Project Name: Agewell

Team Name: Technovators

Team Members:

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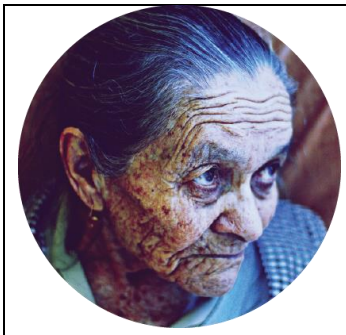
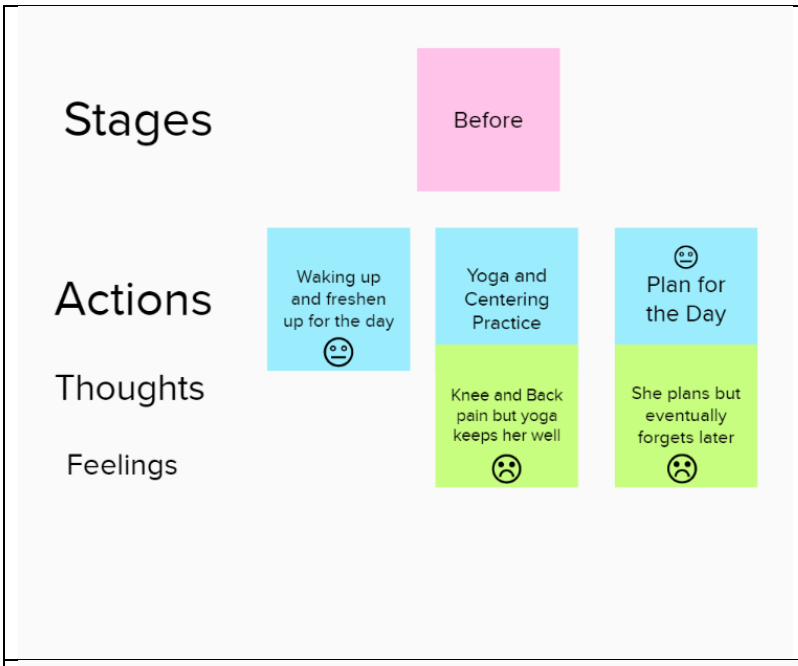
Project Summary: A voice based interactive app/device which could help elderly people (above the age of 80 years) to recollect their short term memory and identify people, objects, places that surround them. Along with it, the system would predict your next actions basis user study and suggest or motivate the ways it could be better achieved with less cognitive load and lower muscle drudgery.

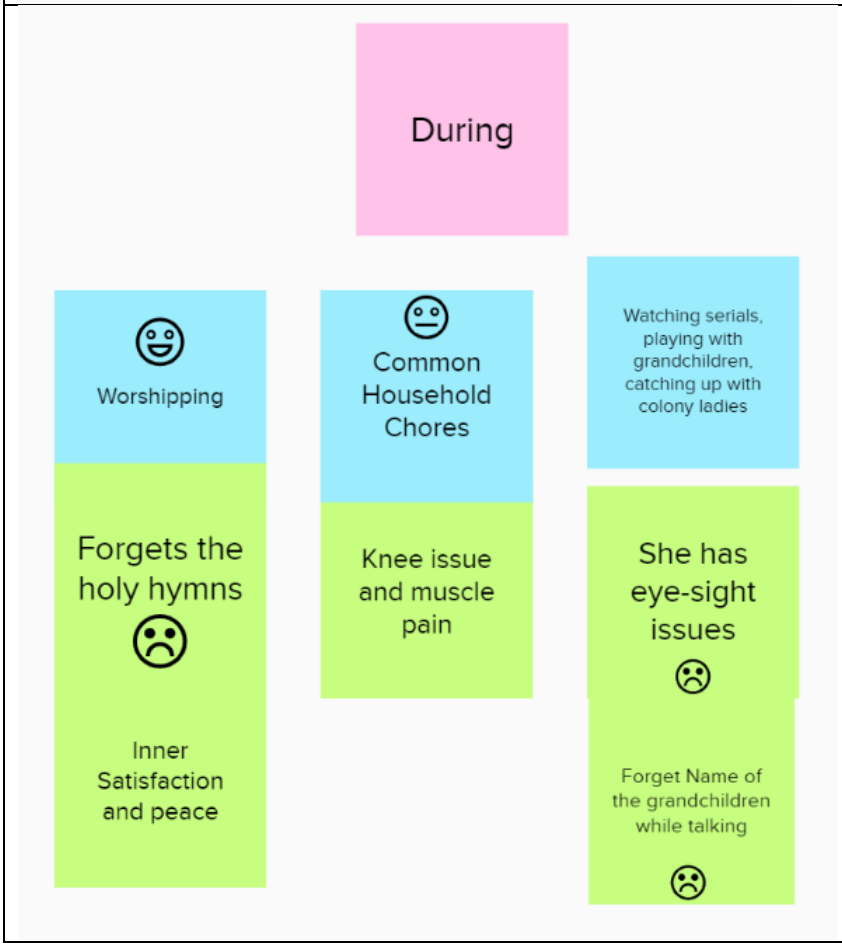
Stages Involved in the Design Thinking about the problem areas were:

