TEAM ID 6

ASSIGNED TA: RADWA MOUSTAFA



# PROPERTY FINDER

DBMS PROJECT - PHASE

#### **TEAM MEMBERS:**

- سیف الدین حاتم احمد محمد SOFTWARE 2021170814 مریم علاءالدین محمود الزهار 2021170833 ماید مصطفی ایمن عبدالفتاح أبوالاسعاد 2021170843 احمد مصطفی ایمن عبدالفتاح الحمد الحمد

- محمود سید محمود عابدین 2021170832 ۱۸
- دینا سعید محمد محمود BIO 2021170951
- محمد شریف عبد الصادق صفا BIO 2021170954 -
- ملك خالد حافظ حافظ احمد خطاب BIO 2021170955

## **DESCRIPTION:**

## What is Property Finder?

Property finder is the Leading Real Estate Marketplace. It allows the client to Search Over 100K Listings of properties for Sale And Rent. It allows agents to offer available properties and enables the users to search and find their ideal property that meets their needs. Users can also report issues that belong to specific properties and also favor a property that matches their needs.

For the Property Finder Database System, there are four major canvases:

- Properties Canvas
- Agents Canvas
- Search Canvas
- Reports Canvas

## IMPLEMENTING TABLES USING SQL:

To create these canvases, we create the database tables in this order:

- 1.Agent\_
- 2.Agent\_Phone
- 3.User
- 4. User\_Phone
- 5. Property
- 6. Report\_Data
- 7. Report
- 8. Search
- 9. Favorites

Also, we created a sequence to increase the RID number.

10. RID / Report ID\_SEQUENCE

As well as we considered these assumptions in the creation process:

- The Same ssn can be used in 2 different accounts if one of them is agent acc. and the other is user ACC.
- It's not allowed to create a report many times if the report has the same (ssn, ref, category, and different comments)

## **SQL** code:

```
_____Agent____
create table Agent_(
Agent_SSN
            number(14) constraint AS_PK primary key constraint AS_CH
check (Agent_SSN between 200000000000 and 400000000000),
email char(30) constraint AE_NN not null constraint AE_UK unique,
password_ varchar(20) constraint APW_NN not null,
First_Name char(20) constraint AFN_NN not null,
Middle_Name char(20) constraint AMN_NN not null,
Last_Name char(20) constraint ALN_NN not null
);
create table Agent_Phone(
 Agent_SSN number(14) constraint ASSN_FK references
Agent_(Agent_SSN),
Phone varchar2(14) constraint AP_UK unique,
Constraint A_P_CMP Primary Key(Agent_SSN, Phone)
);
```

```
/*_____User____
create table User_ (
User_SSN
            number(14) constraint US_PK primary key constraint US_CH
check (User_SSN between 2000000000000 and 4000000000000),
email char(30) constraint UE_NN not null constraint UE_UK unique,
password_ varchar(20) constraint UPW_NN not null,
First_Name char(20) constraint UFN_NN not null,
Middle_Name char(20) constraint UMN_NN not null,
Last_Name char(20) constraint ULN_NN not null);
create table User_Phone (
User_SSN number(14) constraint USSN_FK references User_(User_SSN),
User_Phone varchar2(14) constraint UP_UK unique,
constraint U_P_CMP primary key (User_SSN, User_Phone) );
/*____Property_____
create table PROPERTY(
Reference_ varchar2(15) constraint R_PK PRIMARY KEY,
Location_ varchar2(80) constraint L_NN not null,
Price
      number(10) constraint P_NN not null constraint P_CH check (price
> 0),
area number(5) constraint A_NN not null,
Description varchar2(800),
Status char(9) constraint Stt_NN not null,
Listing_Date date,
Listed_for number(4),
Property_Type char(20)constraint PT_NN not null,
Agent_SSN number(14) constraint AS_FK references Agent_(Agent_SSN),
Offer_Type char(12) constraint OT_NN not null);
```

```
/*_____Other____
create table Search(
User_SSN number(14) constraint S_SSN_FK references User_(User_SSN),
Search_Query varchar2(50),
Query_Date date,
constraint SSN_SQ_CMP primary key(User_SSN, Search_Query, Query_Date) );
create table REPORT_DATA(
RID
         number(10) constraint RID_PK primary key,
REP_Date date,
category_ varchar2(40) constraint C_NNnot null);
create table REPORT(
USER_SSN number(14) constraint R_SSN_FK references USER_(User_SSN),
Reference_ varchar2(15) constraint R_REF_FK references
Property(Reference_),
RID
         number(10) constraint RID_FK references REPORT_DATA(RID),
Category_ varchar2(40) constraint CA_NN not null,
Comment_ varchar2(500) not null,
constraint SSN_REF_C_CMP primary key(USER_SSN, Reference_,RID) );
create table FAVORITES(
USER_SSN number(14) constraint F_SSN_FK references User_(User_SSN),
Reference_ varchar2(15) constraint F_REF_FK references
Property(Reference_),
constraint SSN_REF_CMP primary key(USER_SSN, Reference_));
              _____End Of Tables_____
```

