



COSC2471
IPhone Software Engineering
Assignment 1

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Contribution

Ning Nan: 50%

Chao Geng: 50%

(Both focus on the same section in the same week and followed the weekly progress suggestion)

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App Statement

Slogan: Free platform to lease and rent for everyone.

Purpose: Provide an intermediary for people, who want to lease and rent.

Selling point: Houser is a free application for residential lease and rent. We aim to help everyone to lease or rent as fast as possible. Our system gives free advertisement for landlords, and provide accurate targets for tenants based on their requirements. It is the best place for the person who has idle residential or who is looking for one home to live in. It is free and open. Landlords are able to post their properties and tenants can browse the properties. And also, agents are welcome.

Use Case:

Have a property idle? Instead of paying high idle tax fee, why not make it for lease? Want to manage your residential rental by yourself?

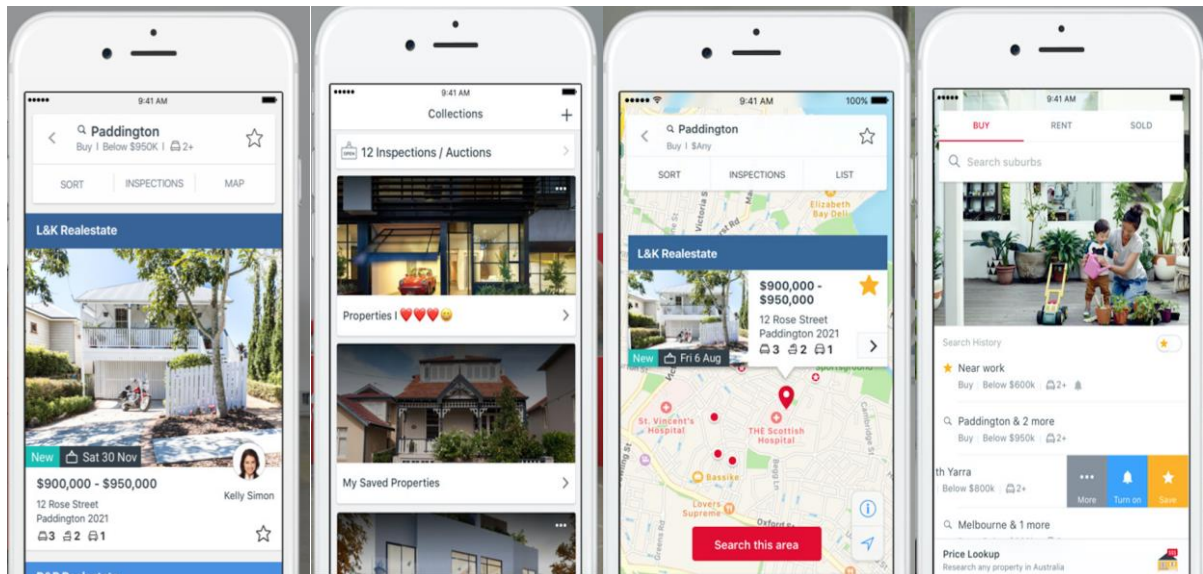
Simply use Houser app, then post your residential detail and wait for response! Totally free!

Want to move to a new place and cannot wait so long? Inspection time from agent always cannot fit your schedule? Get direct communication with the landlord!

Simply download Houser app, browse residential by room number or suburb, pick up your favourite and get the number, contact directly with the landlord! Easy and fast!

Research

realestate.com.au



Store Link:

<https://itunes.apple.com/au/app/domain-real-estate-and-property/id319908646?mt=8>

Analyze:

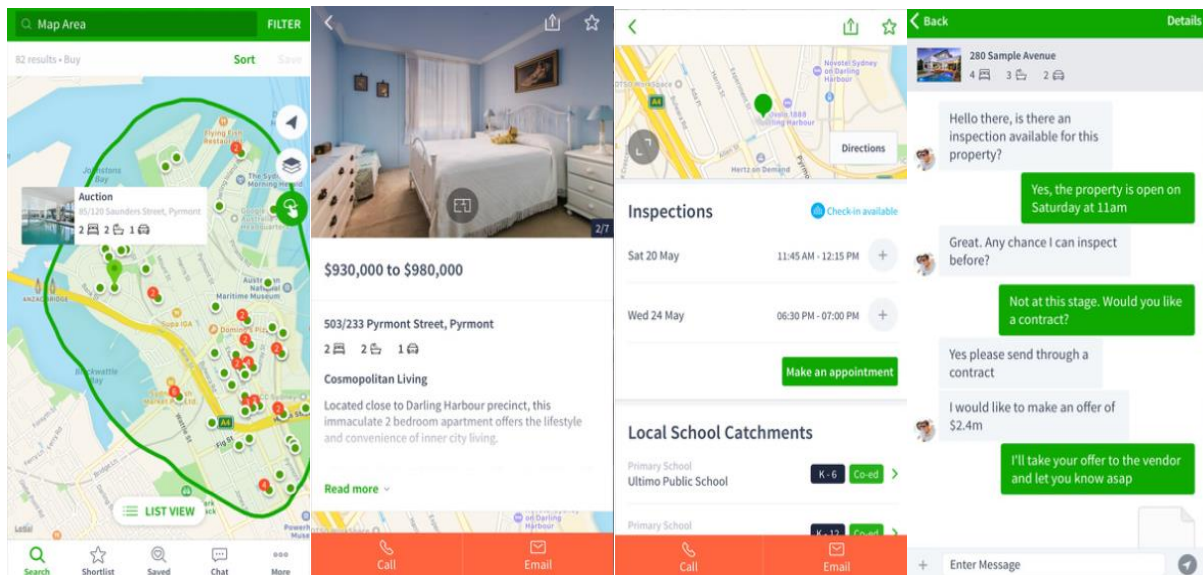
realestate.com.au is a very popular application in Australia for agents or the people who is searching for properties to buy or rent. Used mostly by agents or buyers or tenants. It provides advertisements for agents. Besides the services for people looking for houses, it focuses more on the market. And contains most of the properties' trading history in Australia.

