The Power Control

Keeping appliances safer for Alzheimer's patients

The Nightmare Scenario...

You're a caregiver for an Alzheimer's patient, but you aren't living together. One day, you leave your loved one's house just as they are starting to cook dinner. The next morning, you find that the house has burned down. The Alzheimer's patient accidentally left the oven on overnight, starting a fire. The patient is alive, but badly injured.

The Power Control

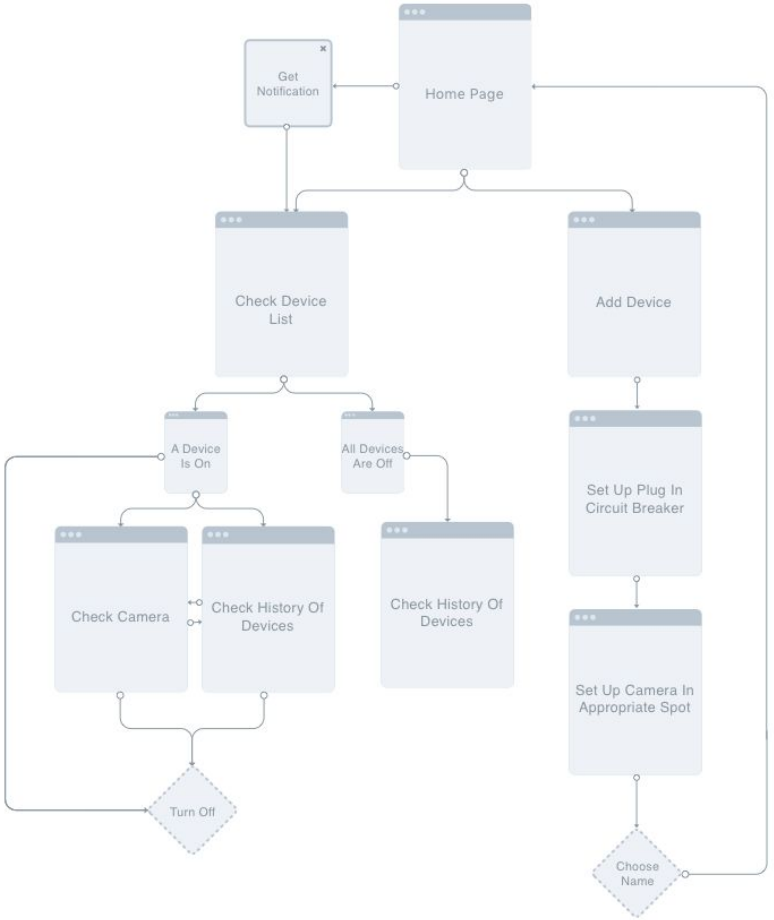
The Power Control is a kit of internet-enabled plugs and miniature cameras, with an app to connect them all.

A caregiver can set up the plugs and cameras, then monitor the patient's appliances discreetly through an app.

If the caregiver believes that there is an immediate danger when monitoring the appliances, they can cut power to any appliance independently through the app.

The app will also automatically send push notifications if any appliance stays on longer than is safe - meaning the caregiver can go about their daily routine with the knowledge that they'll be notified in any danger.

User Workflow



Prototype Demo

Chronological Narrative

- The concept started as a simple device that an oven or iron would be directly plugged into. The caregiver would see if the appliance was on, then call the patient to verify that being on was intentional.

- We realized that there was a risk of the patient unplugging the device, so we decided for it to connect to the house’s circuit breaker instead.

- We also found that forcing the caregiver to call the patient was an extra step that made things more annoying. So, we added miniature cameras to the kit.

- Finally, we added push notifications to the app’s features, so that the caregiver wouldn’t need to check the app directly to know there was a problem.

User Testing

- One user was confused with the QR aspect, and how the camera didn’t seem to be connected to the system.
- Thought the logo was more related to electric company than safety.
- Wanted more functionality like account management, history, etc.

Improvements Needed

- Add more functions in general.
- Add a second phase of the device adding process where a camera is connected (or at least, something showing that the camera is being connected automatically).
- Redesign logo - some sort of stylized fire extinguisher?
- The interface doesn’t entirely match with the functions available - when new functions are added, it will need to be modified.

Resources Used

- Workflow chart and interactive prototype created in Sketch
- Icons downloaded from flaticon.com
- Screen capture recorded with Screenflow
- QR Code image from Wikimedia Commons
- House Fire image from MaxPixel.net