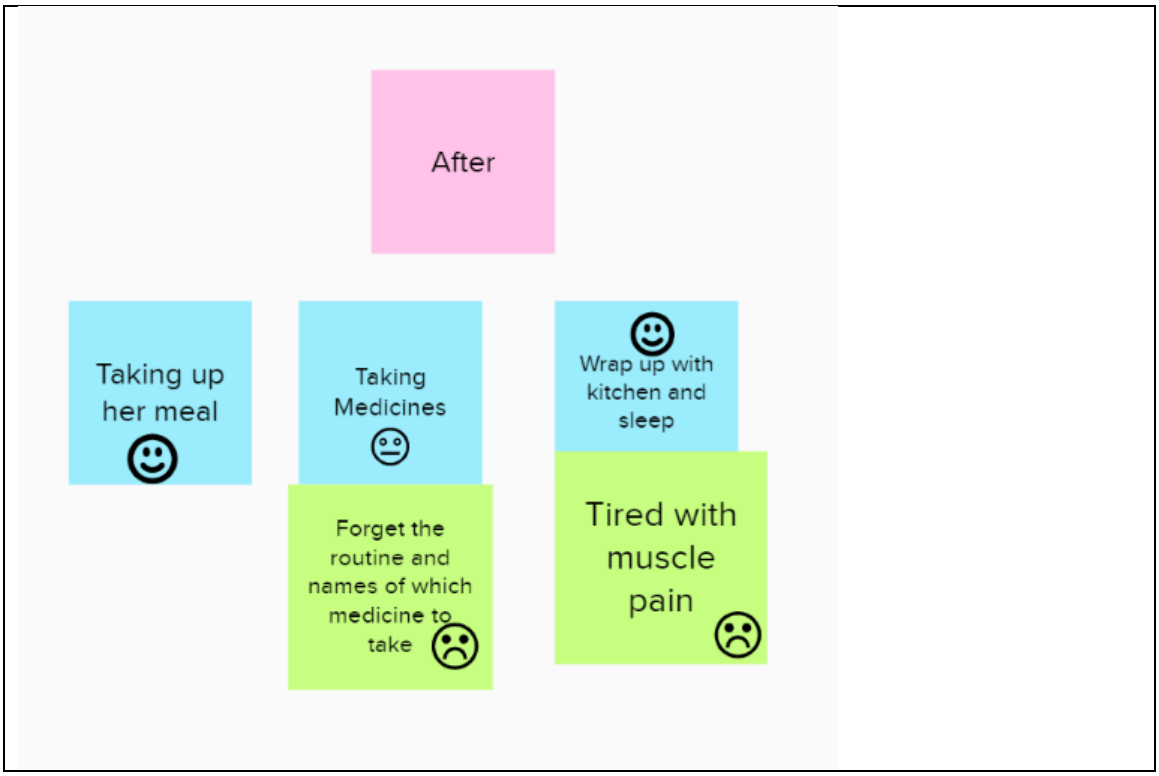
1. **Persona creation :**

	An 83 years old lady, named Sheetal who lives with her whole family comprising of her husband, children and grandchildren as well in the town – Mandsaur, Madhya Pradesh, India. She is a homemaker and likes to do day-to-day homely task on her own. She faces challenges in retaining information for long-term. Along with the aging she faces problem of holding objects firmly because of lower bone density. Diminishing eye-sight is another pain area for her.