* **Blue front shows commons, Red front shows pros.**

this app	my app
buy, sold and rent	rent, lease
mostly agents with users	directly users with users, agents are also welcome
sort for searching	sort for searching
property history	map location
map location	directly post property using mobile app
apply online	directly connect with landlord (SMS, phone call or email)
book inspection online	No login required at this stage
add favorite property into sub list	add favorite property into sub list

(Login and register add more screens and seems too large for the assignment requirements on this stage.)

Domain



Store Link:

<https://itunes.apple.com/au/app/domain-real-estate-and-property/id319908646?mt=8>

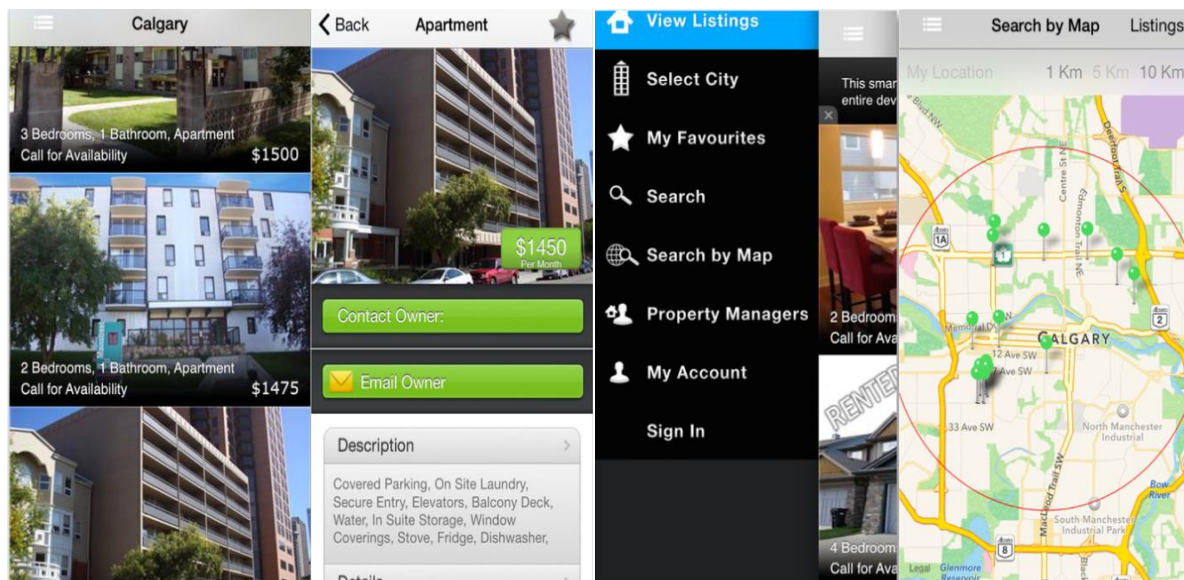
Analyze:

Domain is a very similar app for buying, renting and selling app with realestate.com.au. All the features seem no different with the realestate.com.au. However, Domain has two special features that are users can directly chat on that app with the agents and users can choose search scope by drawing circle. However, Domain has no apply online option. Besides things above, there are no difference between the above two apps.

* Blue front shows commons, Red front shows pros.

this app	my app
buy, sold and rent	rent, lease
mostly agents with users	directly users with users, agents are also welcome
sort for searching (user can draw to make the scope)	sort for searching
property history or price	map location
map location	directly post property using mobile app
directly chat with agents	directly connect with landlord (SMS, phone call or email)
book inspection online	No login required at this stage
add favorite property into sub list	add favorite property into sub list

Rent Click



Store Link:

<https://itunes.apple.com/au/app/apartment-rentals-houses-for-rent-searches-by-rent-click/id463401237?mt=8>

Analyze:

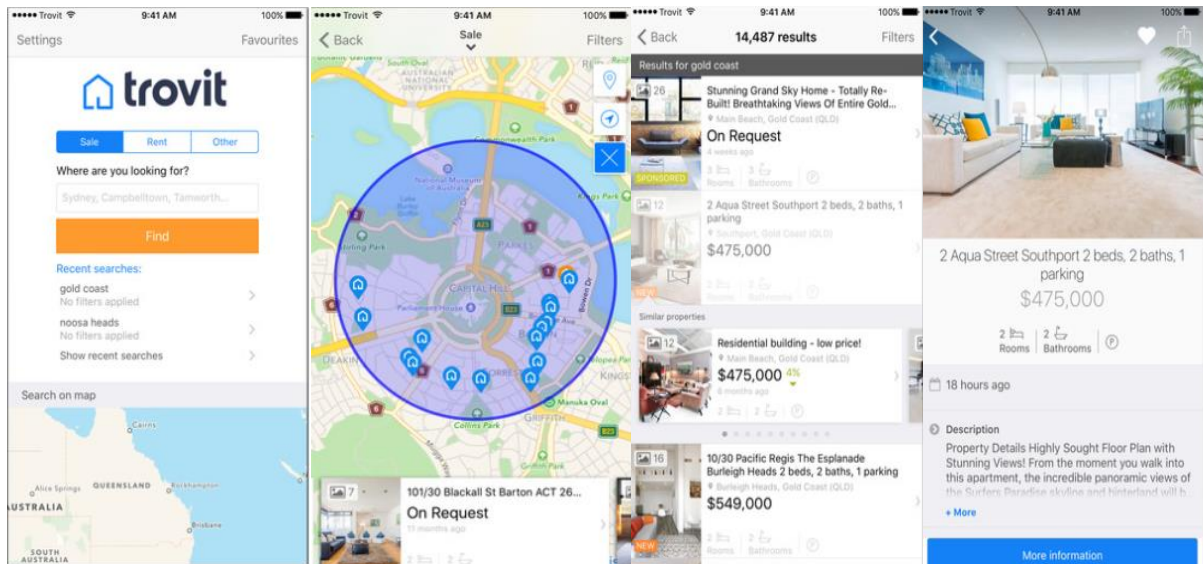
Rent Click is a very simple application for property rent. It is very simple and clear. Not too bad use experience but seems designs are not updated anymore. However, it has some special features: search by map, view property agents, directly contact, etc.

