

A Web Tool for Negotiating Negative Housing Conditions

Anonymous Author(s)

ABSTRACT

Dealing with negative housing conditions is a frustrating, confusing process for many tenants. People living with these conditions often do not know how to handle them. In this project we began to develop a tool that will help tenants track their conditions and build a case to negotiate with their landlords. This tool will help tenants navigate a difficult situation and will also provide data to help guide future landlord-tenant information economy tools.

CCS CONCEPTS

• **Human-centered computing** → **Human computer interaction (HCI)**.

KEYWORDS

hci, landlord-tenant information economy

ACM Reference Format:

Anonymous Author(s). 2019. A Web Tool for Negotiating Negative Housing Conditions. In *COMPASS '19: ACM SIGCAS Conference on Computing and Sustainable Societies, July 03–05, 2018, Accra, Ghana*. ACM, New York, NY, USA, 3 pages. <https://doi.org/10.1145/1122445.1122456>

1 INTRODUCTION

Negative or illegal housing conditions can cause financial stress, emotional turmoil, and even health issues for tenants [4][6]. Prior research suggests that negative housing conditions are more prominent in units rented by low-income tenants, which often includes minority groups, immigrants, and the elderly [5][6].

Tenants who are facing these conditions in their rental units are often entitled to monetary compensation depending on the type and duration of the condition. However, many tenants do not know how to negotiate appropriately with their landlords. Some cities, like New York City [2] and Chicago [3], have platforms to help their tenants report issues, but there is no widespread, accessible tool to help tenants in other locations. There are also tools such as Massachusetts Defense of Eviction (MADE) [1] that help tenants who are facing eviction court, but these tools require a large time commitment and are only designed for tenants facing evictions.

We have begun to build a standalone tool that guides tenants who are facing negative housing conditions. This tool will not only serve people in need, but will also help build a database of rental conditions tenants face in order to guide the development of future housing assistance tools.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from permissions@acm.org.

COMPASS '19, July 03–05, 2019, Accra, Ghana
© 2019 Association for Computing Machinery.
ACM ISBN 978-1-4503-9999-9/18/06...\$15.00
<https://doi.org/10.1145/1122445.1122456>

2 DESIGN

We began by determining the use cases and requirements for the tool. Together we determined two different use cases:

- (1) Tenants who are building a case for eviction court, either with or without the help of a lawyer, need a way to track negative housing conditions and calculate a monetary amount to negotiate in the case.
- (2) Tenants who are not being evicted but are facing negative conditions in their housing unit can track the conditions and work directly with their landlords to negotiate.

In addition, we walked through the process that a lawyer normally takes with tenants to understand the information needed for a negotiation. We determined that the type of condition, duration that it was present, monthly rent, and perceived hardship to the tenant were all necessary.

To support the two use cases and gather the required information, we chose to focus on four different functions in the tool:

- (1) Give users a sense of the types of conditions they may be able to negotiate.
- (2) Allow users to enter a condition with a start date, end date, and percentage of rent they believe the condition merits.
- (3) Educate tenants who are using the tool without assistance so that they enter values that are realistic for a negotiation.
- (4) Provide an output of the entries and total amount that may be owed for use in a later negotiation.

Additional factors taken into account were:

- The ability to add a condition multiple times if it occurred over different time periods
- The ability to remove or edit previously entered items
- Basic error handling for all numeric and date inputs
- Clear messaging that the tool is just for guidance and does not provide a guarantee of any funds or legal representation
- The ability to enter a condition that is not already on the list
- Ensure that conditions and corresponding information are logged for future data analysis

After exploring different interaction types, we chose to use a collapsible button design for the tool. This design provides a clean way for users to enter multiple entries of a single condition. Additionally, it allows tenants who are using the tool on their own to first view the conditions, then think about the information they need to enter only after they select a condition.

3 THE TOOL

When the page first loads, the user sees the title of the tool (still being decided), basic instructional text and a list of suggested conditions. In addition, there is a text box to enter the monthly rent and a button to run the necessary calculations at the bottom of the page. Figure 1 shows this layout.

After selecting an individual condition, the user can then enter the specific start date, end date, and appropriate percentage for the condition. Tooltips are present next to each entry to guide tenants

The screenshot shows a vertical list of housing conditions: Insects, Mice or Rats, Water Leaks or other Plumbing Problems, Electrical Problems, Lead Paint, Defective or Leaky Windows, Defective Locks, No Heat, No Hot Water, and Other. Below the list is a text input field labeled 'Monthly rent:' and a blue button labeled 'Calculate Total'.

