

A photograph of a two-story house with green horizontal siding and yellow vertical siding on the corner. The house has several windows with white frames. In the foreground, there is a sidewalk, a chain-link fence, and a garden with various plants and flowers. A white utility box is visible on the right side of the house.

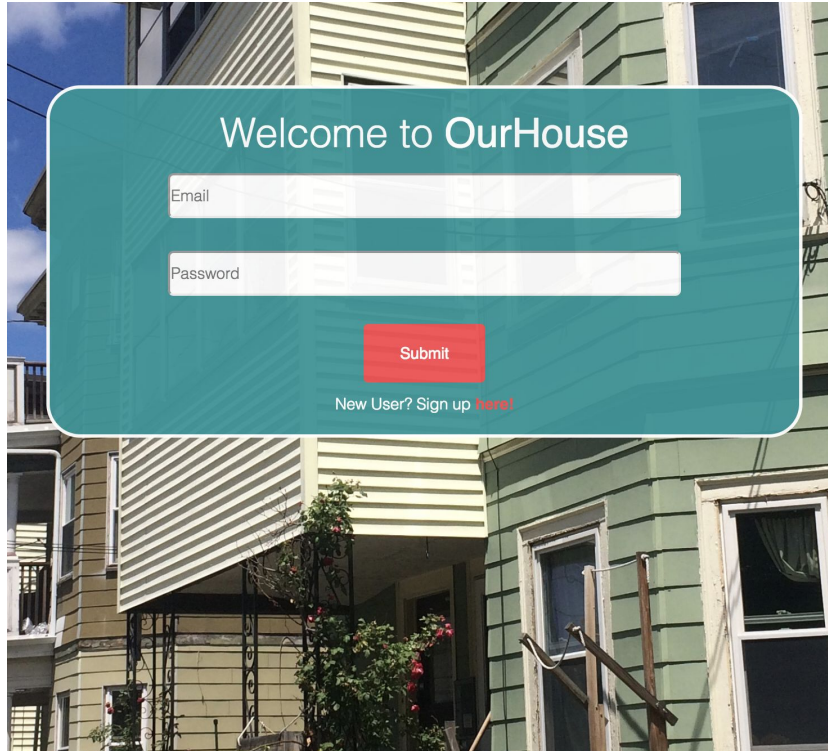
OurHouse Final Project

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What is OurHouse?

- A **singular** resource that allows college students to find affordable off-campus housing with reliable information from previous tenants and landlords. In short, it's the AirBnB of off-campus housing.

Login or sign up (as student or landlord)



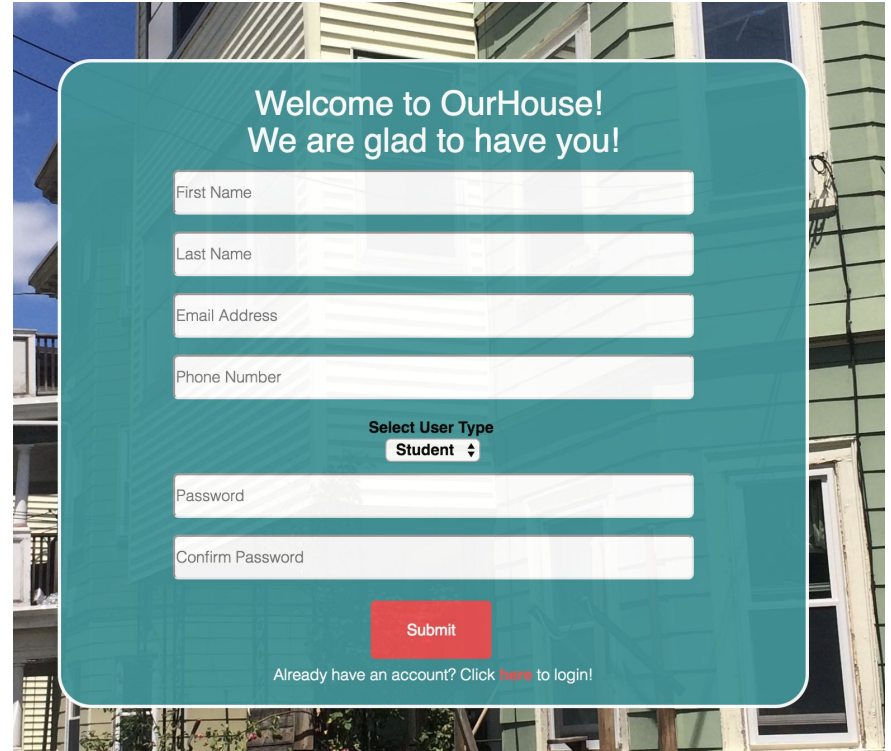
Welcome to OurHouse

Email

Password

New User? Sign up [here!](#)

The login form is a teal-colored overlay with rounded corners. It features a title 'Welcome to OurHouse' at the top. Below the title are two input fields: 'Email' and 'Password'. A red 'Submit' button is positioned below the password field. At the bottom, there is a link 'New User? Sign up here!' where 'here!' is in red.