/**/
create sequence RID_SEQ
start with 1
increment by 1
maxvalue 999999999
/**/
/**/
ALTER TABLE user_phone MODIFY user_phone VARCHAR(11) NOT NULL;
alter table property
drop column listed_for;
ALTER TABLE AGENT_
ADD Gender char(1);
ALTER TABLE USER_
ADD Gender char(1);
/**/
/* Insertion Statements for AGENT table */
/*nsertion Statements for AGENT_ table*/
insert into agent_ values(2000000000000, 'Mahmoud@gmail.com',
'lklklk', 'Mahmoud', 'Sayed', 'Abdein', 'M')
insert into agent_ values(20000000000001, 'Muaaz@gmail.com', '2l2l2l2l',
'Muaaz', 'Sayed', 'Mahmoud', 'M')
insert into agent_ values(2000000000000, 'Marwa@gmail.com',
'3m3m3m3m', 'Marwa', 'Ahmad', 'Muhammad', 'F')
insert into agent_ values(20000000000003, 'Khalid@gmail.com', '4n4n4n4n',
'Khalid', 'Bilal', 'Saleh', 'M')
insert into agent_ values(2000000000004, 'Sayed@gmail.com', '5p5p5p5p',
'Sayed', 'Mahmoud', 'Hussein', 'M')

### /\*Insertion Statements for AGENT\_PHONE table\*/

insert into Agent\_Phone values(2000000000000, 01060486231) insert into Agent\_Phone values(2000000000000, 01148923108) insert into Agent\_Phone values(2000000000001, 01293104823) insert into Agent\_Phone values(2000000000000, 01142984102) insert into Agent\_Phone values(2000000000003, 01148928121)

#### /\*Insetion Statements for PROPERTIES\*/

insert into Property values('Ref#1', 'Cairo', 1000000, 170, 4, 2, 'A vast flat with a lot of surrounding services', 'Y', '12-DEC-22', 'Flat', 20000000000004, 'Rent') insert into Property values('Ref#2', 'Cairo', 20000000, 200, 5, 3, 'A luxurious Villa with a fine looking garden', 'N', '14-JAN-02', 'Villa', 2000000000004, 'Buy')

insert into Property values('Ref#3', 'Alexandria', 3000000, 190, 5, 2, 'An old villa with a fine looking Lake', 'N', '02-JUN-19', 'Villa', 20000000000000, 'Buy') insert into Property values('Ref#4', 'Aswan', 400000000, 250, 6, 3, 'A big Place that used to be a company', 'Y', '30-JUL-20', 'Corporate Building', 2000000000000, 'Buy')

insert into Property values('Ref#5', 'Giza', 35000000, 220, 5, 3, 'No Available Data', 'Y', '24-MAY-14', 'Other', 2000000000003, 'Buy')

