Library Air Monitor Interface Design

# A design of user-friendly interface to help users understanding air quality data

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Abstract

Air quality in schools is a growing concern, not only because it causes various diseases, but also because good air quality is even more important in the Covid-9 environment. This is a field project on interface design that helps users to better understand the air quality data in the library.

Introduction

Indoor air pollution is almost as dangerous as outdoor air pollution, but is more easily ignored. According to my literature research, people spend 90% of their time indoors. In a fully enclosed building, hundreds of people work in an open-plan environment where pollution from computers, printers, air conditioners and various other electrical equipment mixes with the air and affects everyone in the work environment. In addition, as the building is enclosed, every breath people take increases the level of carbon dioxide in the room, which can easily produce fatigue and headaches. In conclusion, these possible air pollution problems can have a long-term negative impact on people's health and I believe this is an issue that should be taken more seriously. My design goal in this project is to visualise how air quality can be better understood and addressed.

User flow
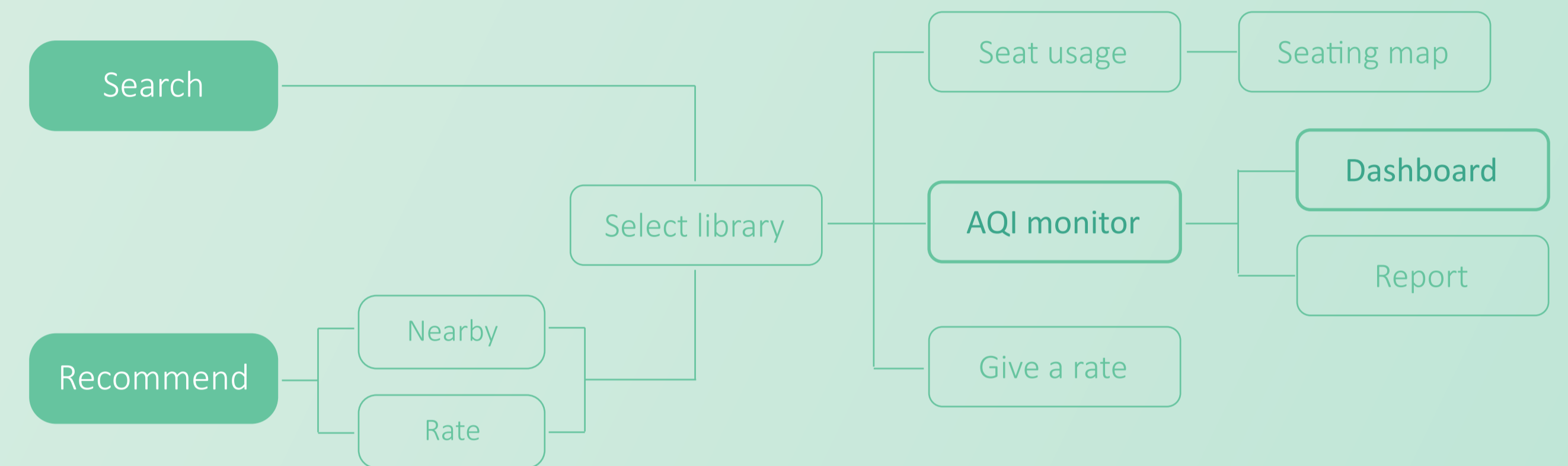
Process of Research & Design

- Do background research and communicate with the company about the direction of the air monitor design
- Determined to do the interface design for the library air monitor and started doing background research and iterative analysis
- Research product usage scenarios - field research and analysis of different functional areas of the library
- Use the stakeholder map to analyse the most promising and potential collaborators for the product
- Competitive analysis of existing air monitors on the market in terms of interface design
- Analysis of existing air monitoring problems, summarising the pain points and distilling the functional requirements
- Design the information architecture of the interface and start prototyping
- User testing of first prototypes and modification of problematic features and information architecture to produce high fidelity interfaces

Conclusion & Future

After feedback from user testing, the visual design of the air monitor does help them understand air quality and the number of people can influence their choice of library. Where possible in the future I will be conducting more user testing with deep library users and and I would like the company to assist in finding more test users. After that is multiple iterating on the interface design.

Considering the practical use of the product, I have not been able to come up with a clear solution for specific applications in scenarios, such as the differences between different libraries. If it is to be used on the field, it would need to be tailored to a specific scenario and have more interface modifications.

Design

Search library

Select library

Library info

The AQI rate is an important reference in deciding how to choose a library

AQI monitor

Hovering to zoom on

Plant growth conditions reflect air quality

Seating map

Check different zone of library

The system will recommend the proper seat for you to avoid overcrowding