

HCI- 373

# ONLINE REAL ESTATE

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## Overview

This website/mobile application helps people with finding real estates at the place and the price range that they want, whether they want to rent or buy a property and even sell or lease their property.

Besides, It also offers the users other services, like making deals with Banks for loans, making deals with technicians and designers to provide offers for users.

The real estate could be land, a house, a garage, an apartment, a room, a building....etc.

The website's homepage has ads for the website services: a banner for the most important paid ads like a compound, services like offers and deals provided only to its subscribed users. The navbar has buttons entries for the website pages highlighting current page. The Catalogue provides an infinite scrolling for the ads created by users. There's filters and sorting options, and a group of buttons to select the category the user is searching for. The Statistics page shows the results of the analysis made on the database to provide estimations for investors and indicate for the user the best time to buy his new home.

The android homepage has buttons that the user can navigate with them through the app. There is a search bar also that the user may use it to find a certain ad he saw before with a keyword he remembered from that ad. There is a button for the user to create a new ad, go to his favourite ads, categories, statistics, hot deals, settings and his profile.

The ads page has the ads and some details of it, filters and categories also a search button, sort, profile and of course the homepage button.

The ad page itself contains pictures of the property and its details, price, a map of the location, contacts information and other suggestions.

## Assumptions

The project is based on the following assumptions:

1. The owner of a real estate wouldn't mind placing his property on the internet.
2. The user is ok with having calls or messages from other users interested in buying/renting his property.
3. The user will also share his personal information like Name, phone number ... etc.

## Claims

The project is based on the following claims:

1. All the data is real and there is no spoilers who will post fake data.
2. The buyers are guaranteed to have the money to pay their deal.
3. Users will love using virtual reality sets in exploring the real estate they're interested in.

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## Problem Space

This problem already exists and there are a lot of solutions for it like Brokerage offices.

- **Why is it a problem?**

It's exhausting for buyers and renters to find the best choice that fits their needs, also the application's aim is to satisfy the needs of both buyers and sellers in terms of the price, which means that we want to get the buyer the lowest price possible and we also want the highest price the seller could get to make both sides happy and satisfied with the deal. And there should be an easy way to connect buyers and sellers.

- **How this design ideas might overcome other solutions ?**

Making the linkage between buyers and sellers online will make it easier for them to connect and will save their time. There will be a variety of choices from a lot of places not only a specific region. Cancelling the broker will make it cheaper and safer for both sides to complete the deal without scamming.

## User Group

This is not just the people who directly interact with the system, but also people who affect the system indirectly.

### Primary users

The primary users are going to be the ones who buy, sell or rent the real estate.

### Secondary users

The secondary users could be those who check the pricing of the real estates occasionally, could also be a person buying, selling or renting through an intermediary.

### Tertiary users

Real estate companies and brokers, people or companies that provide services in the area of the property like markets, banks, home-repair technicians and designers that'll profit after a user buy a property.

### Users characteristics

Users are more likely to be adults, diverse cultures, have money or property.

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# Interaction Design Process

## Needs

People need a way that facilitates for them buying, renting or selling any real estate instead of spending a lot of time in the normal process, which may include having a face to face conversation with the owner of the real estate or going to the place where the real estate is at which may be far. They also need to know all the choices available for them so that they can compare prices and make their decision easily.

## Requirements

A website / mobile application that provides what the users need such as finding the suitable real estate for them and saving their time and effort. For example, if a person wants to buy a house he can check many houses in different places from his smartphone in no time when compared to the normal way.

## Tasks & Goals

### Tasks

1. Accounts creation where personal and contact information will be added.
2. Adding properties and the related information such as price, location and photos.
3. Deleting the advertisement of a property automatically if a deal is made on the property.
4. Adding a filter system that helps the user to find the property that fits his needs.
5. Sending notifications to users for new ads with certain user interests.
6. Adding a recommendation system.
7. Giving an estimate of the price range for the users.

### Goals

1. Ranking the users and their credibility.
2. The main goal of the website of course.
3. No out of date data.
4. Make it easy for the users to search the properties.
5. Notify user for ads that might suit what they are looking for.