## /\*Insertion Statements for USER\_\*/

insert into USER\_ values(26489103666540, 'Ahmed@abo.com', 'Podcast1#', 'Ahmed', 'Mostafa', 'Aboalesaad', 'M'); insert into USER\_ values(30212291600052, 'Amr.Shoukry@gmail.com', 'Messi@Argentina\*', 'Amr', 'Mohamed', 'Shoukry', 'M'); insert into USER\_ values(26489400665540, 'Maha\_Albetar@hotmail.com', 'gdic&\_v', 'Maha', 'Elsayed', 'Albetar', 'F'); insert into USER\_ values(36446103666569, 'El\_Osta@YAYA.com', 'KholiolsGood', 'Abdo', 'Abdo', 'El-balf', 'M'); insert into USER\_ values(26489156410250, 'Marwa.Ghoneim@gmail.com', 'alwaysup:)', 'Marwa', 'Mostafa', 'Ghoneim', 'F'); insert into USER\_ values(20107688104388, 'BolBol@gmail.com', 'IshouldLive\$', 'Ahmed', 'Samy', 'Salama', 'M'); insert into USER\_ values(20358399640633, 'AbdulRahman@gmail.com', 'soi\*%d', 'Abdulrahman', 'Mohamed', 'AbdelSalam', 'M');

```
insert into USER_ values(32850206833542, 'Dina.Aboalesaad@yahoo.com', 'fashionallTheway&', 'Dina', 'Mostafa', 'Aboalesaad', 'F'); insert into USER_ values(21348350369675, 'Tasneem_Almokadem@gmail.com', 'coz7dl', 'Tasneem', 'Mohamed', 'Almokadem', 'F'); insert into USER_ values(35402986558800, 'Omar.Samir@hotmail.com', 'savethe$earth', 'Omar', 'Samir', 'Bedair', 'M');
```

#### /\*Insertion Statements for USERS\_PHONES\*/

```
insert into USERS_PHONES values(26489103666540, 01025365907) insert into USERS_PHONES values(26489103666540, 01110464701); insert into USERS_PHONES values(30212291600052, 01127677059); insert into USERS_PHONES values(30212291600052, 01065978169); insert into USERS_PHONES values(26489400665540, 01598460053); insert into USERS_PHONES values(26489400665540, 01269451111); insert into USERS_PHONES values(36446103666569, 01515151515);
```

#### \*Insertion Statements for SEARCH\*/

insert into SEARCH values(26489103666540, 'Nasr City Flats', '15-MAY-2019'); insert into SEARCH values(32850206833542, 'Nasr City Duplex', '01-APR-2020'); insert into SEARCH values(20358399640633, '5th settlement villahs', '29-DEC-2021');

insert into SEARCH values(35402986558800, 'Abbaseya residental Buildings', '19-JUN-2022');

insert into SEARCH values(26489156410250, 'cheap flats', '06-Feb-2017');

#### /\*Insertion Statements for REPORT\_DATA\*/

```
insert into report_data values(0, '12-DEC-22', 'inaccurate price'); insert into report_data values(1, '13-DEC-22', 'No property details'); insert into report_data values(2, '14-DEC-22', 'No response from broker'); insert into report_data values(3, '15-DEC-22', 'No property details'); insert into report_data values(4, '16-DEC-22', 'poorly typed description'); insert into report_data values(5, '17-DEC-22', 'poorly typed description');
```

### /\*Insertion Statements for REPORT\*/

insert into REPORT values (26489103666540, 'Ref#1', 5, 'inaccurate price', 'No other comments');

insert into REPORT values (26489103666540, 'Ref#1', 5, 'poorly typed description', 'no comments');

insert into REPORT values(30212291600052, 'Ref#2', 1,'No property details', 'need to know more details');

insert into REPORT values (26489400665540, 'Ref#3', 2, 'No response from broker', 'this broker doesn't respond anymore and I need this property'); insert into REPORT values (36446103666569, 'Ref#4', 3, 'No property details', 'there is no enough details');

insert into REPORT values (26489156410250, 'Ref#5', 4, 'poorly typed description', 'description is too short');

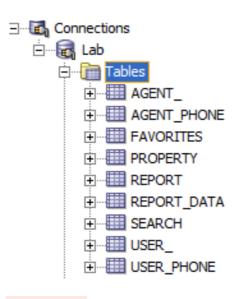
### /\*Insertion Statements for Favorites\*/