* Blue front shows commons, Red front shows pros.

this app	my app
rent	rent, lease
mostly agents with users	directly users with users, agents are also welcome
map searching	sort for searching
add favorite property into sub list	map location
map location	directly post property using mobile app
Sign in functions (No register method so cannot test it)	directly connect with landlord (SMS, phone call or email)
directly connect with landlord (SMS, phone call or email)	No login required at this stage
	add favorite property into sub list

(Login and register add more screens and seems too large for the assignment requirements on this stage.)

Trovit



Store Link:

<https://itunes.apple.com/au/app/homes-for-sale-and-for-rent-trovit-real-estate/id347012986?mt=8>

Analyze:

Trovit is a well-designed application that provides lists and details of properties for sale and for rent. There are no unuseful functions on that application. And provides 19 different languages and 46 different countries. And also, the application provides more search results by redirecting the page to the websites.

* Blue front shows commons, Red front shows pros.

this app	my app
rent, lease, buy	rent, lease
get data and properties from website, when click on some properties, will be redirected to the web page	directly users with users, agents are also welcome
map searching	sort for searching
add favorite property into sub list	map location
map location	directly post property using mobile app
build in browser	directly connect with landlord (SMS, phone call or email)
	No login required at this stage
sort for searching	add favorite property into sub list

(Login and register add more screens and seems too large for the assignment requirements on this stage.)

REST based API

URL: <http://postcodeapi.com.au>

This API can simply accept the request with Australian postcode. Then it returns the name of the suburb with the location and the state information. Useful for checking if user have written the right postcode and suburb.

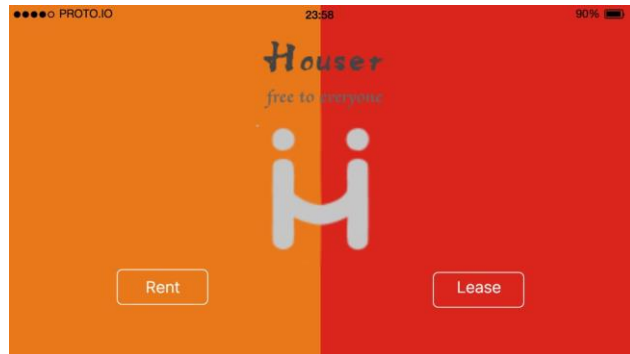
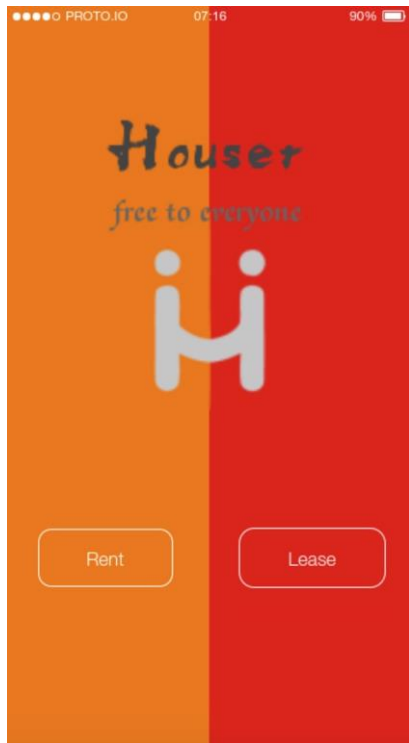
Sample API request post:

<http://v0.postcodeapi.com.au/suburbs/3066.json>

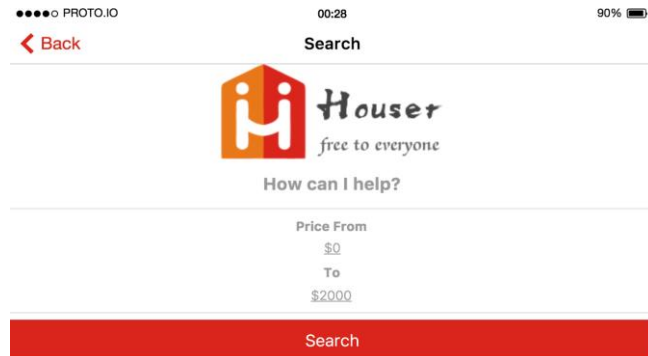
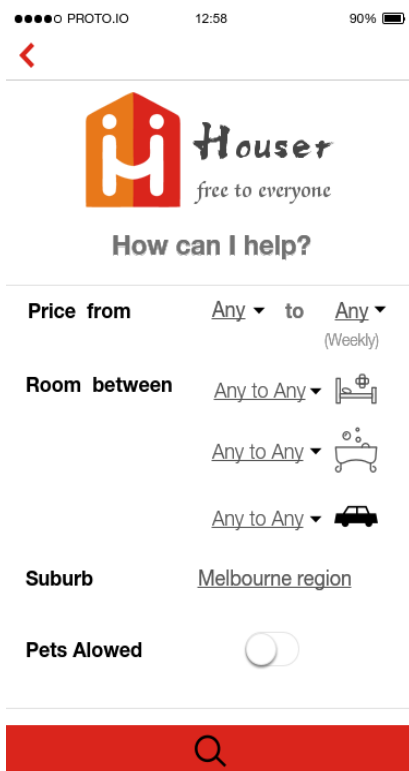
Sample response

```
{
  "name": "Collingwood",
  "postcode": 3066,
  "state": {
    "name": "Victoria",
    "abbreviation": "VIC"
  },
  "locality": "HAWTHORN",
  "latitude": -37.8,
  "longitude": 144.9833
}
```

