

User Acceptance Testing	
Copy-Waste	
Project:	Green Screen Dashboard
Date	Feb. 24 / 2022
User:	Prairie Robotics
Goal:	The primary strategy when requesting feedback on the dashboard is to focus on evaluating the utility, usability, and desirability of the dashboard from the user's perspective.
Plan:	<p><i>Provide Background:</i> The main course of action is to first introduce the user to the dashboard and explain its purpose.</p> <p><i>Complete Tasks and Record Experiences:</i> For this, the users will be given a list of tasks to complete using the dashboard. These tasks are designed to simulate the experiences a user will have as they perform their regular checks with the dashboard. They will be given assistance if they request it, however, the objective of this is to identify where the user is struggling and identify areas to improve the user's experience. After the tasks are completed, their points of difficulty will be reviewed. The list of tasks will be provided as follows:</p> <ol style="list-style-type: none"> 1. Login to the Dashboard (provided credentials) 2. Identify the Recent Collection Dates, number of Offenders, number of contaminants on the home page 3. Navigate to the collection results for Thursday 4. Record the contamination rate, the contaminant which occurred the most, how many bins were collected. 5. Of the recorded pieces of information, identify how it is performing 6. Navigate back to the Home Page <p><i>Freedom to Explore:</i> Finally, this step focuses on giving the user the freedom to explore the application at their own accord and provide any additional feedback and explain what else they would like to see as an improvement</p>

Reviewer	Feedback and Notes
Reviewer 1	<p>1. Login</p> <ul style="list-style-type: none"> ○ No difficulty logging in. <p>2. Home Page</p> <ul style="list-style-type: none"> ○ No difficulty finding the suggested information ○ “I like the number of offenders and contaminants found is the first thing here. If that’s all I am here for I can check for it quickly.” The reviewer was familiar with the information displayed here. <p>3. Map Navigation</p> <ul style="list-style-type: none"> ○ “So Thursday is the yellow area on the map, but how do I see the data from the day? I see stuff from Friday here.” <ul style="list-style-type: none"> ■ Ans: You can click the coloured area on the map which will take you to a different page. ■ Cursor should change from pointer to the “hover” cursor as if you were hovering over a link. <p>4. Collection Day Page</p> <ul style="list-style-type: none"> ○ No difficulty recording information. <p>5. Understandability of Information</p> <ul style="list-style-type: none"> ○ “I assume the number of offenders being red is bad, but why is it bad?” <ul style="list-style-type: none"> ■ Adding some sort of popup / notifier of the thresholds of different information panels would help with this <p>6. Back to Home</p>

-
- Navigated back to the home page using the browser back button.
 - The preferred way of doing this is by clicking the “GREEN SCREEN” header on the top. This should be styled so it looks clickable.

Additional Notes:

All tasks besides 3 and 6 were successfully completed as the navigation was not as intuitive as expected. These issues can be fixed by adding more hover effects, to improve the user’s understanding of what is clickable.

Reviewer 2

1. Login

- No difficulty logging in.

2. Home Page

- “Looks clean. I like that there isn't an overflow of information. It makes it easier to read”
 - “Does the 19 being displayed in the green colour mean it is for the green area on the map?”
 - Ans: No, green refers to the performance being good.
 - However, we should be using distinct colours instead of red, yellow, and green on the map to avoid users from interpreting the information this way.
 - “Have you thought about colouring each neighbourhood based on the contamination rate? I would find it useful when I open this up to be able to see how the entire city is performing all together just through the map.”
 - This is possible but requires more data on a
-

neighbourhood basis to be extracted as opposed to an entire day. It is an interesting idea, and we will look into implementing this.

3. Map Navigation

- The reviewer asked for the cursor to be changed when hovering over the regions on the map, but understood that they were clickable because the area changed colour when hovering over it.

4. Collection Day Page

- No difficulty recording information.
- “So if I want to look at a different day from here, how do I know which area belongs to which day?”
 - The legends for the map are missing on the collection day.

5. Understandability of Information

- “How do you decide what gets set to be green, yellow, or red?”
 - The municipality decides these thresholds, but they should be accessible when you hover over these components.

6. Back to Home

- Successfully navigated back

Conclusion

The reviewers found the information to be desirable and thought it would be valuable for municipality workers to incorporate this in their routine. However, the navigation must be adjusted so that it is more intuitive to users. Alongside this it is important to add reasoning behind the aggressive colouring on the dashboard. The colours are

	valuable, but must provide feedback for the users to reflect on, such as the reasoning behind why a panel is coloured red.
--	--

Notes:

In a perfect case of user acceptance testing, we would have preferred to test this with Waste Management and Municipality workers who are our north star customers. However, this requires coordination with a third-party and we were unable to reach these groups of users. Therefore, we performed these tests with our carryover users which consisted of our industry partner. These users have had the necessary conversations and gathered feedback from our north star customer to provide us their insight on the application.