Welcome to OurHouse!
We are glad to have you!

First Name

Last Name

Email Address

Phone Number

Select User Type
Student

Password

Confirm Password

Already have an account? Click [here](#) to login!

The sign-up form is a teal-colored overlay with rounded corners. It features a two-line title 'Welcome to OurHouse! We are glad to have you!'. Below the title are four input fields: 'First Name', 'Last Name', 'Email Address', and 'Phone Number'. A dropdown menu for 'Select User Type' is shown with 'Student' selected. Below this are two password input fields: 'Password' and 'Confirm Password'. A red 'Submit' button is positioned below the password fields. At the bottom, there is a link 'Already have an account? Click here to login!' where 'here' is in red.

Homepage

The screenshot displays a real estate website interface. On the left, a sidebar contains a filter menu with the following options:

- Filters** (expanded)
- Minimum Rent**: 500+ (dropdown)
- Maximum Rent**: 3000 (dropdown)
- Distance from Campus Center**: 0.5 miles (dropdown)
- Number of Bedrooms**: 4 (dropdown)
- Laundry Included**: included (dropdown)
- Utilities Included**: included (dropdown)
- Parking Spots**: Any (dropdown)
- Update** (button)

A light blue information box in the bottom left corner displays the details for a selected property:

- Address: 14 Frederick Ave
- Bedrooms: 6
- Monthly Rent: \$875
- Parking Spots: 2

The main area features a map of Medford, MA, centered on Tufts University. The map shows various streets, including North St, South St, and Main St, and landmarks such as the Mystic River and the Mystic River State Reservation. A red pin marks the location of the selected property. The map also shows the locations of other properties, indicated by blue house icons. The bottom of the page includes a footer with the text: "For all things developer related, click [here](#)".

Create a listing



List Your House

Profile ▾

Logout

List Your House on Our House!

Landlord Information

Landlord First Name Landlord Last Name

Landlord Email

Apartment Information

Address 1 Address 2

City State Country

Zipcode

Monthly rent

Pets allowed? Bedrooms Parking

Utilities included? Laundry included?

Date available

Edit listing

Landlord Information

Liz Lemon

House Info

14 Frederick Ave Medford, MA 02155

Monthly Rent

Pets allowed?


Bedrooms

Parking

Utilities included?

Laundry included?


Upload images


 [List Your House](#) [Profile](#) ▾

Choose File | 49913cd1050...bedroom.jpg

Upload Image



 [List Your House](#) [Profile](#) ▾



Rent/Month: \$875
Address: 14 Frederick Ave, Apt 1 Medford, MA
Distance from Campus Center: 0.557
Number of Bedrooms: 6

Write a review



Profile ▾

Utilities Not Included

Laundry Included

No Pets Allowed

Logout

The apartment is a spacious, sunny six bedroom in a two family on a quiet street. Newly renovated kitchen with wood floors. Very close to Tufts' gym. Half mile to medford square. The landlord, Liz, was great. She was always available when we needed her and is prompt to fix whatever issue may arise with the house. The onsite laundry was a plus. 5

2017-04-16 19:29:31.110213+00:00

Write your own review for this house!:

Stars 5 ▾

Submit

Contact landlord

Express interest in this property!

Your Email Address

Enter your email here.

Contact this landlord!



Someone is into your house!

Hey there Rachael,

Someone on OurHouse is interested in viewing your property!

We've included their contact information below so that you can get in touch with them to set up a viewing of the apartment. Please reach out to them soon! They've included the following message:

Hello, I am interested in this apartment and if you are seeing this message, you should know that I typed this message into the OurHouse website and then it put it into an email and sent it to you! How fun!

Contact this student by emailing them at fcaiazzo95@gmail.com

The OurHouse Team

Committed to helping you make your house their house!



If you didn't create an account using this email address, please ignore this email or send us an email to let us know.

What is the challenge area?

- How to accomplish **singularity**
 - Consolidation of information
 - Have all resources available in one place such that no user should have to leave our site in order to lease a home **AND** have access to a complete picture of the property
 - A site that carries the user from start to finish with as much transparency as possible

Why did we decide to delve into this area?