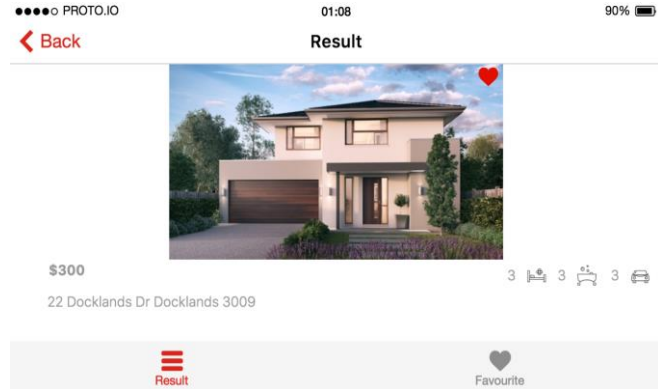
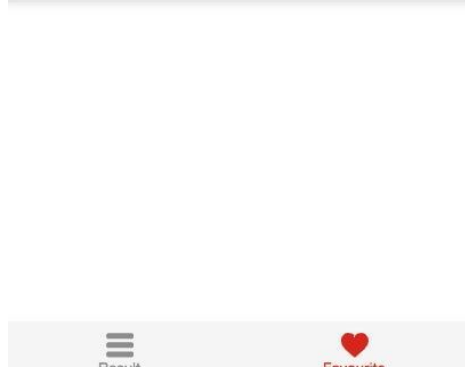
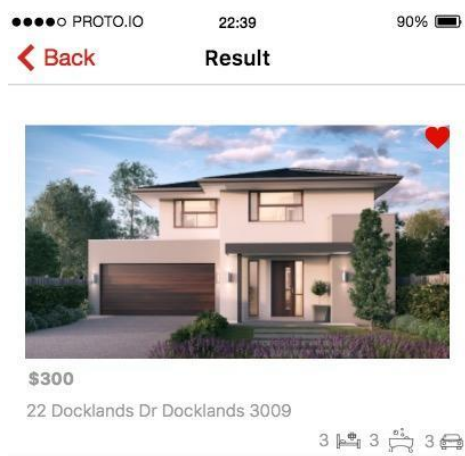
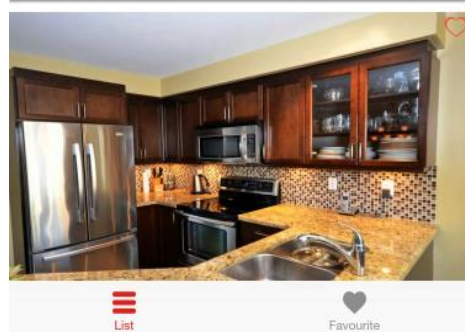

Wireframes (Sketch - Overview)



The first screen shows application logo and name, besides, it provides two options for users. Provides rent access and lease access. By clicking different buttons, user can enter either search screen or owner screen.

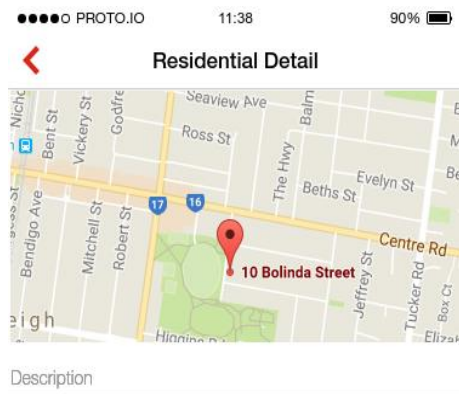


This screen appears when user clicks on Rent button. Help users to specify their requirements. By clicking the input fields, the user can change the requirements. By clicking back button or the sign on the top left corner, user can be able to go back to the first screen.

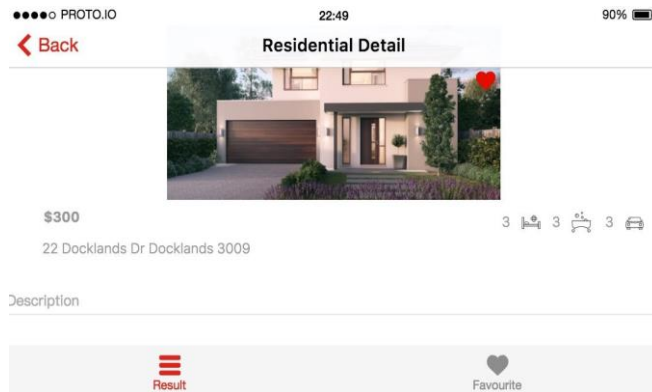
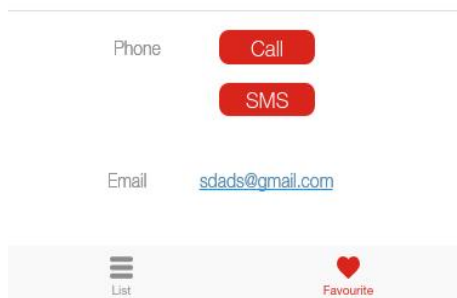


This screen shows the design of both results screen and favourite screen. This screen appears after user click search from the search screen. User can also click on back on the navigation bar to the search screen. Favourite screen can be accessed from clicking on the tab bar. And it is the same design with the result screen. The only difference is the favourite screen will only display the favourite properties. Pictures, mark icons, room no, prices and locations will be loaded from the database depends on the search selection. By clicking on the cell, user will enter into the detail page. And user can click on the red heart icon to mark or unmark the property.

