Evaluation Feedback for COMP2811

Introduction

This document summarizes the evaluation feedback collected for the COMP2811 project, which includes the Dashboard Overview, Pollutant Overview Page, Persistent Organic Pollutants (POPs) Page, Environmental Litter Indicators Page, Fluorinated Compounds Page, and Compliance Dashboard. The feedback aims to identify improvements in usability, functionality, and overall design to meet user needs and enhance application performance.

Feedback Summary

Dashboard Page

Questions Asked:

1. Is the dashboard layout intuitive and visually appealing?
2. Do the pollutant summary cards clearly communicate compliance information?
3. Are the navigation links to detailed pages easy to locate and use?

Participant Insights:

1. Most participants praised the dashboard for its clean design but suggested adding filter controls if possible.
2. Compliance indicators were seen as effective; however, participants recommended adding textual descriptions as well as colour-coded statuses for accessibility.
3. Two participants mentioned the need for adaptive resizing for better viewing on smaller devices.

Lessons Learned:

1. Attempt to add filter for quick access.
2. Enhance accessibility with descriptive compliance indicators (with colours).
3. Ensure responsive design elements for seamless tablet and mobile experience.

Pollutant Overview Page

Questions Asked:

1. Is the search functionality easy to use and effective?
2. Do the time-series/bar charts provide clear pollutant trends?
3. Are compliance indicators clear and consistent?
4. Does the page offer sufficient details on pollutant risks and thresholds?

Participant Insights:

1. The search bar was appreciated for its simplicity but could benefit from autosuggestions for pollutant names.
2. Charts were clear but was too clustered, making it not that easy to review.
3. Compliance color-coding was praised.

Lessons Learned:

1. Add autosuggestions, if possible, for pollutant search functionality.
2. Use dropdown to display data in multiple graphs (breaking them down into parts).
3. Ensure compliance color-coding stays consistent and explore maybe adding a threshold line to the graph if needed.

Persistent Organic Pollutants (POPs) Page

Questions Asked:

1. Are the data trends displayed effectively using line charts?
2. Do rollover pop-ups provide meaningful insights into pollutant details?
3. Is the compliance color-coding intuitive and helpful?
4. Would a drop-down menu be preferrable over all the data on one line graph? If so, how would you break down the different drop-down options?

Participant Insights:

1. Line charts were well-received, but participants suggested adding a line for critical compliance thresholds.
2. Pop-ups were considered informative but could use simpler language for wider accessibility.
3. Compliance indicators were effective, with consistent feedback on their intuitive design. However, some participants insisted having a coloured column in the table would look easier on the eyes.
4. Drop-down menu heavily recommended, with most agreeing with a “Sample Point – Date” format for each option.

Lessons Learned:

1. Enhance line charts with compliance threshold line.
2. Simplify language in rollover pop-ups.
3. Ensure visual consistency with the Dashboard Overview.
4. Add drop-down menu in “Sample Point – Date” format.

Environmental Litter Indicators Page

Questions Asked:

1. Are the litter comparison visualizations clear and engaging?
2. Do the compliance indicators make sense? Is finding any litter in a bathing water source a cause for concern?
3. Are the filters for water source and litter type easy to use?

Participant Insights:

1. Pie charts for litter comparisons were engaging but bar charts were suggested instead.
2. Compliance indicators were well-received, users appreciated that litter being spotted in water sources should be “non-compliant”.
3. Location filters were functional but required more visibility on the page, possibly displaying locations in different graphs for better functionality.

Lessons Learned:

1. Replace pie charts with bar charts instead.
2. Ensure compliance indicators are properly maintained.
3. Improve filter drop-down menu and include multiple graphs per dropdown to split up multiple locations (to make it easy to compare locations if needed).

Fluorinated Compounds Page

Questions Asked:

1. Does the time-series visualization clearly display compound distributions?
2. Are the compliance indicators easy to understand?
3. Do rollover pop-ups provide sufficient details to understand what's going on?

Participant Insights:

1. The time-series visualization was well-received for each location / time.
2. Compliance indicators were clear, with a request for additional explanations on safety levels.
3. Pop-ups were informative but could benefit from a more concise format.

Lessons Learned:

1. Ensure all drop-down menu graphs work, and that none are too zoomed-in / zoomed-out.
2. Provide concise but clear pop-up information.
3. Ensure compliance indicator consistency across pages, and add a threshold line for better understanding.

Compliance Dashboard

Questions Asked:

1. Does the table successfully show all possible pollutants?
2. Are the filters for location and other criteria intuitive and functional?
3. How would you suggest showing more details for non-compliant pollutants?

Participant Insights:

1. Users managed to find all pollutants using the search bar.
2. Filters were intuitive, though a user suggested to organize everything in alphabetical order.
3. Participants recommended either pop-ups, or a link to go to a list of pollutant information.

Lessons Learned:

1. Ensure search bar works for any field.
2. Organize items in drop-down menu (filter) alphabetically for easier scrolling. Apply this to other pages where needed.
3. Find a way to show pollution information for non-compliant ones.