

Make Water Saving More Efficient

Background

1. 91% of residents were interested in historical water use.
2. 68% of them were willing to compare their water usage with neighbors or people in the same communities.
3. Over 63% of residents expected gaining advice from water companies or related professional organizations on how to save water.
4. People's excessive reliance on existing water-saving equipment leads to a rising frequency of using water, which leads to a rebound in water usage.

User Research

1. 8 out of 9 interviewees do not mind sharing their water consumptions but better to be anonymous.
2. All interviewees have the awareness of saving water like shorten shower time, but they do not know many water-saving tips.
3. All interviewees reflect that they consume most of the water on bathing and showering.
4. All interviewees think that they can only perceive their water consumption by water bills.

Low Household Water Saving Efficiency

Experience Requirements

1. Visual Experience
Visualized water consumption
Enable users to have a clearer understanding of water bills
2. Interactive Experience
Simple and intuitive operation
Highly interactive
Easy to switch interfaces
3. Social Experience
Household: Compare the average water consumption in the community
Individual: Data sharing within the family

Design Solution

1. We developed a system that can provide real-time water consumption and costs, and the visualization of system data is our focus.
2. This system is presented at home in the form of a screen embedded in the kitchen walls or living room to disclose water usage information. Each family member can share the system's water information, which forms a kind of sociality
3. While highlighting water use visualization, we also actively push some water-saving tips for users to further improve water-saving efficiency.
4. Finally, we intend to use rankings to increase competition and interaction among families in the community for sociality. We set up a ranking mechanism that conceals water usage information and actively recommends that users with the top rankings push their

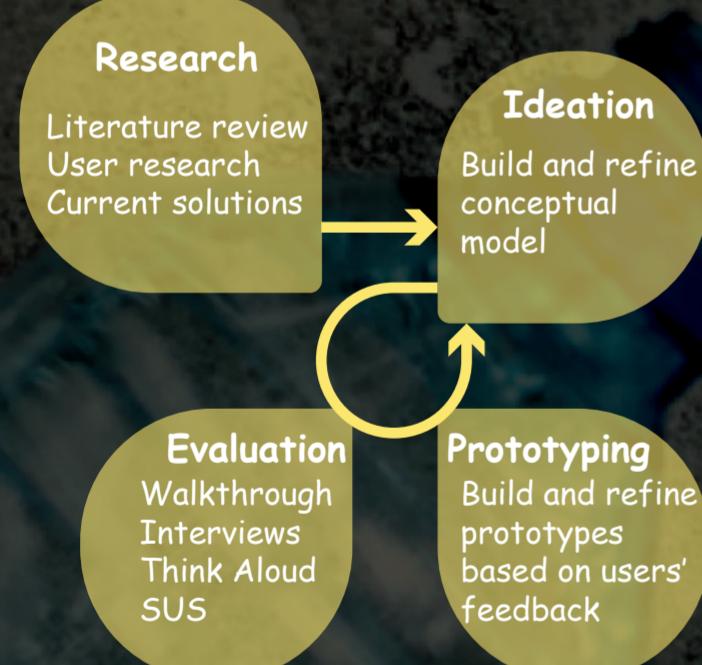
Target Audience

We are targeting the people who live in the share houses in Brisbane. Especially the international residents sharing a house with 1-2 people; the local residents living in a big family have more than 4 members in the home and working holiday visa holders