2. **Customer Journey Mapping** (before, during, after the activity) and association of emotions at each stage, for all three phases.


Stages
Before
Actions
Thoughts
Feelings
Waking up and freshen up for the day
Yoga and Centering Practice
Plan for the Day
Knee and Back pain but yoga keeps her well
She plans but eventually forgets later

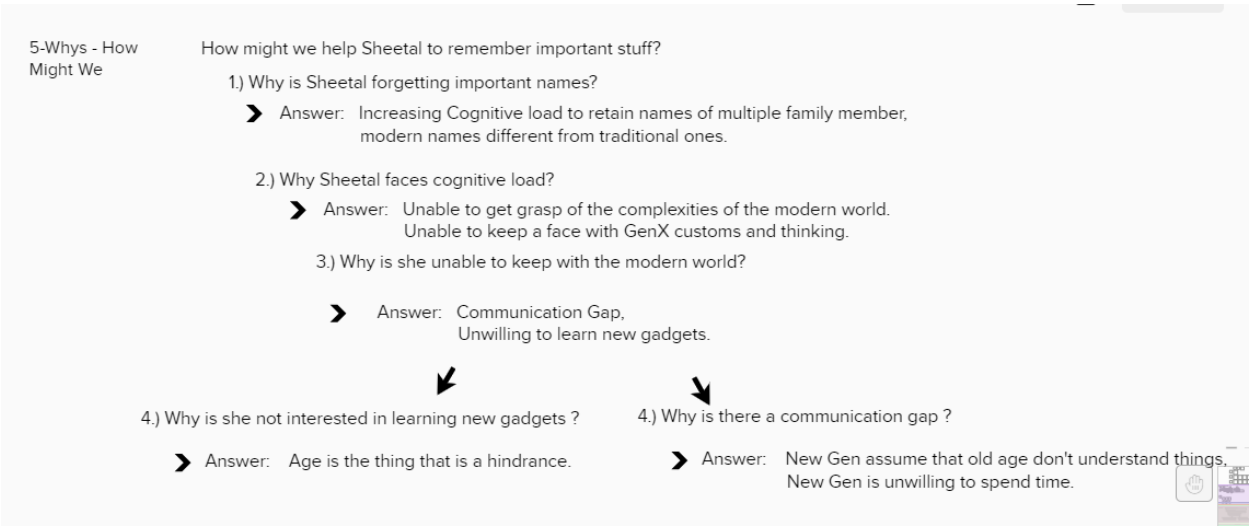

During
Worshipping
Forgets the holy hymns
Inner Satisfaction and peace
Common Household Chores
Knee issue and muscle pain
Watching serials, playing with grandchildren, catching up with colony ladies
She has eye-sight issues
Forget Name of the grandchildren while talking



