

User Testing Plan & Results

URStreamSight

Raymond Knorr, Avery Cameron, Noah Rowbotham

Version: 1 2021-04-08

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User Testing Plan

Our User testing plan strategy is based on a series of events:

- Allowing the user to explore our application
- Recording comments and any points of difficulty
- Review the Experience

We introduce the users to our application and let them explore our frontend. We have the users comment on:

- Initial thoughts and impressions
- What they are attempting to do
- Improvements to experience

As the user navigates through our application, we make notes on any times the user seems confused or is struggling. This helps us to improve navigation and the overall user experience. This is completed by noting the experience without prompting the user.

Finally, once the user has completed navigation of the frontend, we ask the user questions to assess the experience more formally. The questions are:

- What are your overall thoughts on the application?
- Were there any struggles you experienced?
- What improvements would you make?
- Do you have any questions about the app?

User Testing Feedback

Here we will detail the comments of the users, and any steps taken to improve the user interface resulting from those comments.

Note: Prairie Robotics has also provided feedback from the municipalities when they demonstrated the product to clients. We built our front-end with a lot of this feedback already in mind.

User 1

Chart Page

- Add x and y axis labels to make interpreting the data easier
- “What does bottom 25% mean? Least infractions or worst behaviour” Changed to “worst 25% of households”
- Legend in the top right of the graph would be better
 - All three of these changes were implemented

Infraction Page

- Filtering by each contaminant is really cool

- “I can’t believe you guys count how many bins you tip over”
 - Municipality analysts will be familiar with the term ‘bin tip’ and what it means
- Dragged and dropped columns caused formatting errors
 - Problem with the MatTable library that we used, and was not fixed.

Home Page

- Loading spinner looks nice
- Data is generally interpretable

Map Page

- Maybe put a number next to the contaminant equaling the amount currently loaded on map.
 - This was added.
- Contaminants on the top right didn’t pop out, not immediately obvious that they are there
 - Different colors were experimented with, also discussions about locus of attention and having them closer to the input field for contaminants. This is a UI issue that we would like to fix still.

User 2

General Comments

- Make sure greens are consistent
- Make sure margins are consistent on all pages
- Make sure fonts are all serif or sans serif
- Make sure title is more consistent and consistently placed on all pages
 - Styles were enforced throughout pages

Chart Page

- “Bottom” should be “Worst”, “Top” should be “Best”
- “Before/After” could be “Before / After”
 - Both of these changes were implemented

Infractions Page

- Grey background on headrow could pop it out a bit
 - We decided that increasing the font size of the table head row would have a similar effect.

Map Page

- Maybe add a slider for contaminant intensity
 - This was added in bottom right corner of map page
- Clicking contaminants should have some sort of color or animation when they are added.
 - See above map page comments.

- + and X buttons to add all / remove all contaminants did not appear the same size.
 - These were changed to “ADD” and “CLEAR” buttons

User 3

Login Page

- The login form doesn't indicate when it is selected which is hard to interact with
 - We changed the input selection to still describe the expected entry (email, username) and to highlight the input box more clearly
- The first page doesn't have any indication that it is a login page
 - We added a heading to the main page to let the user know they can login