## Extra features

1. Making deals between Banks and users for loans.
2. Making deals between technicians, designers and users to provide offers for them.
3. Encouraging users to make accounts to grow the database.
4. Showing nearby schools, hospitals and famous places for users.
5. Using 360 video feature to make the user have a feel what they are buying or renting.
6. Giving an estimate of the price range for the users, providing charts and graphs to make it

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easier for visualisation. This gives an overview for the real estate market and very useful for investors.

## Usability measures

### Effectiveness

By considering the accuracy and completeness with which users carry out their purchase.

### Efficiency

By considering the application support for users in carrying out their purchase, as the users would want everything to be simple and straightforward.

### Safety

By Protecting the user from dangerous conditions and undesirable situations

### Utility

By providing a right functionality for adjusting the user needs in purchasing a real estate

### Excluding learnability

Learnability was excluded because it is a straightforward application used by adults so there won't be any issues from the user-side to learn the app.

### Excluding memorability

Memorability was excluded because memorizing the application isn't necessary as it will be made in a simple sequence, so users that use the application infrequently won't have a problem using it.

## Interactions

1. Users will deal with the application through an instructing graphical user interface.
2. Attention for important Ads in the home page banner.
3. Allow user to be aware of his current page in the website by highlighting the page name in the navbar and in the category types bar.
4. Change category list background color with different districts while scrolling to notify user of a change made.
5. A sound associated with an action to confirm that the action has been carried out during sign up or creating an add.
6. Provide an indication where an error occurs while creating an ad by highlighting the wrong field and explaining what's required.
7. User may need VR glasses for the mobile app to take a tour as an overview for the property.

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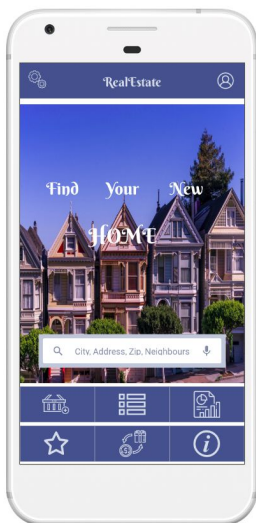
## Undreamed of needs

Applying virtual reality principles and simulating the real estate so users can experience the place and have a closer look of the property as if they are inside it using virtual reality headsets.