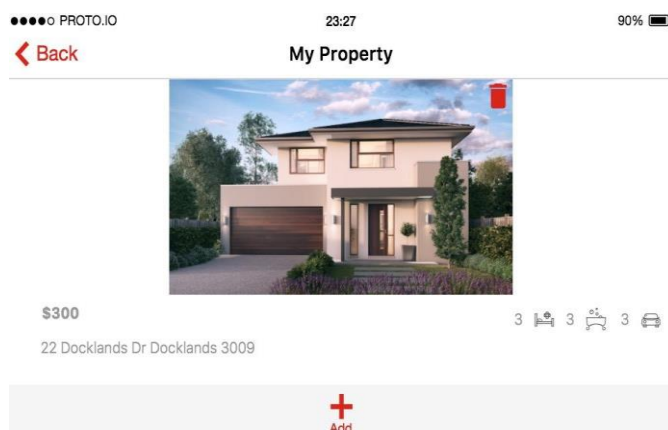
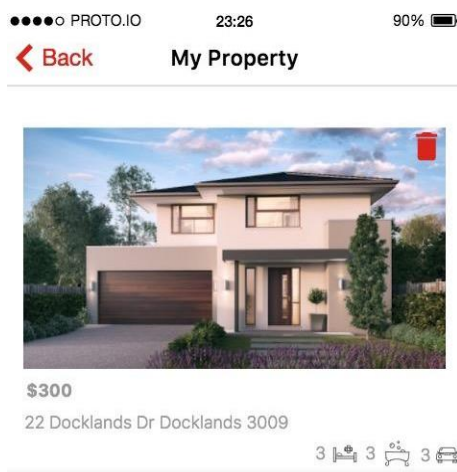
This is the favourite screen, shares design with the result list screen. It can be switched through the tab bar button. This screens shows all the favourite properties from the database. By clicking on the cell, user will enter into the detail page. And user can click on the red heart icon to mark or unmark the property.



Property description




This is the detail page, this page shows a residential detail including map, image, price, location, room numbers, description and options for user to call, SMS and email. This page has navigation bar button to go back to the last page. And user can click on the red heart icon to mark or unmark the property.



This page shows the page for lease. Can be accessed from clicking on the lease from the first screen. Through this page, user can see what properties that they have already published. Also, by clicking the add button below, user can enter to the add page.

