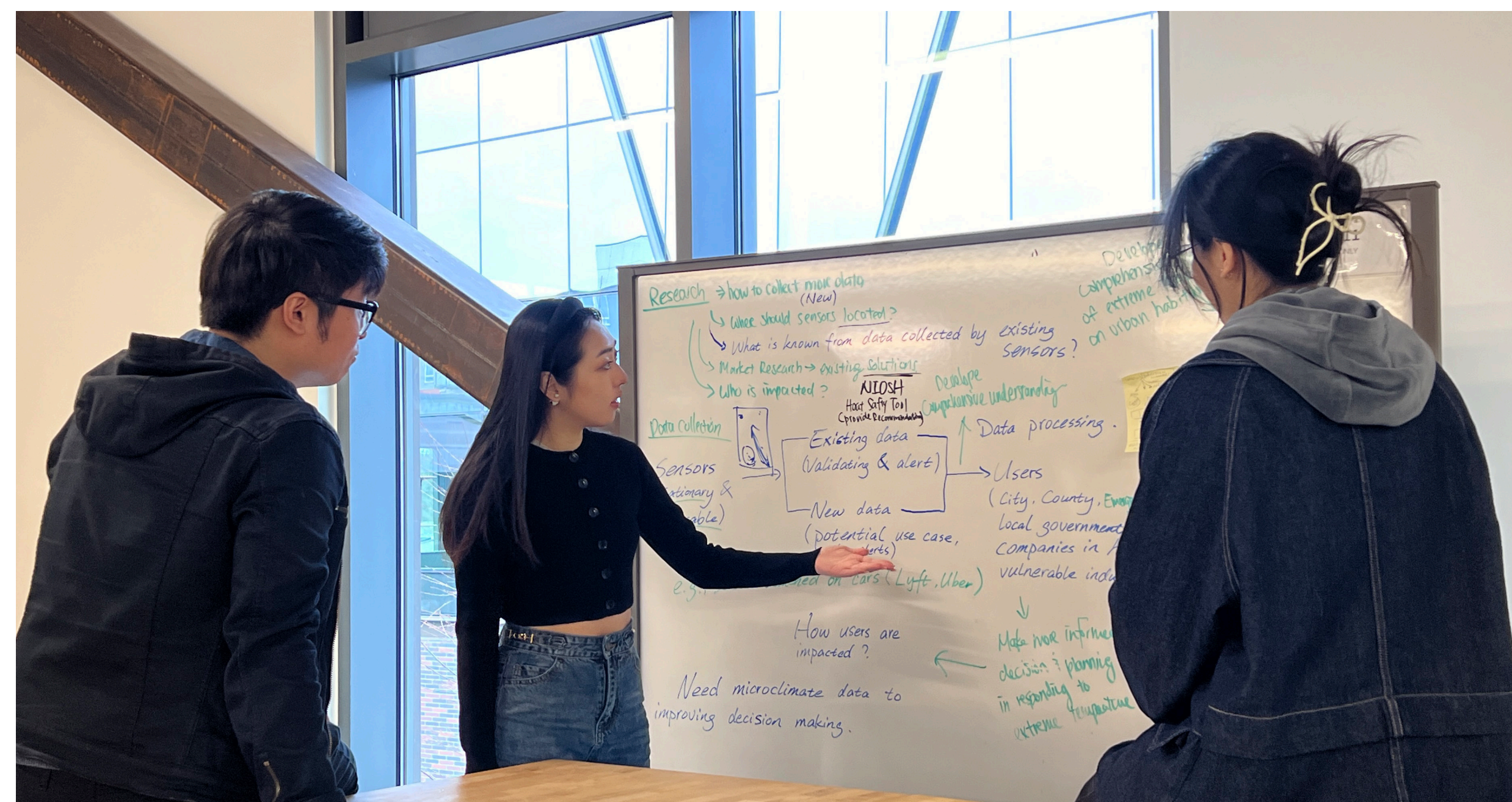


# VAISALA Xweather

An intuitive dashboard that provides accurate hyper-local temperature which enhances decision-making and insights for the University of Washington Emergency Management.



Installing Tempcast sensor



Brainstorming session

## Process/Approach

### Research and Analysis:

Conducted thorough research on the impact of temperature and humidity on human behavior and the significance of hyper-local weather information. Analyzed existing solutions and identify gaps in addressing the distinct microclimates within cities.