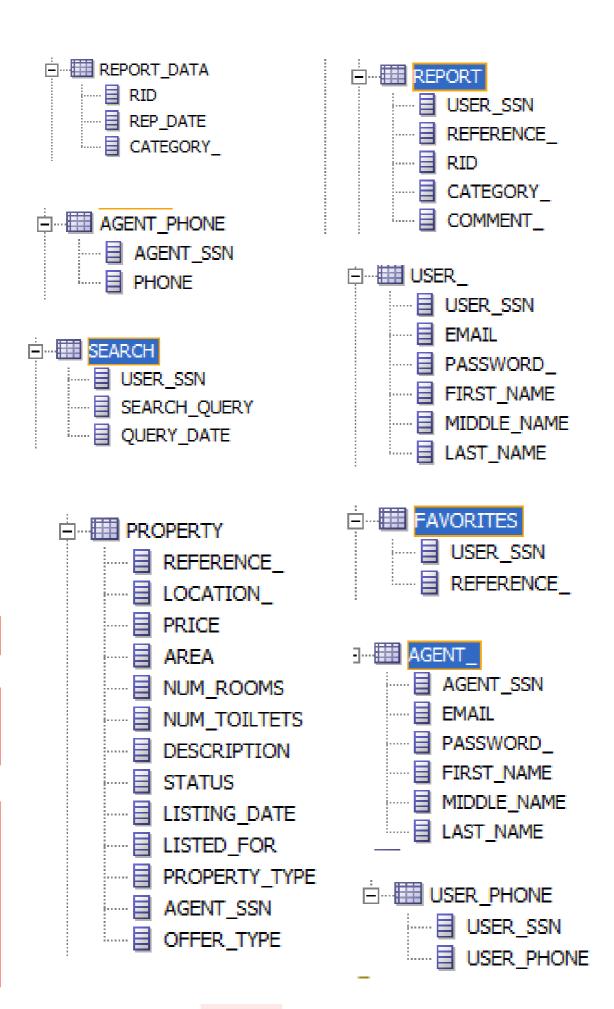
insert into FAVORITES values(26489103666540, 'Ref#1'); insert into FAVORITES values(30212291600052, 'Ref#2'); insert into FAVORITES values(26489400665540, 'Ref#3'); insert into FAVORITES values(36446103666569, 'Ref#4'); insert into FAVORITES values(35402986558800, 'Ref#4'); insert into FAVORITES values(26489156410250, 'Ref#5'); insert into FAVORITES values(26489156410250, 'Ref#6')04:18 AM

## Source code file:

https://drive.google.com/file/d/1XdX96P8pkXQolW7T2I5NsSjmXqaH84lK/view?usp=share\_link

## **Screenshots for tables implementations:**





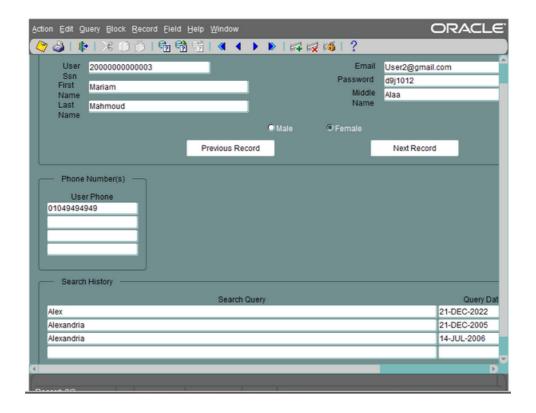
## FORM CREATION:

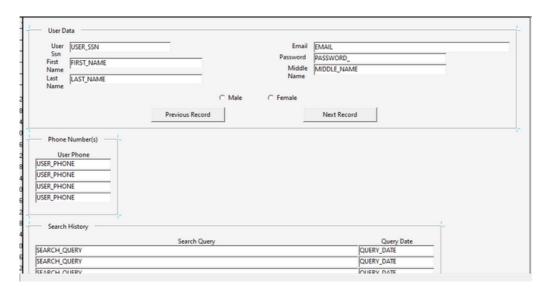
# 1- IMPLEMENTING USER/SEARCH CANVAS:

This canvas includes blocks related to the User & Search tables. This canvas utilizes the following:

- radio button
- triggers
- master detail

## **Screenshots for User/Search Canvas:**





#### **Buttons:**

```
Ö-□PUSH_BUTTON15

Ö-Triggers

□ → WHEN-BUTTON-PRESSED

Ö-□ITEM16

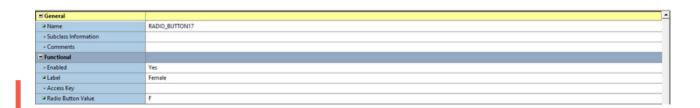
Ö-Triggers

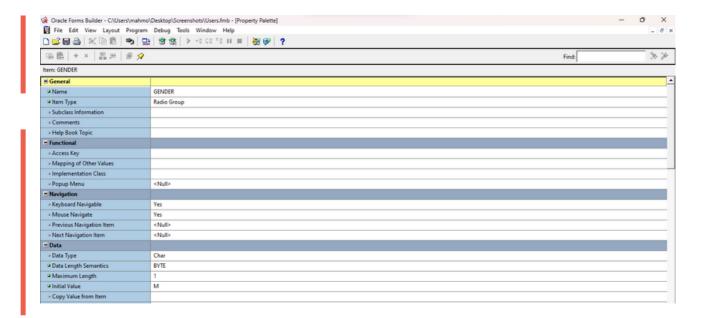
□ → WHEN-BUTTON-PRESSED
```

#### Gender:

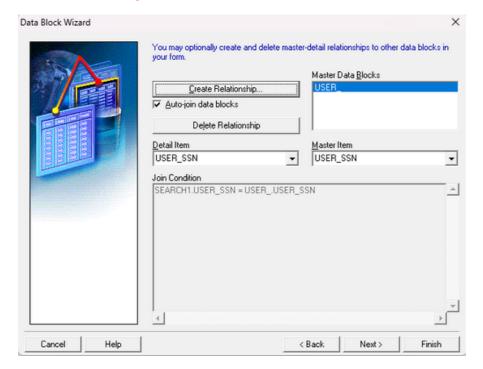


≝ General	
<sup>2</sup> Name	RADIO_BUTTON18
Subclass Information	
→ Comments	
<b>≡</b> Functional	
→ Enabled	Yes
□ Label	Male
→ Access Key	
☐ Radio Button Value	M

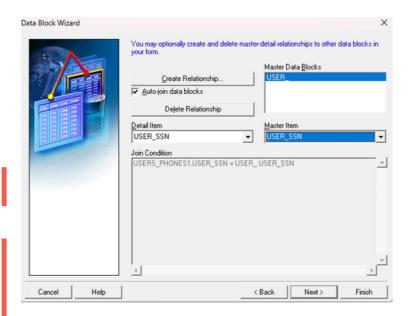




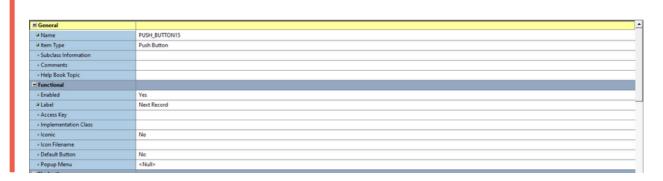
## user to search join condition



## user to user\_phone joing condition:

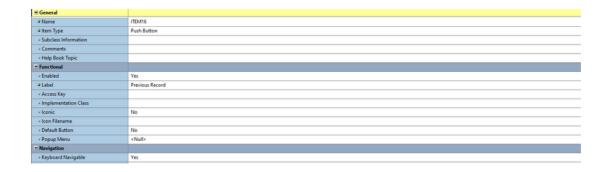


## Next record button 1:



#### Previous record button 1&2:





## The source file of canvas .fmb:

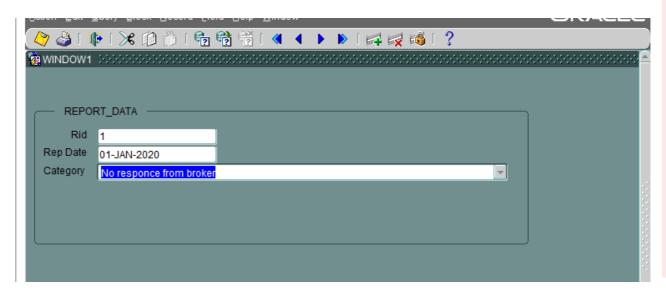
https://drive.google.com/file/d/IODKHsebMgCifazA532OfMGxR3jBXLST4/view?usp=sharing

