#### A Property search and display widget (with maps)

General layout of the widget

|  |  |
| --- | --- |
| Search and list view area | Map |
| Table view | |

Figure 1.

We are looking to create a widget that will allow a user to search and view properties. Any real estate agent who wants to use this widget would sign up with us and we will assign that agent a key (called AID). The agent’s website will have a web page and on that web page there will be a src tag that will call our widget website using something like this.

Agent’s website page

<html>

.

.

.

<script src="http://WidgetWebsite.com/Mywidget.aspx?AID=<key></script>

.

.

.

</html>

When the widget is accessed, it would look at the AID key and match into our database and we will check to see if that agent is active and has come from a valid source.

If the agent is not active or wrong key, our widget would not do anything.

We can broadly divide the widget functionality into 11 sections.

1. Search
2. Results (listview)
3. Map (The properties would be plotted on the map. The user should also be able to draw a polygon on the map and those properties within that polygon would be shown)
4. Results (Tableview)
5. Detailed view
6. Property comparison
7. Agent showcase
8. Login (Facebook, yahoo or email)
9. Database
10. Facebook Operations (Share a property listing, link a property listing etc).
11. Realtor’s Favorites

**Please ignore the below section.**

**Ignore section begin.**

1. Search
2. Listview Results
3. Map
4. Table view
5. Detailed view
6. Sort
7. Draw polygon
8. Login
9. Mark as favorite or add note
10. Schedule a showing
11. Email a listing
12. Facebook, yahoo or gmail
13. Save search
14. Highlight selected
15. Open House
16. Showcase agent’s past deals
17. Reset search?
18. Foreclosures
19. Help ?
20. Sort
21. Hovering over a property in the Listview results shows that properties’ location in the map.
22. Clicking on the property in the map shows that property in the results as the first property and that will be highlighted in the results pane.

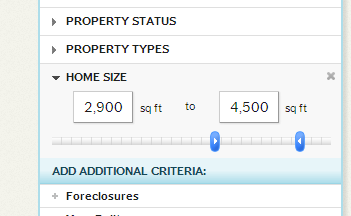
**Ignore section end.**

#### Section 1. Search

The search would allow the user to specify some parameters to search the properties. The search section would be on the left hand side of the page.

There are two sets of search params. First set is Address, zip, mls number, township, county and the second set is  Price,  Beds, Baths, Home Size , Lot Size,  Days Listed,  Year Built,  Price Drops,  Property Types,  Features,  Schools/ Districts,  Foreclosures,  Parking,  Property Status,  Photos,  Open Houses.

To conduct a search, any one of the params from the first set has to be specified. The params from the second set are optional. The user specifies a param from the first set and zero or more options from the second set and clicks Show me results and the results are plotted on the map. The view changes from the search to the Listview (see section 2) and the results are shown in a listview. The first property in the listview is highlighted in the list view (either by an arrow pointer or making the border of that listing in the listview a different color and that property would be highlighted on the map (to be demoed).