## Screenshots

- Android

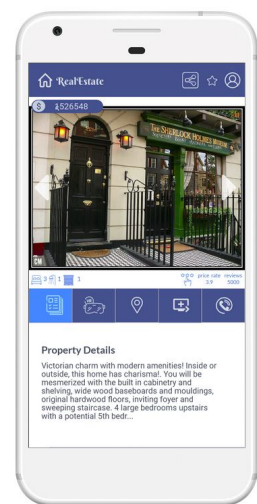
Link: <https://marvelapp.com/1bccfj96>



Homepage



Ads page

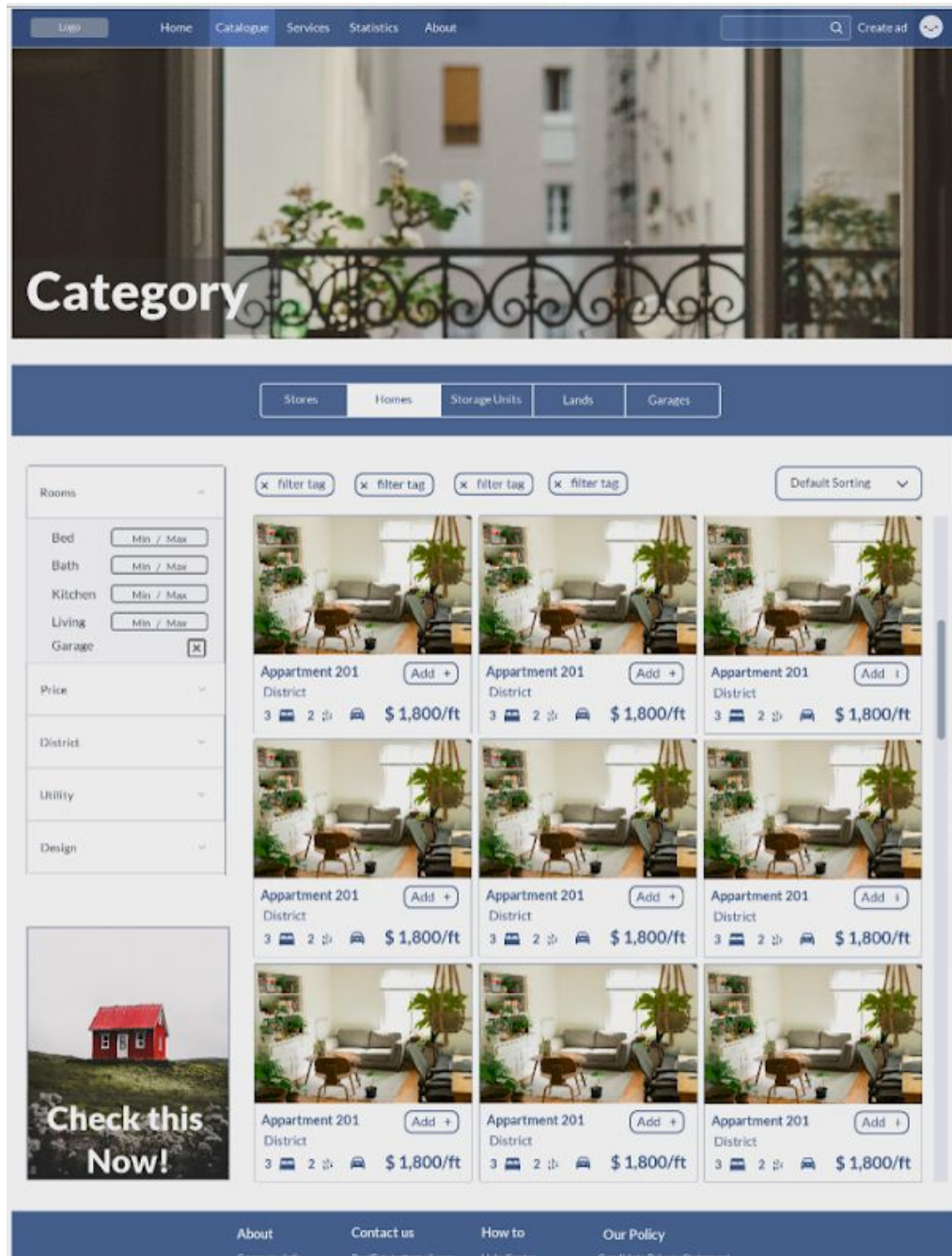


Ad details page

- Website

- Link: <https://marvelapp.com/3icc8a8>


Category page





# Homepage


[Sign](#) [Home](#) [Catalogue](#) [Services](#) [Statistics](#) [About](#)  [Sign in](#)



## Big Ads

1,000,278 Properties sold	706,921 Ads offers	50,371 Hot deals
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### Help For First-Time Home Buyers





Our talented designers bring years of experience to whichever furniture piece we're sitting near. By discovering your personal style, we'll make sure that your space isn't just aesthetically pleasing, but also a reflection of you.

[Check it now](#)

20% off the regular price of your next completed in-home repair service (parts and labor). ServiceSmart agreements, Home Warranty service, heating & cooling or garage door repair.

[Check it now](#)





Finance 70% of your dream homes with Bank's housing loan that offers a choice of payment methods that suits any lifestyle.

[Check it now](#)

[About](#)

- Company Info
- Our Partners Page
- Newsroom
- Careers

[Contact us](#)

- Real Estate Agent Home
- +200.900.0000

[How to](#)


- Help Center
- Privacy Policy
- Create a Page
- Create an Ad

[Our Policy](#)


- Customer Privacy Statement
- Data Policy
- Terms and Policies
- Cookie



## Ad details


[Logo](#) [Home](#) [Catalogue](#) [Services](#) [Statistics](#) [About](#)  [Create ad](#) 


### Best Lagoon Apartment





#### Details

The main housing types are single detached homes and row houses. This municipality has a good variety of unit sizes. Around 85% of the dwellings in the municipality are occupied by home owners whereas the rest are rented.