## 2- IMPLEMENTING REPORT CANVAS:

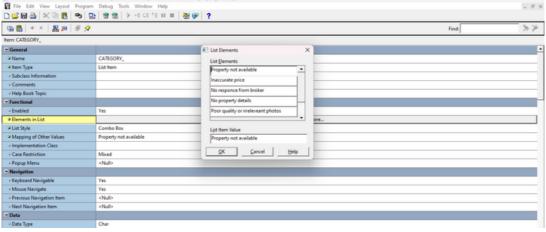
This canvas includes blocks related to the Report & Report Data tables. This canvas utilizes the following:

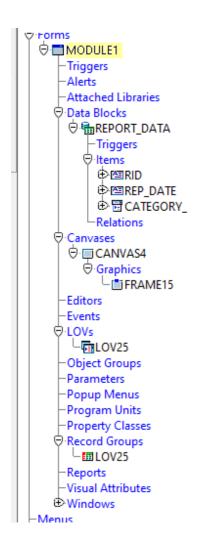
- Combo box
- List of Values

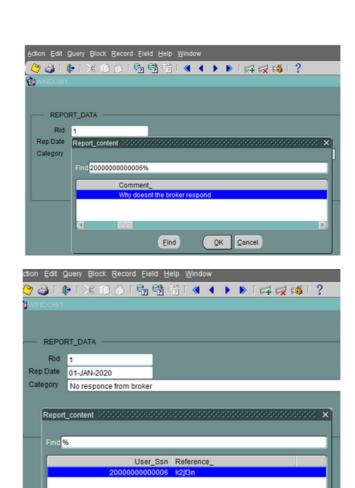
## **Screenshots for Report Canvas:**



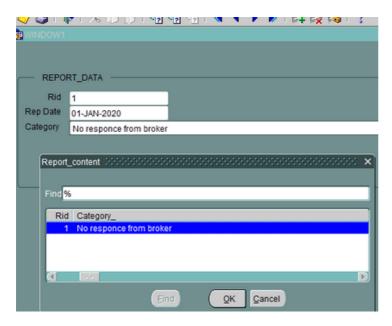








Cancel



## The source file of canvas .fmb:

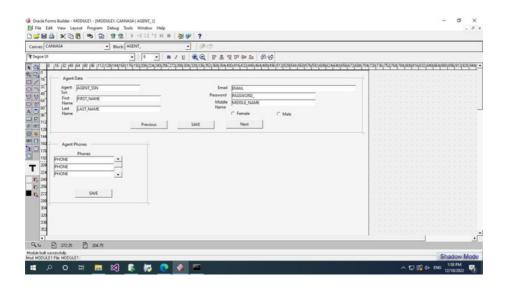
https://drive.google.com/file/d/IIvvgyXzP5ON8bUg8tvNqbtgkg1-iUJ1q/view?usp=sharing

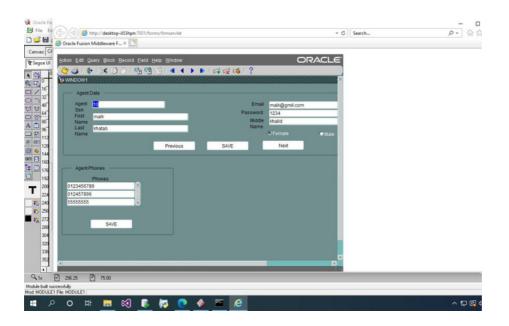
## 3- IMPLEMENTING AGENT CANVAS:

This canvas includes blocks related to the Agent phone & Agent Data tables. This canvas utilizes the following:

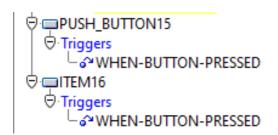
- radio button
- triggers
- master detail