- We have all had the experience of trying to find a place to live and finding ourselves scouring three, four, five **different websites** in order to access the information we need
- And truthfully, much of the information that exists across all of these resources is basically synonymous...
- Lots of data, but lacks **relevance, context, and meaning**

craigslist

post to classifieds

my account

search craigslist

event calendar

M	T	W	T	F	S	S
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7
8	9	10	11	12	13	14

help, faq, abuse, legal

avoid scams & fraud

personal safety tips

terms of use

privacy policy

system status



Buy

Rent

Sell

Mortgages

Agent finder

Home design



PadMapper



Where to?



Tufts Class of 2017

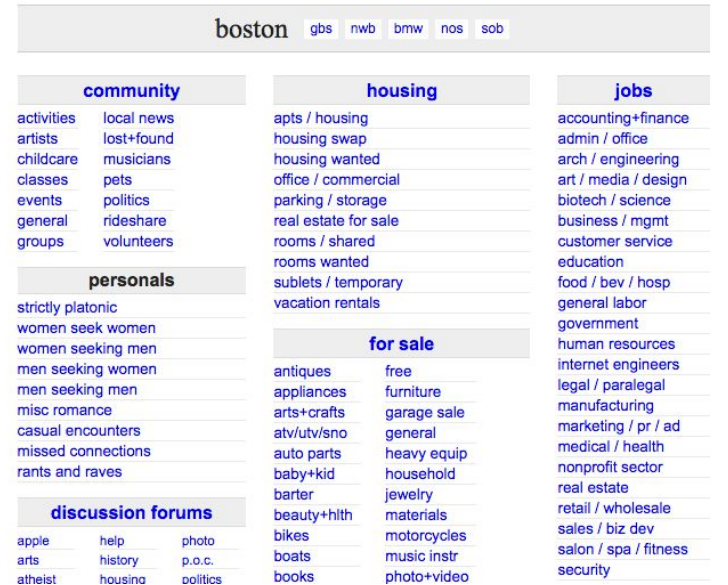
Do you know of any good landlords?

Companies that also face this problem

- In a generation where the success so many businesses hinges upon the distribution of information online, the **problem of decentralized information** is a big one.
- For example, if a consumer can more easily acquire all of the information they need from somewhere else, a company is likely to lose business.

