HULU REMOTE

DESIGN CHALLENGE

How might we design Hulu to be more accessible for people with special needs or different challenges when it comes to discovering and/or viewing content?

THE TEAM

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PROJECT OVERVIEW

- Over the span of 16 weeks, we studied how 3 individuals live with Cerebral Palsy and how they utilize technology.

- Through our research process, we gained insights into how people with Cerebral Palsy interact with Hulu in both the digital and physical space.

CEREBRAL PALSY

- Cerebral Palsy is a neurological disorder caused by a non-progressive brain injury or malformation that occurs while the child’s brain is under development. Signs and symptoms can vary greatly, Cerebral Palsy primarily affects body movement and muscle coordination.

- Cerebral Palsy affects body movement, muscle control, muscle coordination, muscle tone, reflex, posture and balance. It can also impact fine motor skills, gross motor skills and oral motor functioning.

PROJECT GOALS

1

Become familiar with how our participants currently use technology

2

Observe our participants using Hulu in their native environment by conducting in–home interviews

3

Gain an understanding of the limitations and motivations that drive or hinder our users

4

Design a solution that is not only affordable, but adapts to the users needs

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RESEARCH METHODS

In Home Interviews

Task Analysis

Co-Creative Workshop

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OUR PARTICIPANTS

Manuel

“People don’t understand me or want to understand me”

Paraplegia due to Cerebral Palsy

Muscle stiffness

Eye sensitivity

Rigo

Rigo is unable to speak due to his Cerebral Palsy

Involuntary muscle movements

Difficulties reading and counting

Inability to speak

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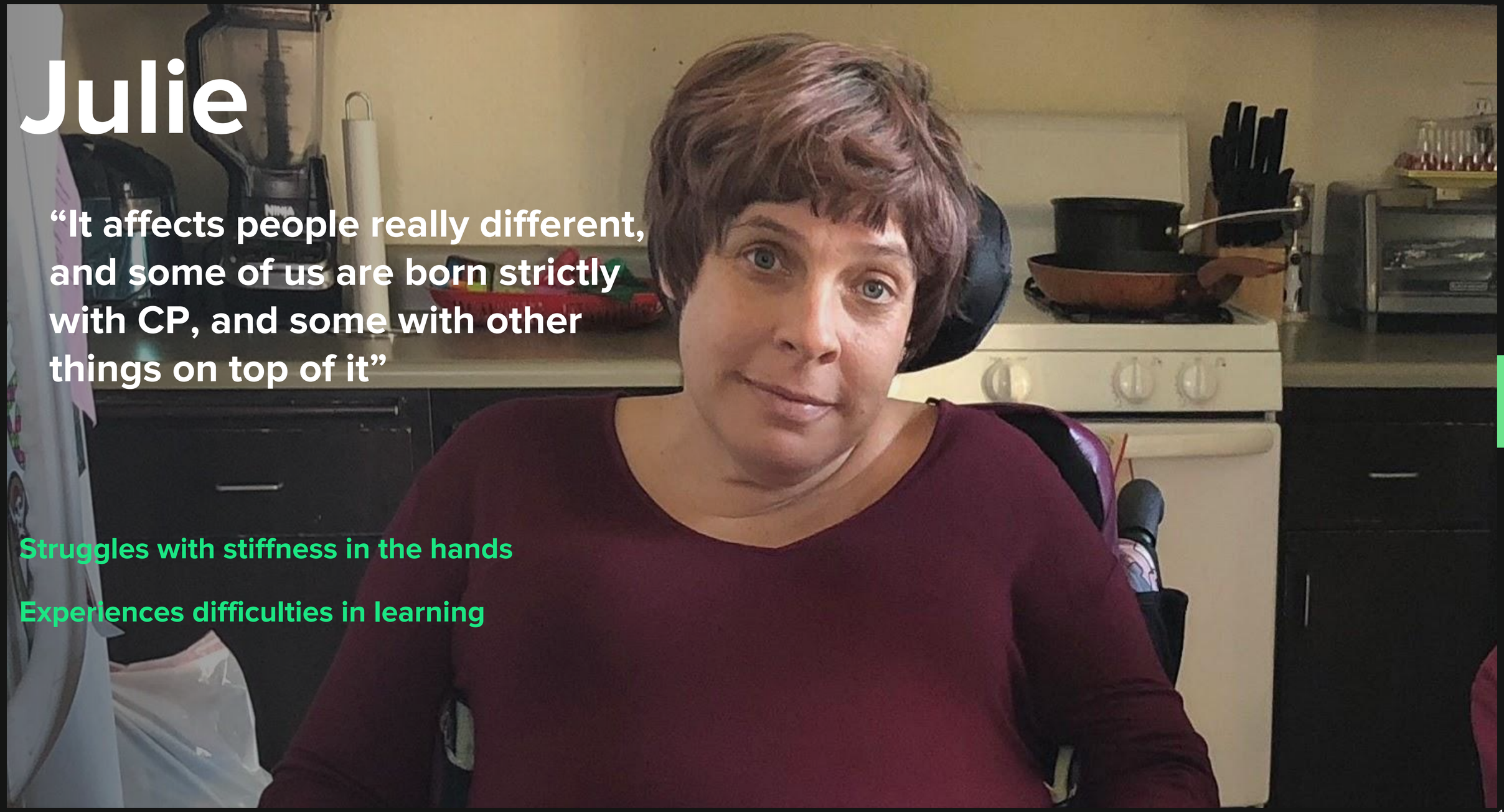