## **Screenshots for Agent Canvas:**



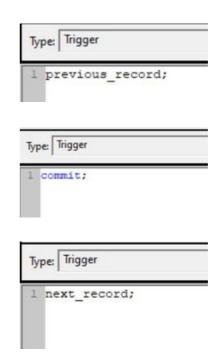


#### **Buttons:**

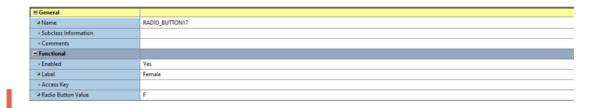


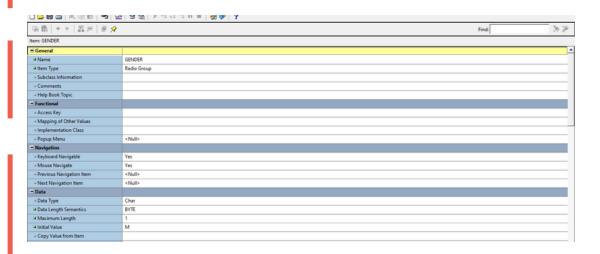
#### Gender:











## The source file of canvas .fmb:

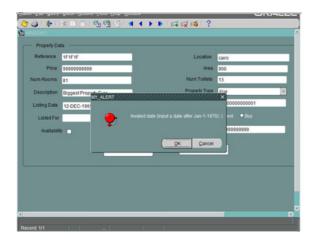
https://drive.google.com/file/d/1qR7631liO5ovcS\_4cVec0VUvRHi43Ny\_/view?usp=sharing

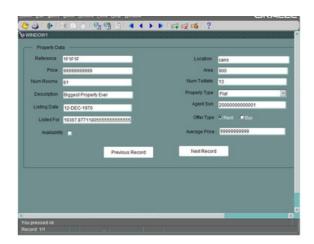
## 4- IMPLEMENTING PROPERTY CANVAS:

This canvas includes blocks related to the Proberties tables. This canvas utilizes the following:

- radio buttons
- push buttons
- check box
- formula
- summary
- alert
- combo box

## **Screenshots for Agent Canvas:**









## Listing data alert:

```
Declare

b number;

Begin

If :property.Listing_Date < '01-JAN-1970' then

b:= show_alert('My_Alert');

If b = 88 then

Message('You pressed ok');

Message('You pressed ok');

Raise form_trigger_failure;

Elsif b = 89 then

Message('You pressed ok');

Message('You pressed ok');

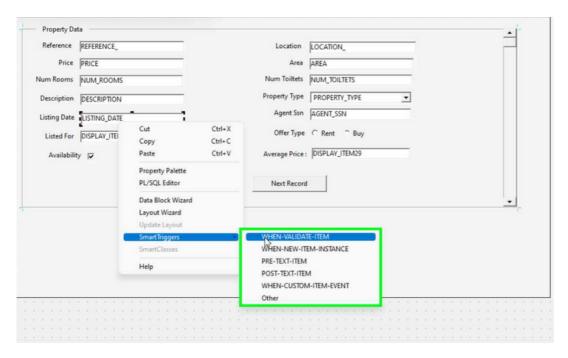
Message('You pressed ok');

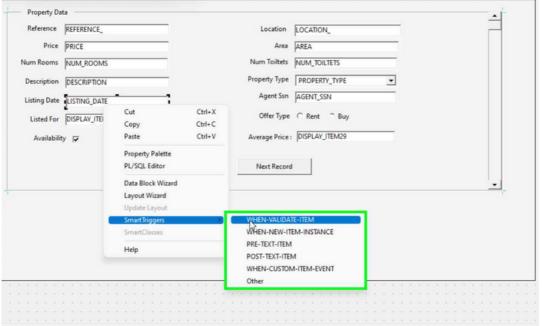
End if;

End if;

End;
```

```
1 Declare
2 b number;
3 Begin
4 If :property.Listing_Date < '01-JAN-1970' then
5 b:= show_alert('My_Alert');
6 If b = 88 then
7 Message('You pressed ok');
8 Message('You pressed ok');
9 Raise form_trigger_failure;
10 Elsif b = 89 then
11 Message('You pressed ok');
12 Message('You pressed ok');
13 End if;
14 End if;
15 End;
```





