HOME SAVVY

Smart home mobile application

Product

Home Savvy is a application for user to access their devices from different rooms.
They can operate appliances in their home using this remote mobile application.

Project duration

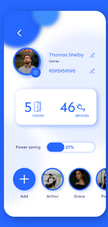
Started in August 2020 and completed the final Hi-Fidelity Prototype in November 2020

The problem

There has been always difficulty faced by the residents in controlling the devices remote in all rooms simultaneously and needs a solution in easy operating of the devices which can lead a proper power saving for the household

The goal

To design an remote mobile application that can provide a power saving environment for the resident



Understanding the user

Persona

"I love spending my time in writing once my husband and kids move out for work and school"



Smitha

Age: 32
Education: Graduate
Hometown: Mumbai
Family: Spouse & Kids
Occupation: Freelance Writer

Goals

- An easy application that can be used from anywhere
- Helps in power saving options
- Easy to remove/add access to each rooms separately

Frustrations

- "Being on a wheel chair I cant be moving around the house all the time to check if all the devices/ appliances or on/off."
- "Kids forget to switch off the lights as and when they move out of the rooms leaving to a huge electricity bill at the end of the month"

Smitha is a 32 year old Home Maker and Freelance Writer who is also physically challenged enjoys writing at her leisure.

She is frustrated that she gets distracted and it is difficult to move around the house on checking the status of the rooms as and when her husband or kids leaves their rooms. It is very difficult for her to go each time to a room and check if all the appliances are switched off. It also frustrates her that she is not able to save the electricity bill.

User Story

As a/an	Home maker and freelance writer	type of user
I want to	Avoid moving around the house and switching off appliances individually	action
so that	I can quickly check them remotely	benefit

User Journey map

Persona: **Smitha**

Goal: **Shop for clothing online quickly and easily buy items in a specific size**

Action	Addition of New rooms	Checking on Rooms	Adding a member to household	Switching Rooms On/Of
Task List	• Using Add button adding a room to the application • Select the controls that needs to be included for the room • Tap Confirm to finish adding a room	• Swipe left to check out on the status of each rooms • Select the appliances that need to be switched on or off	• Add a member to your house hold by tapping 'Add Member' Button • Fill in details and confirm	• Select the rooms list in the Profile page • List of rooms connected appears • Toggle between on/off to connect the room to the app
Feeling Adjective	Excited	Focused	Anticipation	Focused
Improvement opportunities	• Can make the Add button more brighter to give a better focus for the user	• Can also include Temperature as a part of the appliances	• Can show how many rooms are connected along with number of appliances for an overall idea.	• Can include a owner and co-member option so that the owner has the full access to the house than a co-member

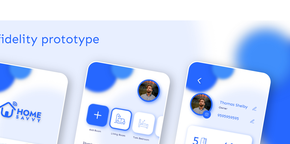
Problem Statement

Smitha is a **physically challenged home maker** who needs **remotely accessible household** because **she can stop moving around the house and save electricity**

Starting the design

Digital Wireframes for Mobile Application

In this simple version, you can see how the designer approaches solving the user's needs. The remote access to all the appliances in the rooms helps the user to toggle them switch on or off and save energy.



Low-fidelity prototype



Usability Study

Research Questions

- How long does it take for a user to add a room?
- Are users able to successfully create a room?
- Are the users able to add members to the house hold successfully?
- Are there any parts of process where user gets stuck?

Participants

5 Participants

Participants were Working Middle aged Mother, young adults, Working professionals. Age groups between 22-65

Participants a from different age groups and with different level of education.

Methodology

15-20 mins

Remote

Unmoderated usability study

Users were asked to create a room and also add a member to the household

Observations	User 1	User 2	User 3	User 4	User 5
Sees uses for labels	1	1		1	1
Doesn't see uses for labels			1		
Knows how to Add a room	1		1		1
Confused how to add a room				1	
Feels frustrated on adding a room					
Knows how to Add a member	1	1	1		1
Confused how to add a member				1	
Feels frustrated on adding a member					
Having trouble in color usage					
Has trouble in finding the notifications					
Speaks In a positive tone		1	1		
Speaks In indifferent tone				1	1
Speaks In frustrated tone					
Speaks In annoyed / impatient tone					
Speaks In confident tone	1				

Research Insights

Adding a Wifi Option

Users felt that Wifi devices can also be included to the device list for saving data

Power Saved Intimation

Users needed an intimation where they can understand how much power has been saving over the month using this application.

Toggle between Owner and Co-Member

Users need a toggle button for selecting the owner or co-member option while adding a member to the household.

Research Recommendations

- Add a separate option for WiFi along with other devices.
- Add a power saver intimation for the user to understand the amount of power saved during the month using the application
- Add a toggle button between Owner/ Co-member so that rightly give access to the members

High-fidelity prototype

Impact

The application helps user to access their households remotely irrespective of their disability. It also helps saving energy by a considerate amount on the monthly electricity bills

Learning

The idea of this application was only the beginning. I also understood that not everyone uses mobile applications and this application can also be a web application with responsiveness so that it is accessible for all devices.