* 1. The Search functionality and the Map work hand in hand but sometimes they override each other. To be demoed.
  2. Users can choose additional options. When any of the options are chosen, those options would move to the top. To be demoed.
  3. There will be a Reset search button or link. Clicking on it will reset all the search params to their default and the view on the map would change to the default.
  4. Following are the Params from the second set.
     1. Price:- The user will specify a minimum and a maximum price. There will be two drop downs. First one would be minimum price and the second one would be max price. The first option in the minimum price drop down would be No Min. The first option in the max price dropdown would be No Max. The drop downs would show values from $5000 to $5 million in the increments of $5000. If the user chooses higher min price than the max price (say $15,000 min price and $3000 max price then on the click of the search button ignore the max price and change the max price to No Max and show the search result accordingly).
     2. Beds It should show a drop down and the first option would be Any. Then the options should be 1 or more, 2 or more, 3 or more till 7 and more.
     3. Baths It should show a drop down and the first option would be Any. Then the options should be 1 or more, 1.5 or more, 2 or more, 2.5 or more, 3 or more, 3.5 or more, 4 or more, 4.5 or more and 5 or more.
     4. Home Size should show not allow a person to type in. Please refer to the image below. We need something like this. So when the sliders are moved the values in the text box changes. 
     5. When the x is clicked the sliders and the text boxes would go away and it would show what was chosen. Lot Size Users can specify either sq.ft or acres to specify this. To be Demoed.
     6. Days Listed will use a slider.
     7. Year Built will use a slider.
     8. Price Drops will use a slider.
     9. Property Types will be a check box. Options would be Condo/Townhome or detached/single family. Users can choose both or anyone. By default both would be chosen.
     10. Features. The options are Fireplace, Gated Community, Hardwood Floors, Patio, Pool, Golf Course
     11. Schools / Districts. This will be a drop down where the user can start typing and when they see the school district they will choose it. To be Demoed.\*Foreclosures
     12. Parking. Show garage spaces and total spaces. Also should have check box for attached garages and detached garages.
     13. New listings (in the last so many days use a slider for days.
     14. Open houses Allow the user to choose a date range. As long as either dates are within the open house range, show it.
     15. Property Status. Active or sold

For the first time the search section is active. And nothing is chosen and the map shows the map of Philadelphia region.

#### Section 2. List view

The list view would appear on the same place as the search panel. The list view would list the properties in a view. For each property the below information should be shown

* Main photo, street address, price, lot size, sqft, no of beds, no of baths, year built. Along with that there will be a show details button which should be made prominent. Other buttons/links include Schedule a showing, get more info, share on facebook (refer to section 10), email this listing, save as favorite and add note.
  1. On the top of the list there will be a record counter which will tell the users how many properties are in the current list view. The view should be shown as one list (with scroll bars and not as prev next).
  2. Hovering over a property in the Listview results should show that properties’ location in the map. (To be demoed).
  3. The following are the conditions under which the list view would change.
     1. When the search button is clicked, the database would be searched for the properties that match the criteria and those properties would be shown in the list with the first property in that list highlighted and that property’s pushpin on the map show circles (to be demoed).
     2. When the map is moved or zoomed in or zoomed out, the properties that match the search criteria and that are within the current map area would be shown in the list view. The record counter would be updated and the first property in the list view would be highlighted and that property’s pushpin on the map would show circled.
     3. When a polygon or circle is drawn on the map the properties that match the search criteria and that are within the current map area would be shown in the list view. e.g. if let’s say the user typed in 19454 as the zip code in the search panel and clicked search. That will erase the polygon and the circle since the zip code may fall within or outside the boundaries of the polygon or circle. Vice-versa, drawing the polygon and circle it will erase any Address, zip or MLS search text box and it will say Current search is using the Map. The record counter would be updated and the first property in the list view would be highlighted and that property’s pushpin on the map would show circled.

2.4 When the show details button is clicked for a property, that properties pushpin would be highlighted on the map and the details of that property would be shown (To be demoed)

2.5 The user will have the ability to sort the listview by Highest Price, Lowest Price, Largest Price drop, Least beds, Most beds, Least baths, Most baths, Smallest Size, Largest Size, Smallest lot, Largest Lot, Newest, Oldest.

2.6 The user should be able to do following actions on the property. If any of the below functions are to be used, the user has to be first logged on. If he’s not logged on show a modal dialog box where the user will log on using facebook, yahoo or by registering an email. For more details see section 8 and 10.

Mark a property as favorite, add note, Schedule a showing, Email a listing or get additional details.

#### 3. Map

The map would always be seen and would be shown on the right side.

3.1 When the user specifies the address, zip or mls number and other search params and clicks search, any existing polygon or the circle would be removed and the properties that match the search criteria and that are within the current map area would be shown on the map with a pushpin for each of the properties and the first property in the listview will be highlighted on the map with a circle (To be demoed). The sold properties would be shown in a green or a different color. Also there should be a different icon for open house properties.