#### AVAILABILITY\_CHECKBOX

Seneral	
Name .	AVAILABLE
Item Type	Check Box
Subclass Information	
Comments	
Help Book Topic	
Functional	
∘ Enabled	Yes
Label	
Access Key	
Implementation Class	
■ Value when Checked	Υ
■ Value when Unchecked	N
Check Box Mapping of Other Values	Unchecked
Popup Menu	<null></null>
Navigation	
Keyboard Navigable	Yes
Mouse Navigate	Yes
Previous Navigation Item	<null></null>
Next Navigation Item	<null></null>
Data	
Data Type	Char
Data Length Semantics	BYTE
Maximum Length	9
☑ Initial Value	Yes
Copy Value from Item	
Synchronize with Item	<null></null>

## SUMMARY\_AVERAGE\_PRIVE:

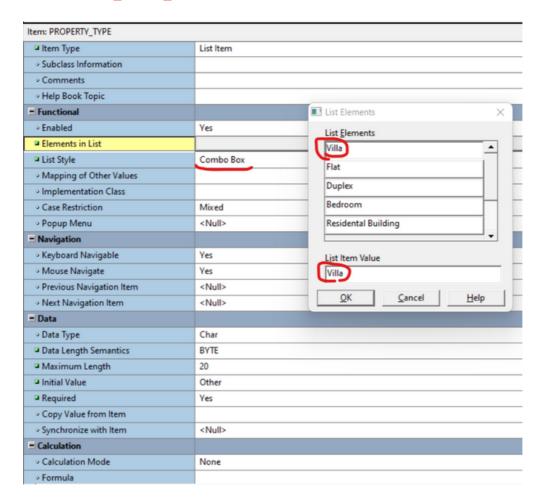
☑ Item Type	Display Item
∘ Subclass Information	
∘ Comments	
→ Help Book Topic	
■ Functional	
Justification	Start
Popup Menu	<null></null>
■ Navigation	
Previous Navigation Item	<null></null>
<ul> <li>Next Navigation Item</li> </ul>	<null></null>
= Data	
□ Data Type	Number
Data Length Semantics	Null
Maximum Length	30
Initial Value	
→ Format Mask	
Copy Value from Item	
Synchronize with Item	<null></null>
■ Calculation	
□ Calculation Mode	Summary
∘ Formula	
□ Summary Function	Avg
■ Summarized Block	PROPERTY
☐ Summarized Item	PRICE
■ Records	
<ul> <li>Current Record Visual Attribute Group</li> </ul>	<null></null>
Distance Between Records	0
Number of Items Displayed	0

#### Item: AVAILABLE **=** General AVAILABLE ☐ Item Type Check Box Subclass Information Comments Help Book Topic **=** Functional • Enabled Yes Label Access Key Implementation Class Value when Checked N Value when Unchecked Check Box Mapping of Other Values Unchecked <Null> Popup Menu ■ Navigation Keyboard Navigable Yes Mouse Navigate Yes Previous Navigation Item <Null> Next Navigation Item <Null> **≡** Data Data Type Char Data Length Semantics BYTE Maximum Length Initial Value Yes Copy Value from Item Synchronize with Item <Null> **■** Calculation

#### PROPERTY\_OBJECT\_NAVIGATOR

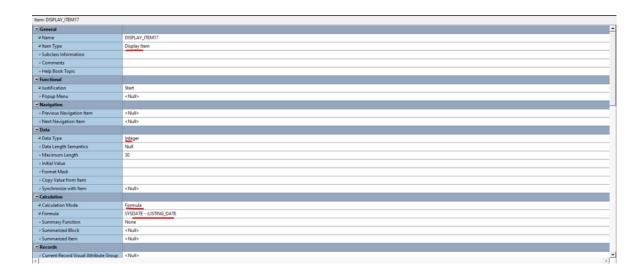


#### PROPERTY\_TYPE\_COMBOBOX



#### LISTED\_FOR





## The source file of canvas .fmb:

https://drive.google.com/file/d/1xweaOWfHwk48G85PD5c2wELR5q\_uPzwN/view?usp=sharing

## **SUMMARY:**

In our project, we utilize all the requirements in the canvases above.

## Link of All canvas together:

https://drive.google.com/drive/folders/ImmRXL61HuiyOcFQ7Thhg06itLvLfo-LE?usp=sharing

You can navigate our project through our website here:

https://dinasolitah.github.io/Property-Finder---DBMS-PROJECT/