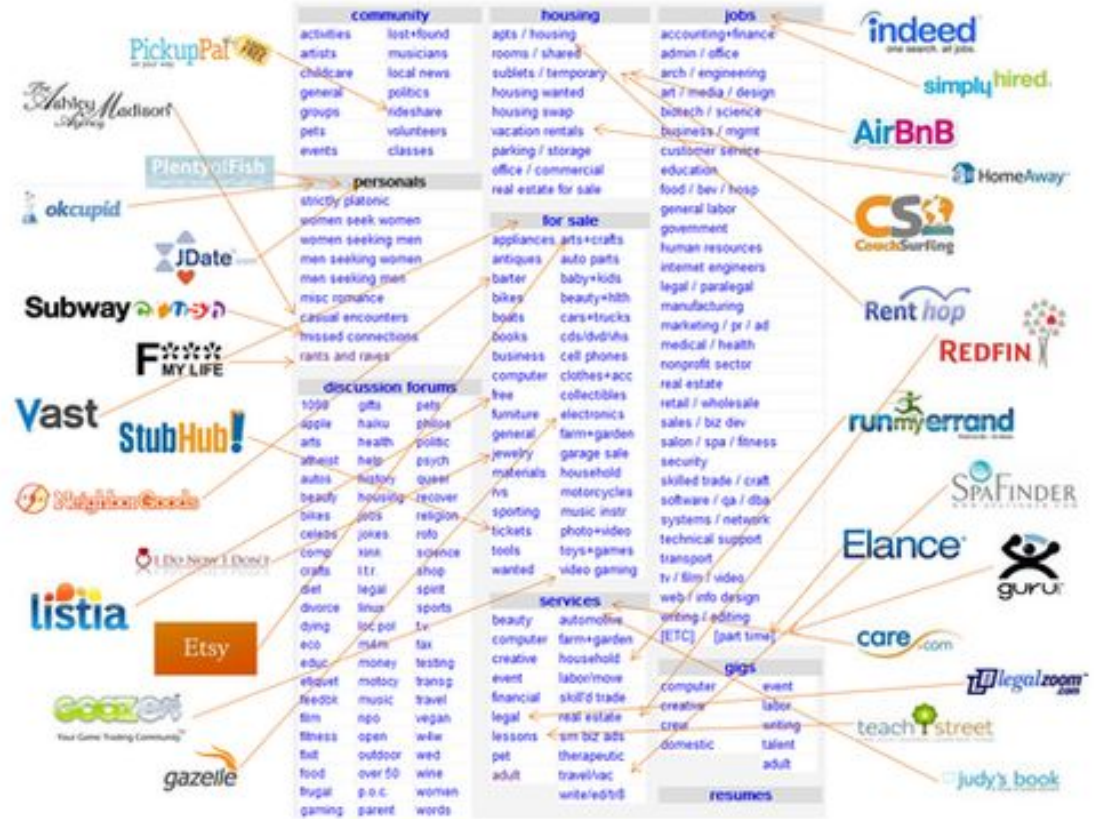
Case Study: Craigslist

- Craigslist has been relatively unchanged since 1995
- Pretty 'ugly' interface
- BUT, is **free** and has simple categories with all **relevant information** in **one place** -> stood the test of time



Implications for businesses

The challenge: pick a category and **centralize the information** in a way that's it's easy to access and interpret



Graphic by: [Andrew Parker](#)

Our solution to singular resource

- Leverage APIs of other existing applications that are relevant to our site
- Data Scraping
- Interpret what the data **means** and communicate that to our audience

Solution (via prototype)



List Your House

Profile ▾

Logout

Here's some more information we found about this house!

Home Description:

- This apartment features 8 bedrooms, 4 bathrooms, a living room, and a full kitchen - Newly renovated apartment! - Laundry on premise - Back deck for entertaining - Hardwood floors - Driveway parking - Very spacious unit - Tons of natural sunlight! - Stainless steel appliances - Granite countertops - Easy access to campus - Easy access to restaurants! - Call before it's gone! (RLNE2658080)

Parking Type:

Looks like there is no parking at this property. If you intend to have a car, you might want to look into street parking. You will need your car registered in Massachussets and proof of residency at this house. Visit [here](#) for more information.

Square Feet:

We couldn't find the square footage of this property. Contact the landlord if you would like to know.

Number of Floors:

We couldn't find information about the number of floors for this property. If you are interested, contact the landlord.

Types of Rooms:

We couldn't find information about the types of rooms at this property. Contact the landlord with any questions you may have.


Appliances:

We couldn't find any information about the appliances at this property. Talk with the landlord to know what appliances you should bring with you.

Heating System:

We couldn't find the heating system of this property. If you would like to know, contact the landlord.

Solution (via prototype)

 List Your House Number of Floors: Logout

We couldn't find information about the number of floors for this property. If you are interested, contact the landlord.

Types of Rooms:

We couldn't find information about the types of rooms at this property. Contact the landlord with any questions you may have.

Appliances:

We couldn't find any information about the appliances at this property. Talk with the landlord to know what appliances you should bring with you.

Heating System:

We couldn't find the heating system of this property. If you would like to know, contact the landlord.

Heating Source:

We couldn't determine the heating source at this property. Contact the landlord if you would like to know.

Year Built:

We couldn't find the year this house was built. If you would like to know, contact the landlord.

Year Updated:

We couldn't determine the year this house was last updated. Contact the landlord for further information.



Existing Solution



Undergraduate Education, Student Affairs, & Student Services
Off-Campus Housing Resources
Office of Residential Life and Learning

Apartment Listings : Current Listings

Apartment Listing:

IMPORTANT: In Medford, the zoning ordinance allows for no more than 3 (three) unrelated individuals to live together in one unit. In S