●●●●○ PROTO.IO 02:33 90%

[Cancel](#) Add Property



Street Number And Name

Suburb

Post Code

Price per week \$0 ▼

space 0 ▼ Bedroom

0 ▼ Bathroom


0 ▼ Car park

Description

Add

●●●●○ PROTO.IO 19:15 90%

[Cancel](#) Add Property



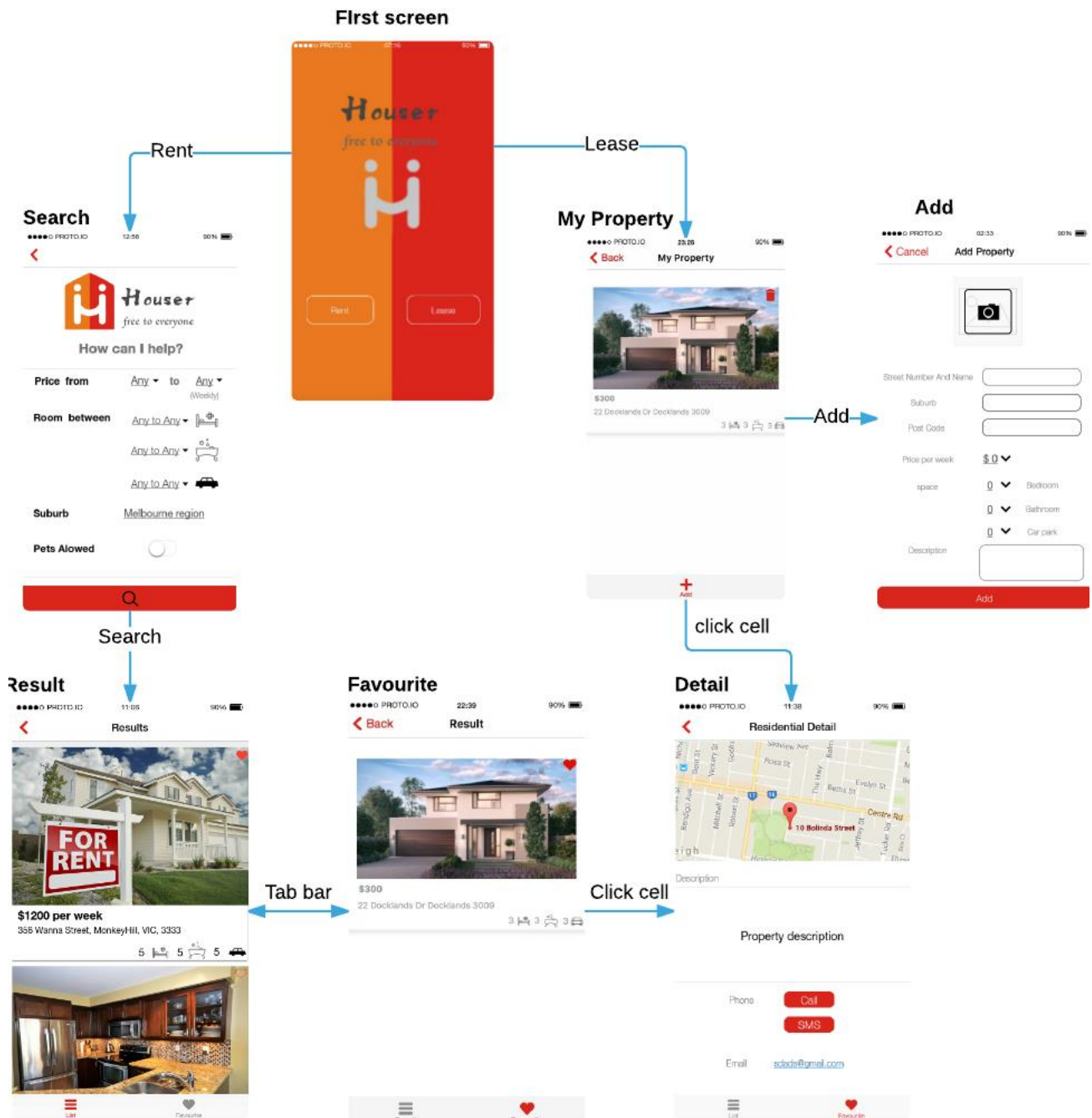
Street Number And Name

Suburb

Post Code

This page allows user to write properties details and publish it to the list. And also allows users to upload the images. The data will be stored in the database.

Workflow

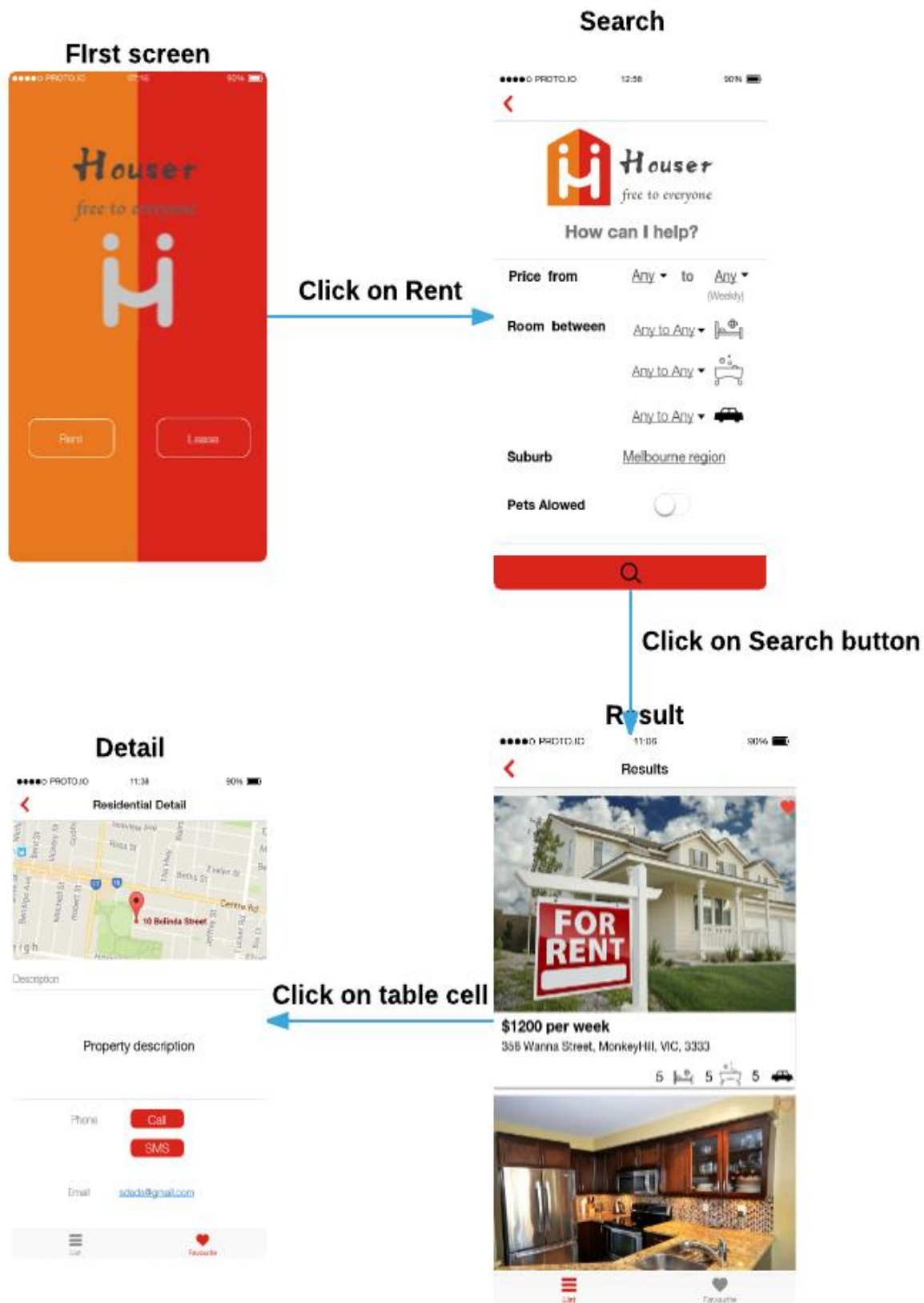


(All screens have back button can go back to the last page by clicking back icon through navigation bar.

And result screen can also enter to detail screen by clicking on the cell.)