Julie

“It affects people really different, and some of us are born strictly with CP, and some with other things on top of it”

Struggles with stiffness in the hands

Experiences difficulties in learning

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DEVICES AND SERVICES USED

Samsung Galaxy

Motorola Moto G4

PS4

Hulu

Youtube

Roku TV

Kodi

Amazon Firestick TV

Netflix

iPad

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WE INTERVIEWED EACH PARTICIPANT IN A LIVING ROOM SETTING AT HOME. WE SET A GOAL TO BETTER UNDERSTAND WHAT TECHNOLOGY THEY EMPLOY AND HOW THEY USE IT, IN SEARCH OF OPPORTUNITIES FOR POSITIVE CHANGE. WE SPENT ROUGHLY 3-4 HOURS TOTAL WITH EACH PARTICIPANT.

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In Home Interviews

In Home Interviews

SPECIFIC TASKS WERE CREATED IN ORDER TO UNCOVER PAIN POINTS THAT OUR PARTICIPANTS MIGHT ENCOUNTER. TECHNIQUES SUCH AS A THINK-ALOUD PROTOCOL WERE USED IN ORDER TO COLLECT DATA. USING THIS RESEARCH METHOD, PARTICIPANTS ARE ENCOURAGED TO "THINK OUT LOUD" AND TALK US THROUGH IT AS THEY CARRY OUT THESE TASKS.

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Task Analysis

Task Analysis

WE ALLOWED OUR PARTICIPANTS TO USE THEIR IMAGINATION AND CREATIVITY TO ENVISION AN IDEAL DEVICE. MODELING CLAY WAS INCLUDED SO THEY MIGHT SHOW US A PHYSICAL FORM THAT WORKS FOR THEM PERSONALLY. THE PURPOSE OF THIS EXERCISE WAS TO UNDERSTAND THE HOPES AND ASPIRATIONS OF OUR PARTICIPANTS AND USE THESE FINDINGS TO HELP DESIGN A BETTER SOLUTION.

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Co-Creative Workshop

FINDINGS

Our ethnographic research yielded a variety of different findings among our participants, specifically problems in these areas:

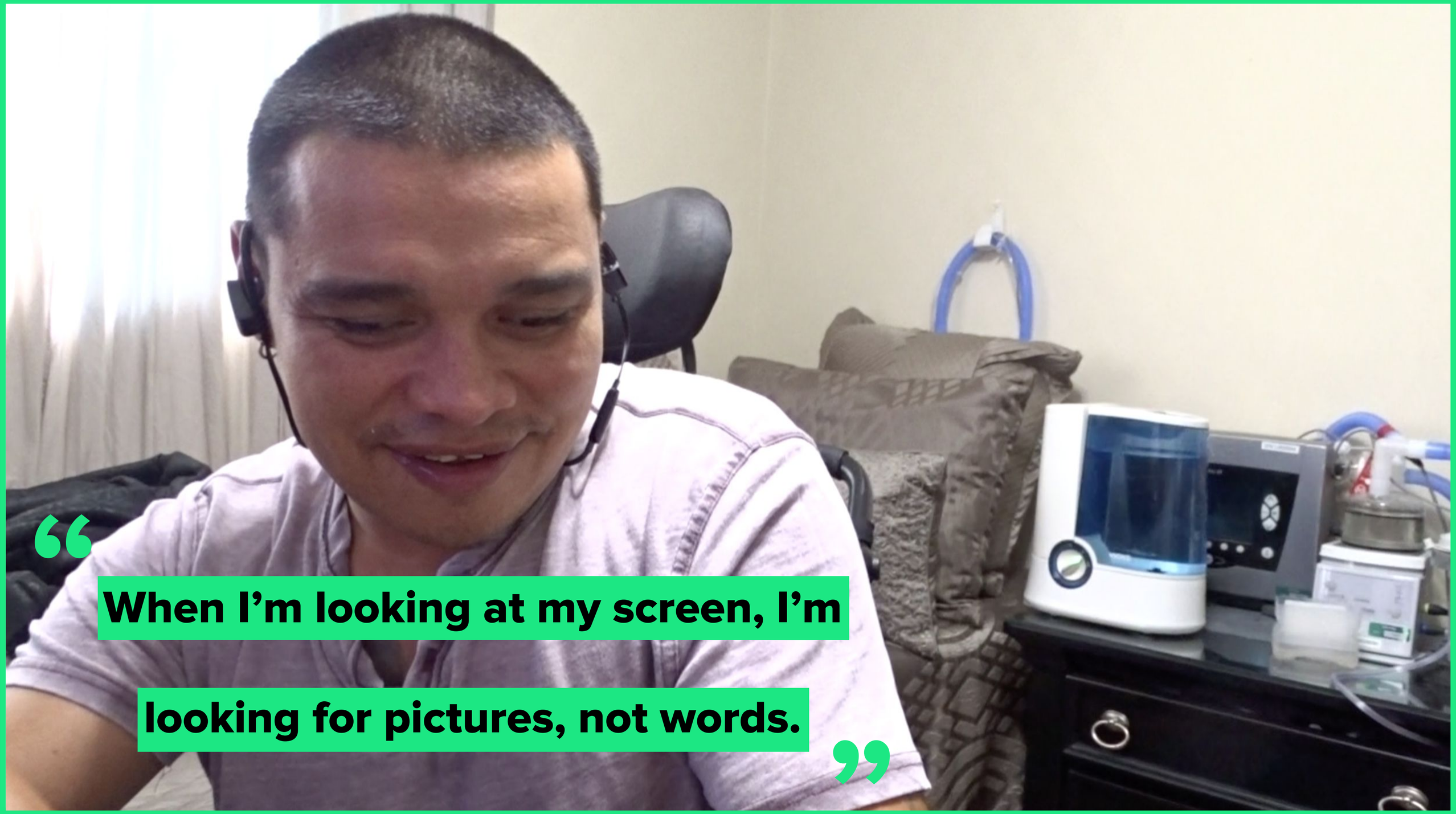
Visual

Cognitive

Physical

VISUAL PROBLEMS

One common symptom of cerebral palsy is eye sensitivity. As a result reading text is very difficult. Furthermore, gradients and colors found in Hulu can be hard on the eyes for someone with cerebral palsy.



“When I’m looking at my screen, I’m looking for pictures, not words.”