Figure 1: The landing page for the tool, excluding the title and instructional text.

through the process. For the two date fields, the tip guides the user to think about when the particular condition started and when it ended. It also mentions that separate timespans can be recorded individually. For the percentage field, the tip encourages the user to think about how that particular condition affected them and their livelihood while living with it. Figure 2 shows the dropdown of a condition along with a tooltip.

Once an item has been entered, the user can see the details of that item, along with a button that allows the user to remove it. In addition, the condition button is updated to show the number of items that have been saved for that condition. This helps users see which items they have entered so they can later edit or remove them if necessary. Figure 2 shows this view.

The screenshot shows the 'Insects (1)' section expanded. It contains three input fields: 'Start Date:' with a dropdown menu showing '2019-04-08', 'End Date:' with a dropdown menu showing '2019-04-17', and 'Percentage:' with a dropdown menu showing '5'. There are blue buttons for 'Add Item' and 'Remove Item'.

Figure 2: The view for one condition after an item has been added.

For the 'Other' condition, the dropdown also includes a textbox for the user to type in what exactly the condition is. This not only helps them remember each condition for negotiation, but will also help show the different conditions tenants are facing via data collection.

After entering in all of the separate conditions, the user then enters the monthly rent payment and selects Calculate Total. Currently, this button calculates and displays the total amount for negotiation based on the information entered.

4 DISCUSSION

We believe this tool will have two main contributions after its launch. First, it will give tenants an easy, streamlined way of recording their housing conditions for negotiations with their landlords. Because the tool will be a standalone app and not tied to a particular location, it will be widely accessible to residents within the United States. In addition, it could be easily adapted for an international audience. We believe this will encourage widespread adoption over time, which will be measured by the number of unique users.

The second main contribution will be the data collected from the tool. At this point, there does not seem to be any widespread data collection for negative housing conditions. This data will be useful for a number of reasons. First, it will help to redesign the tool, by placing the most common conditions at the top and leaving less common conditions off the pre-made list. In addition, visibility into this data will help shine a light on the most common issues facing renters. This may then guide the design and development of future tools to help tenants. Finally, by encouraging users to submit demographic information, we can see if there are certain groups of people who face some housing conditions more than others. We can also gain an understanding of the perceived impact of those conditions, and how that differs among various demographic groups. This information will help social justice initiatives to protect the groups who are most affected by negative housing conditions.

5 NEXT STEPS

Moving forward we plan to extend the capabilities of the Calculate Total button so that it outputs an itemized total, similar to a receipt. This will show users how the total was calculated, allowing them to make changes if necessary. In addition, we plan to make this downloadable as a CSV file so that users can save it to their own device and reference it at a later time.

To increase the accessibility of the tool, we would like to translate it to other languages. This will be particularly helpful for immigrants and those who speak English as a second language. There is also an opportunity to use more visuals in the tool to assist those with low literacy levels.

Finally, this tool will be integrated with the GBLs MADE tool, which is an interview tool that guides tenants who are getting ready to face eviction court. This will help lawyers as they assist tenants, and also ensure that meaningful data is generated from usage of the tool.

REFERENCES

- [1] [n.d.]. Massachusetts Defense for Eviction (MADE). <https://www.gbls.org/MADE/about>
- [2] 2015. JustFix.nyc. <https://www.justfix.nyc/>
- [3] 2019. Rentervention. <https://www.rentervention.com/>
- [4] M. Iversen and R. Dahl. 1990. Allergy to storage mites in asthmatic patients and its relation to damp housing conditions. *European Journal of Allergy and Clinical Immunology* (1990). <https://doi.org/10.1111/j.1398-9995.1990.tb00462.x>
- [5] Michael Schill, Samantha Friedman, and Emily Rosenbaum. 1998. The Housing Conditions of Immigrants in New York City. *Journal of Housing Research* 9, 2 (1998), 201 – 235. <https://doi.org/10.5555/jhor.9.2.y30844637176483>

[6] E. Webb, D. Blane, and Robert de Vries. 2012. Housing and respiratory health at older ages. *Journal of Epidemiology and Community Health* (2012). <https://doi.org/10.1136/jech-2012-201458>

[//doi.org/10.1136/jech-2012-201458](https://doi.org/10.1136/jech-2012-201458)