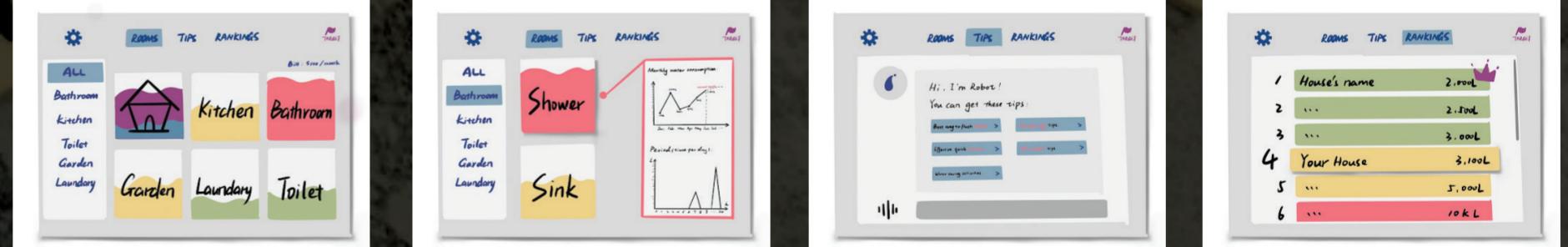
Ideation

Design Process

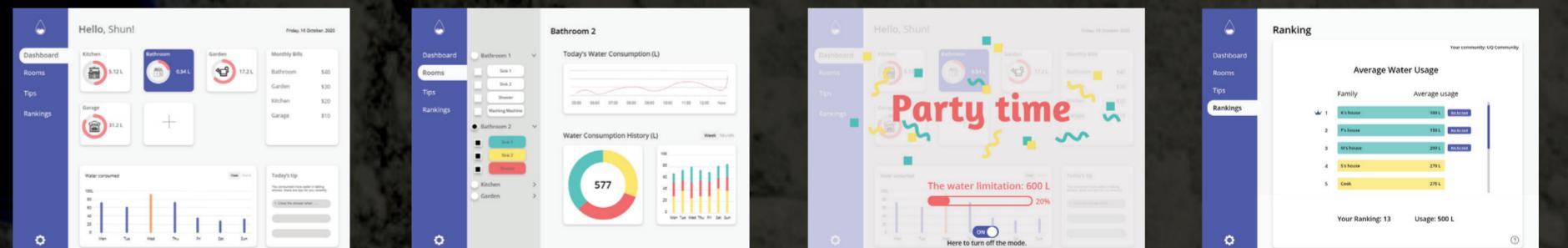
Prototype



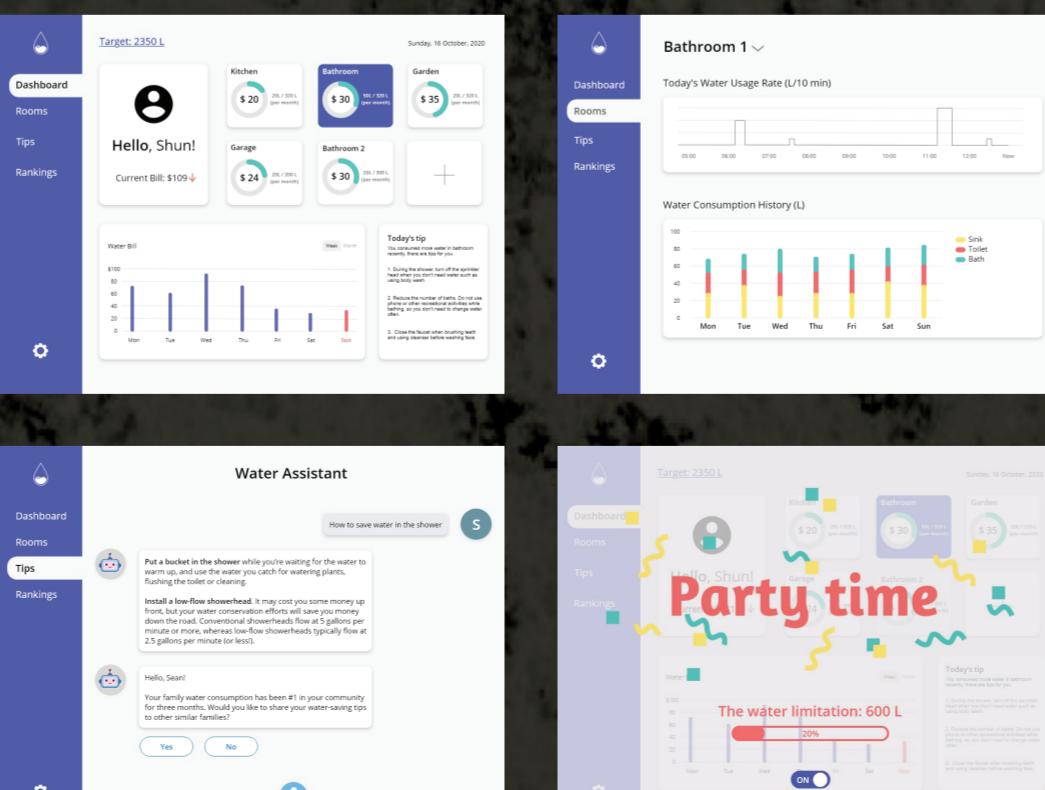
Low-fidelity Prototype



Medium-fidelity Prototype



High-fidelity Prototype



Highlighting Bills

We provided several ways to present the bills for users. On the Dashboard, there are three ways to check the bills: **User information section for the total bill**. **Bills for each room**. The variation tendency in week/month. After user set the Target, a warning will pop-up when the consumption greater than the target.

Monthly Water Consumption Visualization

The color circle visualized the monthly water usage in each room. At the same time, the details of usage of facilities are provided in the Rooms section visualizing by charts.

Collecting Water Saving Tips

This function enhance the communication between users. Chatbot can guide users to find specific tips, and input original water saving tips. All the tips are sorted by family size and shared automatically for making sure users can get suitable tips.

Novel Function - Party Mode

This mode can be turned on from Settings section, and also can be turned off at any time. The water usage is set already by users and will be included in total consumption after conversion.