3.2 The user will have the ability to draw a polygon or a circle. (To be demoed). The user should be able to save that search as well. Refer to 2.3. When the user wants to save a polygon or a circle, and if the user is not logged on, prompt him to log on first.

3.3 Whenever the mouse hovers over a pushpin that property’s details will be shown which will include photo, price, lot, sqft, baths, beds and year built.

3.4 Clicking on the property in the map shows that property in the results as the first property and that will be highlighted in the results pane.

#### Section 4. Table view

The table view will be displayed at the lower part of the screen. Please refer to the diagram 1.

Whatever is being shown in the list view will be shown in the table view in the table format. The table view will have the columns Serial number, (1, 2, 3…) Main Photo, Address, price, sqft, lot area, beds, baths, school district, Year built and *compare* and detailed view. Compare will be a check box. Please refer to section 4.1 for more details about the compare check box. Clicking on the detailed view would show the detailed view of that property. For more info see section 5.

4.1 The user can select up to 5 properties for comparison. So if he wants to compare properties he will check the box called compare for that property and will click a button on top called compare the properties. That will open a new window where all the properties that are being compared will be shown. For more details about this see section 6.

4.2 Price, sqft, lot area, beds, baths, school district, Year built columns should be sortable.

4.3 Clicking on a row will highlight that row and that pushpin will be highlighted in the map and that property will be shown in the listview at the top.

#### Section 5. Detailed view

In the detailed view all the property details of a single property would be shown. This will be opened in a new page. The detailed page would show pictures (picture gallery), (To be demoed). The details to be shown would be

|  |
| --- |
| **BasementType**  **CloseDate**  **ClosePrice**  **InteriorSquareFeetSource**  **RoomList**  **LandOnly**  **ListDate**  **ListPrice**  **ListingID**  **ListingKey**  **LocaleListingStatus**  **ModificationTimestamp**  **SourceModificationTimestamp**  **OffMarketDate**  **Ownership**  **PoolType**  **PropertyType**  **SourceCreationTimestamp**  **StatusChangeDate**  **WaterFront**  **Basement**  **CentralAir**  **Exterior**  **Fireplace**  **FireplaceCount**  **FireplaceFeatures**  **Furnished**  **InteriorFeatures**  **NewConstruction**  **PropertyCondition**  **Roof**  **Storage**  **Styles**  **Type**  **BathsFull**  **BathsHalf**  **Beds**  **LandSqFt**  **NetSQFT**  **BedroomFourth1Length**  **BedroomFourth1Width**  **BedroomMaster1Length**  **BedroomMaster1Width**  **BedroomSecond1Length**  **BedroomSecond1Width**  **BedroomThird1Length**  **BedroomThird1Width**  **DiningRoomLength**  **DiningRoomWidth**  **FamilyRoomLength**  **FamilyRoomWidth**  **Kitchen1Length**  **Kitchen1Width**  **LivingRoomLength**  **LivingRoomWidth**  **MainBedroom**  **OtherRm1Length**  **OtherRm1Width**  **OtherRm2Length**  **OtherRm2Width**  **OtherRm3Length**  **OtherRm3Width**  **OtherRm4Length**  **OtherRm4Width**  **TotalRooms**  **Cooling**  **Heating**  **HotWater**  **LaundryType**  **SewerSeptic**  **Water**  **HOAFee**  **HOAFee2**  **CurrentFinancing**  **VOWAVM**  **VOWComment**  **MaxPhotoTms**  **TotalPhotos**  **InclusionRemarks**  **Remarks**  **LandUse**  **LotAreaAcre**  **LotDimensions**  **PorchDeck**  **PropertyAge**  **HasGarageFlag**  **GarageSpaces**  **GarageType**  **ListAgentFirstName**  **ListAgentAgentID**  **ListAgentLastName**  **ListOfficeOfficeID**  **ListOfficeOfficePhone**  **ListOfficeName**  **SaleAgentFirstName**  **SaleAgentAgentID**  **SaleAgentLastName**  **SaleOfficeOfficeID**  **SaleOfficeName**  **StreetSuffix**  **AddressExportAllowed**  **CityName**  **County**  **CrossStreet**  **DisplayStreetNumber**  **FullStreetAddress**  **PostalCode**  **State**  **StreetDirPrefix**  **StreetName**  **StreetNumber**  **UnitNumber**  **Zip4**  **AssociationFeePaymentFreq**  **CommunityFeeIncludes**  **CondoAssociation**  **ElementarySchool**  **ElementarySchool2**  **HOA**  **HighSchool**  **HousingForOlderPersons**  **MiddleSchool**  **MiddleSchool2**  **Pool**  **Subdivision**  **ListingArea**  **LotDescription**  **LotImprovement**  **LotNumber**  **SchoolDistrict**  **LandAssessmentAmount**  **TaxYear**  **TotalAssessment**  **TotalTaxes** |