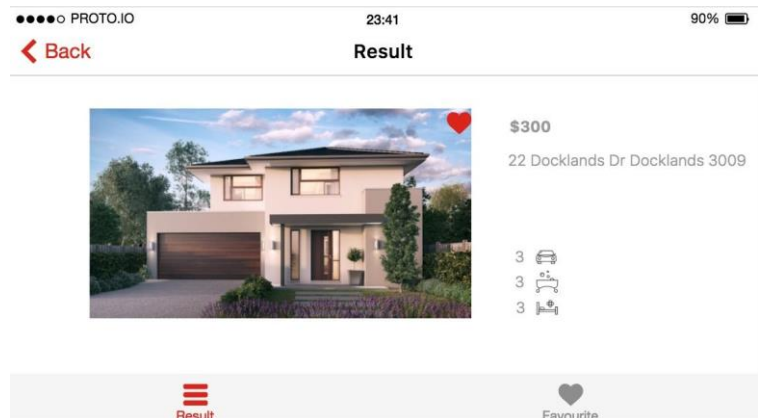
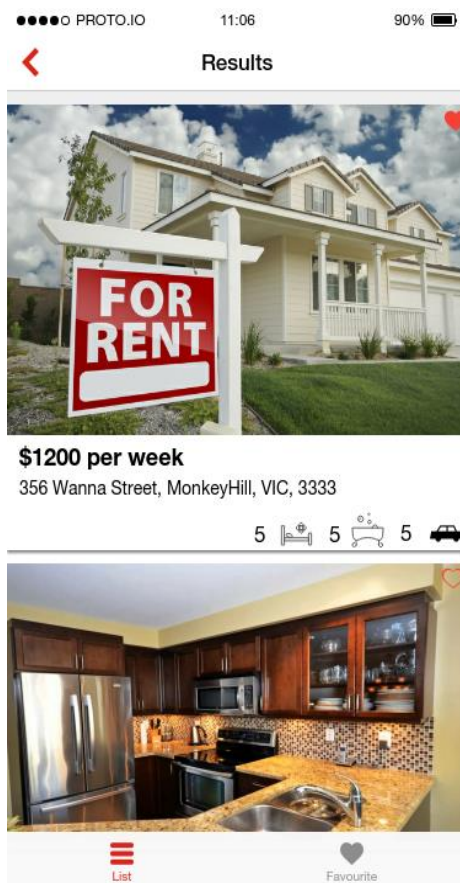
Use Case

This use case shows how user use this application to view a property on the list.



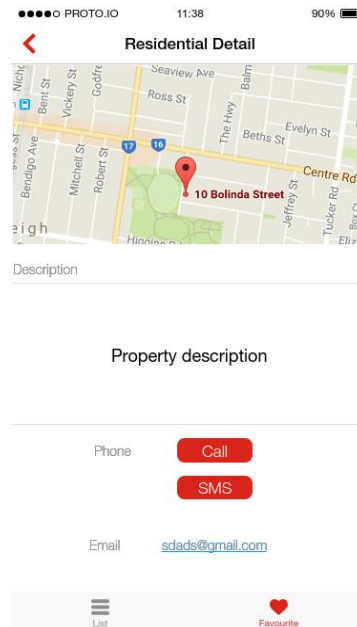
Adaptive Layout

Image will be left while labels will be right of the image when the layout is landscape of some devices.

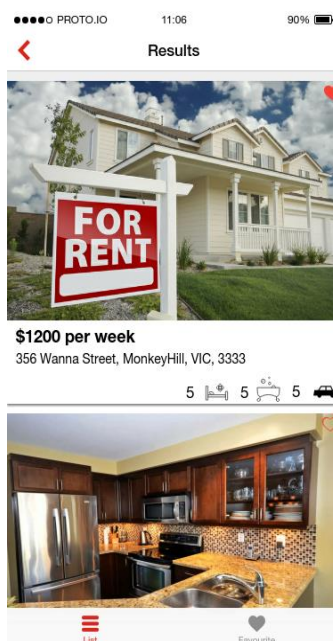


Multiple View Types

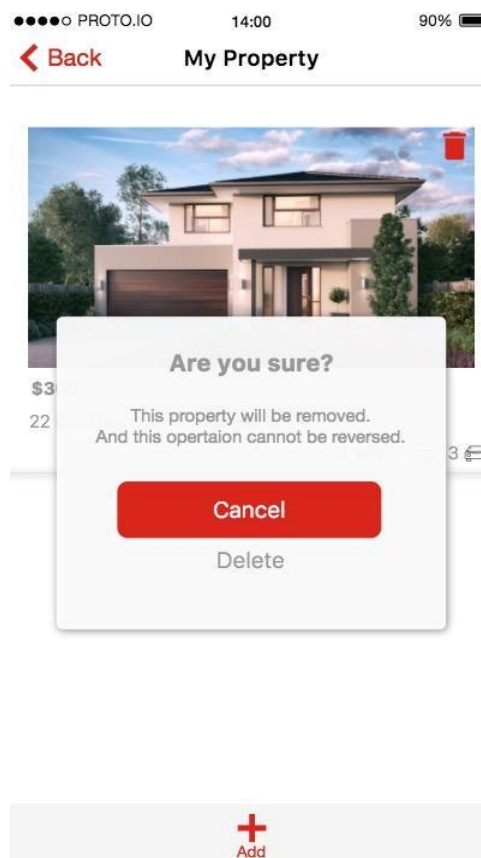
This application contains popover, Table views, UI views, Tab Bar controller and Navigation Bar controller.



- **Customized UIView** provides users all the information about the residential. And has a **scroll view** inside allows users to view more information and adjust the page height dynamically.