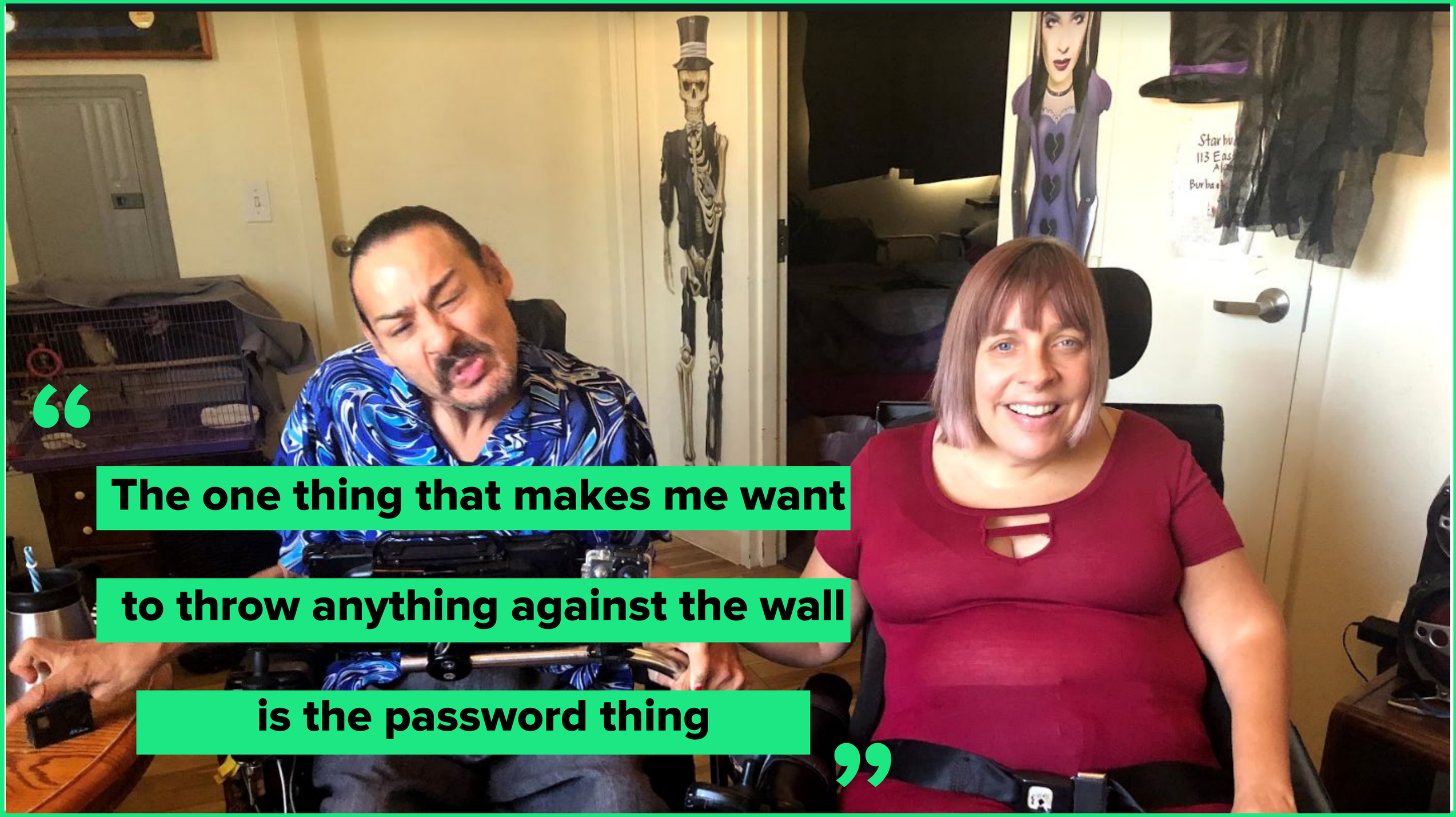
OPPORTUNITY

Offer imagery alone as an alternative
to text when browsing content

COGNITIVE PROBLEMS

For someone living with Cerebral Palsy, things like reading, writing, learning, and memorization are more difficult for them than the average person.

This is attributed to an underdeveloped brain along with a high occurrence of seizures that further hinder their mental capacity.


“The one thing that makes me want
to throw anything against the wall
is the password thing”

OPPORTUNITY

A password sharing feature across all devices

PHYSICAL PROBLEMS

While our participants exhibited many problems in different areas, we found that the most overlap was in the physical realm.

Our participants all exhibited stiffness in the hands, spasticity, jumpiness, muscles that tire easily, among many other qualities.

OPPORTUNITY

Design a digital remote that can address the variety of physical deficiencies people with Cerebral Palsy face.

INSIGHT

While our participants all have problems with CP that are unique to them, all of our participants exhibited some kind of deficiency in the area of fine motor skills.

OUR PROPOSED SOLUTION

CREATE A REMOTE FEATURE WITHIN HULU'S EXISTING APP THAT ADAPTS TO ASSISTIVE DEVICES OUR USERS CURRENTLY EMPLOY. THIS WILL ALLOW THEM TO INTERACT WITH HULU IN A MANNER THAT BEST SUITS THEM.