Along with the above fields there will be Schedule a showing, get more info, share on facebook (refer to section 10), email this listing, save as favorite and add note.

5.1 Detailed view would be seen whenever someone clicks on the detailed view button in the list view or in the table view.

#### Section 6. Comparison

Comparison page will show up whenever the compare button is clicked on the table view. This will open a modal page. So the user will not be able to click anywhere till he closes the comparison page. The comparison page will compare properties that have been selected to compare. On this page all the details of the properties will be compared. Each property would have a remove button which will remove the property from the comparison page. The corresponding check mark on the table view page should get cleared. That way the user can now add more properties to compare.

6.1 The user should be able to do following actions on each property. If any of the below functions are to be used, the user has to be first logged on. If he’s not logged on show a modal dialog box where the user will log on using facebook, yahoo or by registering an email.

Mark a property as favorite, add note, Schedule a showing, Email a listing.

#### Section 7. Agent’s Showcase

Agent’s showcase would highlight the properties that are sold or closed in the past by this agent where he or she was a seller agent or buyer agent or anything to do with that property.

So that will open a new modal window where the deals of the agent from the past would be shown. Should have a prev and a next button. Should show some details (but not all). Like photos, address, sold price, date sold, lot, sq ft, beds, baths.

#### Section 8. Login

The user will have the ability to log in using facebook, yahoo or just regular email. If they login with an email, send them a link and have them click on that link to confirm they are humans and not bots.

To perform any of the actions such as to save a listing as a favorite, to email a listing to someone, to make a note, to save a search, the user has to log in.

The users logged in using their Facebook login should be able to share a property or like it and should be able to share it just with friends or with family filter.

#### Section 9. Database Structure

This section is incomplete since the design of the tables will be determined later on.

The database will contain the following tables

1. Clients

The fields will be

1.1 Client ID, agentID, IPID, Status

1. AllProperty

#### Section 10. Facebook Operations

When a user clicks on facebook icon to share a property the user would first be asked to log on using facebook. If they log on using facebook the user would be able to share the property on their facebook account. On their facebook account we would put a link something like this

http://WidgetWebsite.com/Mywidget.aspx?AID=<key>&MID=<MLSID>

So this Is another way the widget maybe accessed. If a property listing was shared on facebook, the widget would be accessed this way.

[http://WidgetWebsite.com/Mywidget.aspx?AID=<key>&MID=<MLSID](http://WidgetWebsite.com/Mywidget.aspx?AID=%3ckey%3e&MID=%3cMLSID)>

As you can see in this case there is another param called MID. So when the widget is accessed this way we know it was accessed using the link on facebook so we will display the detailed view (refer to section 5) page for that property .

#### Section 11. Realtor’s favorites

There will be a button on the widget somewhere marked as Realtor’s favorites. When this button is clicked, the widget will retrieve the properties that are marked as realtor’s favorites and display them.