 3 Bedrooms

 2 Bathrooms


 Garage


 219 E DUNCAN ST  
AARONSBURG, PA 16820

\$ 2,000/m

150 square meters





#### Contact Owner

 johnDoe@gmail.com

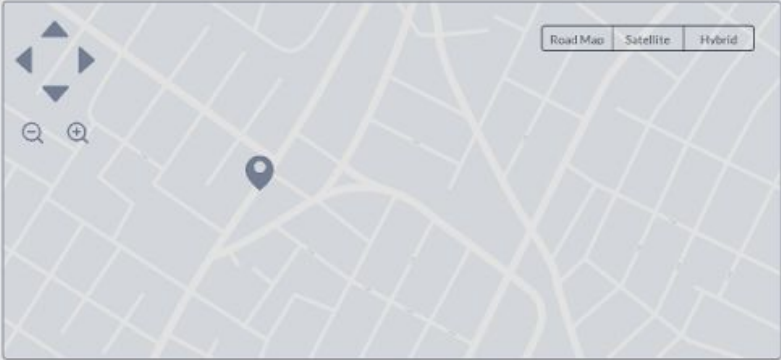
 +20 1XX XXX XXXX

#### Rate Affordability

☆☆☆☆☆






### Location



[Road Map](#) [Satellite](#) [Hybrid](#)

### Suggestions



# Create ad page

Logo

Home

Catalogue

Services

Statistics

About

Search

Create ad

Create ad

Choose a category

Category

Add a price

\$ Price

/m

Choose a city

City

Choose a district

District

Bedrooms

Bathrooms

other...

Garage

read terms and policy

Create

Add a title

Title

Description

Upload Photos

Upload at least one photo

About

Company Info

Our Facebook Page

Newsroom

Careers

Contact us

RealEstate@gmail.com

+2 xxx xxx xxx

How to

Help Center

Privacy Basics

Create a Page

Create an Ad

Our Policy

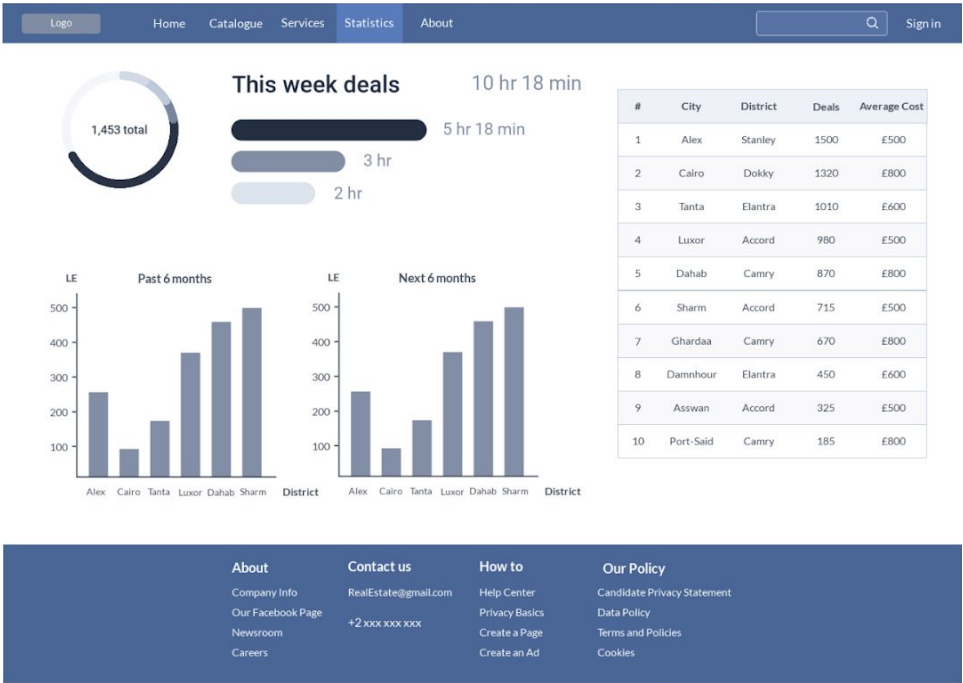
Candidate Privacy Statement

Data Policy

Terms and Policies

Cookies

# Statistics page



About

Company Info

Our Facebook Page

Newsroom

Careers

Contact us

RealEstate@gmail.com

+2 xxx xxx xxx

How to

Help Center

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Create a Page

Create an Ad

Our Policy

Candidate Privacy Statement

Data Policy

Terms and Policies

Cookies