Posted	City	Street	Rental/Sublet	Rent	Description
2/17/2016	Somerville		Rental	\$800/mo	<p>My 17 year old daughter Ruby and I have a beautiful spacious furnished room in the Winter Hill area and you can walk to the red line and we are also a bus ride away from the orange line. We are not far from Union Squares, all are walkable. Perfect spot for Tufts students or visiting faculty, and near to lots of parking.</p> <p>The room is very pretty and comfortable. We have two friendly cats. All utilities, internet, etc. included. Women only.</p> <p>Please email me if you are interested!</p>
7/15/2016	Somerville	Washington St	Rental	\$3000/mo	<p>A gem on the Cambridge-Somerville border. One of the only single-family homes in the area, this 4 bedroom home has 3 bedrooms, each with a queen bed (one BR can serve easily as a home office or nursery), one bathroom, an amazing gas fireplace for cozy winter nights, large dining room, ample kitchen, private fenced-in yard with street parking spots. The house is fully equipped -- including dishwasher, nice range/oven, coffee maker, wifi, etc. Please email for photos.</p>
9/8/2016	Medford	Crowley St	Rental	\$4600/mo	<p>One block from Tufts - Fully Furnished 3 bedroom, 2 1/2 bath, single family, home for rent. Available from 2017. The cost is \$4600, includes all utilities and Wireless Internet. Home has Central A/C, Gas/Fridge, Stainless Appliances, Hardwood Floors throughout, Washer & Dryer, Spotless/Non-Smoking & Full Kitchen. One of only 3 homes on a quiet private way with plenty of parking. First, last and security deposit required.</p>
					<p>2 furnished bedrooms available in 4 bedroom apartment. Wireless high-speed internet access and clean, safe and quiet house. I emphasize the convenience of this location as far as easy access to highways, supermarkets, post office, banks etc...</p> <p>Public transportation is as follows: Major transportation center is called Sullivan Station and is part of the Orange Line system. Sullivan Square Station is approximately 10 minutes walking distance from the apartment straight line down Broadway in Somerville. Please visit www.mbt.com and use the pull down menu to find Sullivan Square Station Transportation Center and the Orange Line. Sullivan Square Station is also a major transportation hub.</p> <p>For almost any location in Boston: You can get anywhere in Boston in less than 30 minutes from Sullivan Square Station.</p>

Difficult part of team's final project/solution


- Few APIs available
 - only found Zillow API
 - Redfin and Padmapper do not have APIs
- Similar issues that team 4 (Yumbo) faced: relying on other applications' data (...Zillow)

Issues with Zillow API

- It doesn't really work... (parsing XML is a nightmare)
- Errors when looking up an address not in Zillow's database
- Difficult to get data from old **APIs that do not keep up their information.**
- The data is in XML /it's all random strings so there's no way to know what data you're getting back. There's **no documentation** of what are acceptable return strings (ie parkingType could be "off-street" or any other string).
- Makes **testing** hard and finding bugs even harder
- **Deriving meaning** from strings when we don't know what to expect is hard

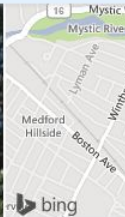

Difficult part of team's final project/solution

Access to Zillow's information - example: this property has all the info we want!



CORRECT HOME FACTS

SAVE SHARE HIDE MORE



**21 Brookings St,
Medford, MA 02155**

OFF MARKET

Zestimate®:
\$474,848


disagree

Rent Zestimate®: \$2,500 /mo

3 beds · 1 bath · 1,580 sqft

Edit

Edit home facts for a more accurate Zestimate.



CORRECT HOME FACTS

SAVE SHARE HIDE MORE

Facts and Features

Type Single Family	Year Built 1910	Heating Baseboard
Cooling Central	Parking No Data	Lot 2,980 sqft

INTERIOR FEATURES

Bedrooms Beds: 3	Basement Unfinished basement
Heating and Cooling Heating: Baseboard Heating: Gas Cooling: Central	Attic Attic
	Flooring Floor size: 1,580 sqft Flooring: Hardwood

SPACES AND AMENITIES

Spaces

Barbecue Area

Difficult part of team's final project/solution

But when we attempt an API request to Zillow for this house..... :(

```
<?xml version="1.0" encoding="utf-8"?><UpdatedPropertyDetails:updatedPropertyDetail  
s xmlns:UpdatedPropertyDetails="http://www.zillow.com/static/xsd/UpdatedPropertyDet  
ails.xsd" xsi:schemaLocation="http://www.zillow.com/static/xsd/UpdatedPropertyDetail  
s.xsd http://www.zillowstatic.com/vstatic/7d664a7/static/xsd/UpdatedPropertyDetail  
s.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"><request><zpid>5628185  
6</zpid></request><message><text>Error: protected data is unavailable through API</  
text><code>501</code></message></UpdatedPropertyDetails:updatedPropertyDetails><!--  
H:016 T:199ms S:115 R:Sun Apr 16 15:47:28 PDT 2017 B:5.0.42234-master.8aaefb5~  
hotfix_pre.d8ebd3d -->
```

Opportunities for Improvement

- Look into more opportunities for data scraping (example - the spreadsheet res-life currently provides for off-campus housing)
- Pooling more resources into our site (still on the hunt)

References

- <https://www.quora.com/Why-hasnt-another-product-disrupted-and-replaced-Craigslist>
- <https://blog.kissmetrics.com/ugly-websites/>
- <http://ase.tufts.edu/och/rentalListings/>