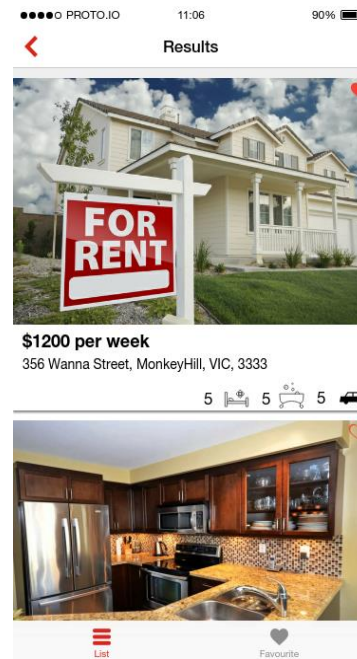
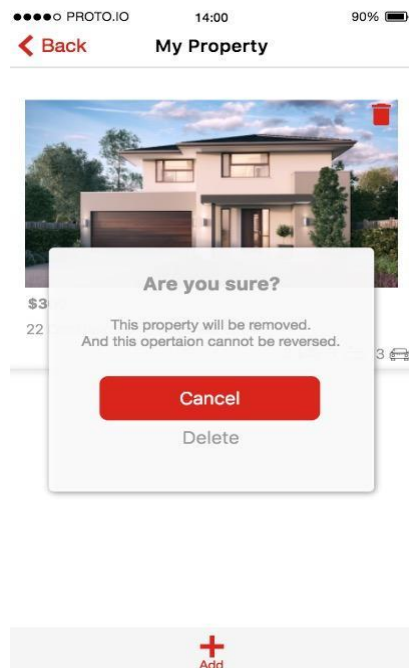


- **Table view** get data and cell numbers from database. dynamical and customize table cells provides multiple data with their unique identifications and also allow users to do mark/unmark operations just on the picture. Result Screen, Favorite Screen, Search Screen and My Property Screen are all table view based.
- The screens are also nested inside **Navigation Bar controller**. Which provides titles and locations of current screen. And also user is free to go back to last screen at any stage.
- Result Screen and Favourite Screen are also **Tab Bar Controller** based. Where user can switch between these two screen by clicking the tab bar items.



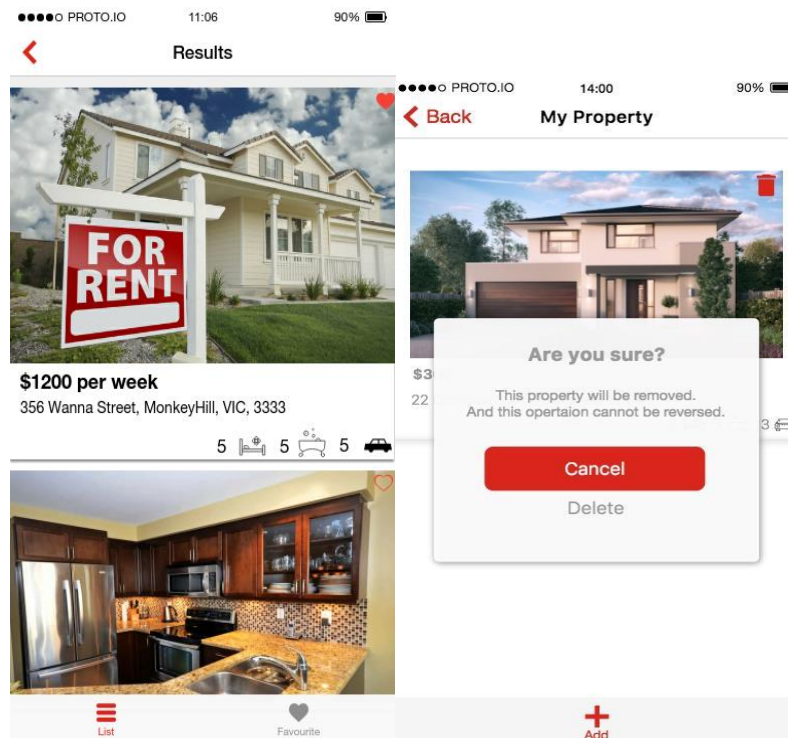
- This is the Example **Popover**. It appears while user executes important operations like delete and confirmation of adding a property. In this example, the highlighted option is “cancel” option to prevent user to do wrong operation.

General Design Principles



- **Contrast**
 - Most of the clickable elements in the application is using the same color which comes from the logo color. And these colors make contrast with the labels and other elements. Gives a good colour feel and clearly reminds users what operations can be done next.
 - Labels of the results details make contrast with each other, price label will be bigger as most people consider about price first.
- **Repetition**
 - For all the lists, Result, Favourite and My Property List, the properties will be displayed in cells. And cells share the same layout and icons.
- **Alignment**
 - For all the cells that display properties. Labels are fixed position in every cell. And align with edges or each other. If users only focus on one attribute of the property, they can simply focus on one point on the screen and scroll down.
- **Proximity**
 - For all the cells, attributes belong to the same property will always be tightened together. And different cells have different contents.

Apple Design Guideline



- **Clarity**

- Labels and texts show clearly different layers. Larger font size shows more important information. Icons are presenting their own meaning. Bed icon shows bedroom numbers and red heart icon shows that is favourite property. And the difference between full red heart icon and border only red heart icon conveys interactivity.

- **Deference**

- On the Screen, the red buttons and icons with the same RGB clearly indicates and guides users how to interact with the application. Contents are clear shown and no conflicts with each other. And interface is very sample and clean.

- **Depth**

- Use of popover reveals part of the screen to remain users when doing the sensitive operation. Icons on the pictures can be clickable to mark or unmark one property.