logging	Message genearted for invalid user Directed to intended page after logging	Unsuccessful Successful
Case2:	User Home page	Select the option to proceed	Test case would open the appropriate page as per option selected by user	Displays desired page	Successful
Case 3.1	Check list	Select criteria	Will display criteria.	Options for criteria displayed.	Successful

Case 3.2	Display lists		Lists should be displayed according to criteria	Lists should be displayed according to criteria	Successful
Case 4	Special offers		Special offers should be displayed	Special offers data displayed.	Successful
Case 5	Loan options		Loan options details to be displayed	Loan options information displayed.	Successful

Case 6.1	Suggestion	Enter suggestions text area	Suggestions should be taken.	Suggestions entered and submitted.	Successful
Case 6.2		click on submit.	Suggestions should be sent to server	Not sent to the server	Unsuccessful

JAVA IMPLEMENTATION

```java
import java.util.*;



class  Customer
{
static String name, email, password,
userID;
public Customer()  //constructor
{}
public static void login()
{
Scanner sc=new Scanner(System.in);
System.out.println("Enter
else
System.out.println("incorrect ID or
password! please retry. \n new
member?  register !");
}
public static void register()
{
Scanner sc=new Scanner(System.in);
System.out.println("Enter the
emailed:");
email=sc.next();
System.out.println("Select the
UserID:");
userID=sc.next();
System.out.println("Enter the
password:");
password=sc.next();
System.out.println("ReEnter the
password:");
String pass=sc.next();
```

```java
if(pass.equals(password))
{System.out.println("Registration
complete");
System.out.println();
System.out.println();}
else
{System.out.println("ReEnter
password correctly!:");
pass=sc.next();}
}

public static void giveSuggestion()
        //Ready
{
Management mgmt=new
Management();
Scanner sc=new Scanner(System.in);
System.out.println("Enter your
Suggestion:");
String sugg=sc.next();
mgmt.acceptSuggestions(sugg);
}
}


class Buyer
{
int registerID;
public Buyer()        //constructor
{}
public static void checkList()
        //Ready
{
List li=new List();
li.displayList();
}


public static void checkLoanOptions()
        //ready
{
Management mgmt=new
Management();
mgmt.displayLoanOptions();
}

}

class Management
{
int loanOptions;
String specialOffers, suggestions;
public Management()     //constructor
{}
public static void displayLoanOptions()
{System.out.println();
System.out.println("Loan options");
System.out.println("Buying a flat?
Floating home loan rate option ideal
now \n Prospective home loan
borrowers are in for lower home loan
interest rates \n in the near to medium
terms. \n The Reserve Bank of India
(RBI) bringing down the repo rate \n
and the cash reserve ratio (CRR) by 25
basis percentage points each signals\n
lower lending rates in the months
ahead. \n This headline inflation rate
too is coming down and this makes it
possible\n for the RBI to take a softer
stance on the Credit Policy .");
System.out.println();
System.out.println();
System.out.println();
}
```

```java
public static void
acceptSuggestions(String sugg)
       //Ready
{
String s=sugg;
System.out.println("Suggestion
noted, Thank you for your
feedback!");
}
}


class List
{
String criteria;
public List()  //constructor
{}
public static int selectCriteria()
{
Scanner sc=new Scanner(System.in);
int cr=3;
System.out.println("Select criteria:");
System.out.println("1. To buy. \n 2.
For rent. \n 3. All.");
int chcr=sc.nextInt();
switch(chcr)
{
case 1:
{cr=1;
break;}
case 2:
{cr=2;
break;}
case 3:
{cr=3;
break;}
}
return cr;
}
```

```java
public static void displayList()
{
Property prop=new Property();
Scanner sc=new Scanner(System.in);

int cr=selectCriteria();
if(cr==1)
{
System.out.println("* Andheri(W)-
Shastri Nagar...4BHK for more detail
enter 11.");
System.out.println("* Mulund(E)-
Mithagar Road... Recently renovated
with plush modern for more detail
enter 12.");
System.out.println("* Vileparle(E)
...5BHK for more detail enter 13.");
System.out.println("*
Powai/Sakinaka...4BHK for more detail
enter 14.");
System.out.println("* Kandivali...Good
location for more detail enter 15.");
int propID=sc.nextInt();
prop.getPropertyDetails(propID);
}
else if(cr==2)
{
System.out.println("* Vasai
Road...3BHK on rent for more detail
enter 21.");
System.out.println("* Mulund(E)-
V.P.Road... 2BHK on rent  for more
detail enter 22.");
System.out.println("* Thane(E) ...1BHK
on rent for more detail enter 23.");
System.out.println("*
Bhandup(w)...2BHK on rent for more
detail enter 24.");
```

```java
System.out.println("*
Dadar(E)...3BHK on rent for more
detail enter 25.");
int propID=sc.nextInt();
prop.getPropertyDetails(propID);
}
else if(cr==3)
{
System.out.println("* Andheri(W)-
Shastri Nagar...4BHK for more detail
enter 11.");
System.out.println("* Mulund(E)-
Mithagar Road... Recently renovated
with plush modern for more detail
enter 12.");
System.out.println("* Vileparle(E)
...5BHK for more detail enter 13.");
System.out.println("*
Powai/Sakinaka...4BHK for mor detail
enter 14.");
System.out.println("*
Kandivali...Good location for more
detail enter 15.");
System.out.println("* Vasai
Road...3BHK on rent for more detail
enter 21.");
System.out.println("* Mulund(E)-
V.P.Road... 2BHK on rent  for more
detail enter 22.");
System.out.println("* Thane(E)
...1BHK on rent for more detail enter
23.");
System.out.println("*
Bhandup(w)...2BHK on rent for more
detail enter 24.");
System.out.println("*
Dadar(E)...3BHK on rent for more
detail enter 25.");
int propID=sc.nextInt();
prop.getPropertyDetails(propID);
```

```java
}


}


}




class Property
{
String name, location, ownerName,
status, type;
int price, propertyID;
public Property()
{}

public static void getPropertyDetails(int
propID)
{
int id=propID;
System.out.println();
System.out.println("Details not
available for property with ID "+id);
System.out.println();
System.out.println();
}


}




class PropertyMgmtSyst
{
public static void main(String args[])
{
Customer cust=new Customer();
Buyer buy=new Buyer();
```

```java
Property prop=new Property();
Management mgmt=new
Management();
List li=new List();


int ch;
Scanner sc=new Scanner(System.in);

System.out.println("Welocome to
ABHICHAR Property deals!!");
do{
System.out.println("Menu:");
System.out.println("1.Login");
System.out.println("2.Not a
Member!.. Register");
System.out.println("3.Propery List");
System.out.println("4.Check Loan
Options");
System.out.println("5.Give
suggestions");
System.out.println("6.Exit");
ch=sc.nextInt();

switch(ch)
{
case 1:
{cust.login();
break;}
case 2:
{cust.register();
break;}
case 3:
{buy.checkList();
break;}
case 4:
{buy.checkLoanOptions();
break;}
case 5:
{cust.giveSuggestion();
break;}
case 6:
break;
}
}while(ch!=6);
}
}
```