Preliminary design document

Colour scheme and appearance

Neutral pallet with blue accents. Create sleek and professional look while maintaining colour contrast for better accessibility

Use traffic light system to indicate pollutant levels. Can use same scheme for the interactive map. Use a dark / light contrast between the red and green colours to improve accessibility.

Label interactive elements for screen readers

Use simple, easy to read font. Eg Open Sans, Arial, Roboto

Data handling

Data comes in as csv. Use csv.hpp to extract elements

Keeping in csv requires less setup and is still quick for small – medium sized datasets

Converting to SQLite will take extra steps in both development and run time. However, it is far better at querying and allows for indexing. Can be suitable for all sizes of datasets

Initial implementation using csv format. Add SQLite conversion in future iterations if performance is poor.

Data needs to be validated before it is used. Eg missing values and inconsistent format.

Appropriate rounding used for any mathematical operations

Customer flow

User initially presented with the main dashboard. This will give a basic overview of key data points, basic filters as well as language options and data sources.

From here the user can navigate to any of the other pages. These other pages will follow a consistent theme of presentation. They will give a more detailed insight into specific data points. From these pages users can return to the dashboard or further navigate to other detailed pages.