### Conceptualization and Ideation:

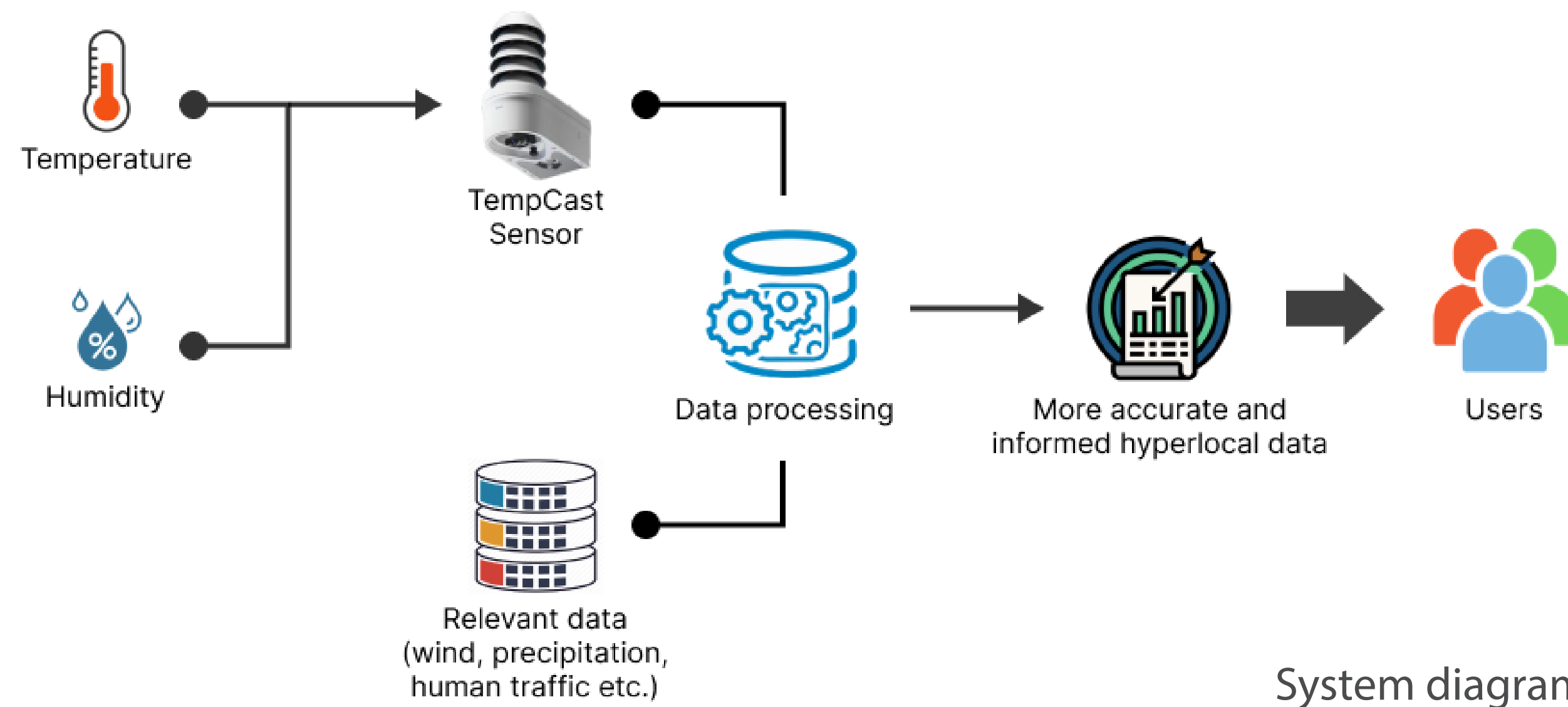
Brainstormed ideas for the design of the hyper-local weather information dashboard, considering the integration of Vaisala's TempCast sensor and other open-source data streams. Explored different features and functionalities that would empower users to customize data and make informed decisions.

### Prototyping:

Developed prototypes of the dashboard interface, focusing on usability and accessibility. Incorporated critical temperature metrics and other relevant data streams into the prototype to provide comprehensive hyper-local weather analysis.

### User Testing and Feedback:

Conducted usability testing with University of Washington Emergency Management to gather feedback on the prototype. Iterated on the design based on user feedback to improve usability and address any issues identified during testing.



System diagram

## Problem

The surrounding environment significantly influences human behavior in responding to extreme weather conditions. There are more than 1,300 deaths per year in the United States attributed to extreme heat. Emergency managers currently lack effective ways in mitigating this situation, because they often respond based on the overall city climate report, disregarding the distinct microclimates that can vary considerably across different areas within the city.

Empowering both general users and decision makers by providing hyper-local weather information. This enables them to customize data with localized, accurate, and real-time insights, facilitating informed decisions.

## Solution

Utilizing Vaisala's TempCast sensor measurements and incorporating critical safety recommendations alongside other pertinent open-source data streams, we have developed a comprehensive heat monitoring dashboard.

### Hyper-local Temperature Monitoring:

Provide users with precise and localized temperature data for specific regions or areas.

### Actionable Recommendations:

Offer the University of Washington Emergency Management actionable recommendations based on comprehensive temperature data and additional metrics.

### Weather Indices:

Provide the University of Washington Emergency Management with a comprehensive view of critical weather indices relevant to their decision-making needs.