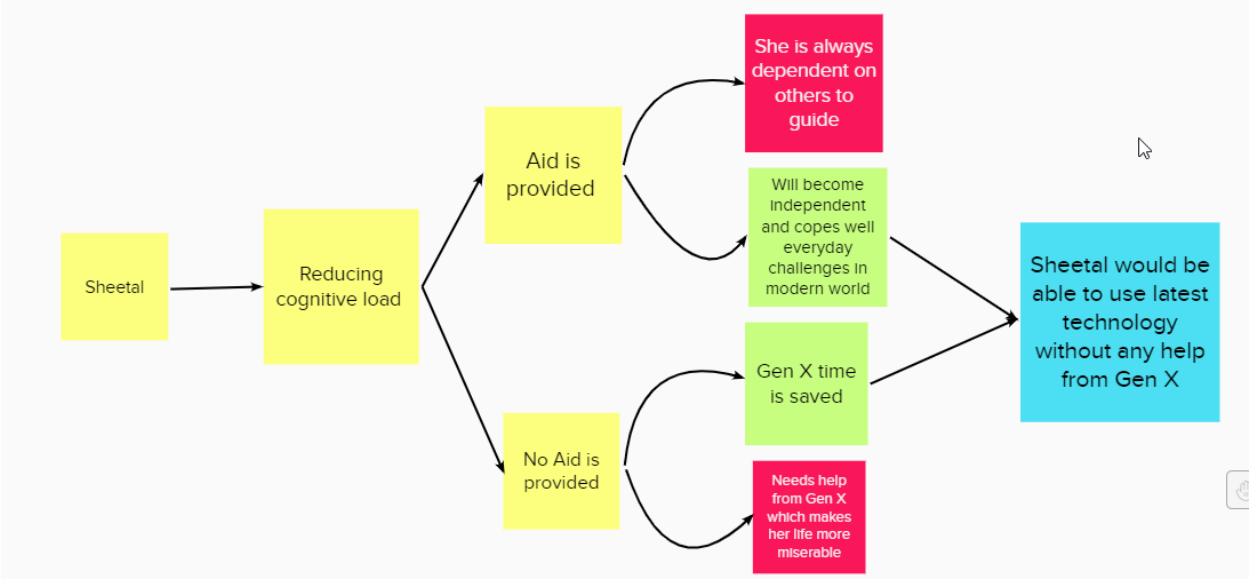
3. **Define the Problem Statement** and generating concrete, **"How Might We"** questions**?**

    - *How might we* help her in remembering things, names, and plans?
    - *How might we* help her in reducing constant knee, back and muscle pain while performing daily activities?

4. Performing **"Multi-Why Analysis"** to analyze the unearthed pain areas and reframe the "HMW" questions?



5. Identification of **"Conflict-of-interests**" between multiple participating entities in the whole workflow. Identifying the secondary user was challenge here.

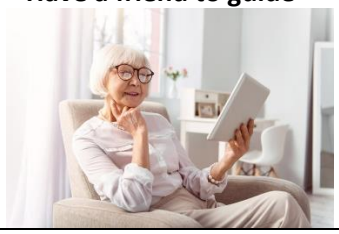


6. Moving to the third stage, after Empathize and Analyze, came the "**Solve". Ideation Session** happened through Controlled **brainstorming**. Most voted ideas were picked up for further nurturing.

7. Ultimately, the solution which was envisaged was. "A ML based app/wearable device which will be powered by voice based interaction (with no essential need of real-time face time with the interface). The app will function by taking independent variables like the environment around the user, their day-to-day activities, their medicines, their pain areas, and also keep an account of their near-and-dear ones. Then it will predict or let us say, identify the person, object, place

that come in touch with the user. The app would also keep the note of day-to-day activities of the user and suggest the better way to day it in the most human centric and ergonomic format.

Advantages to the users:

Become Independent	Have a friend to guide	Cost effective
		

8. Lastly, came the "**Make-Test**" phase. High-fidelity prototype was made using tool like Adobe Xd and integration with Google ML based API which identifies person or object in front of a camera was demonstrated.

9. The ideas were demonstrated to the entire cohort and feedbacks were very well taken for the next iteration of changes and launch.

Link to prototype: https://xd.adobe.com/view/dc99d3db-a207-4b6c-9c6f-8465ffd46b3f-89ca/

Embedded Link to Prototype(If required): <iframe width="428" height="926" src="https://xd.adobe.com/embed/dc99d3db-a207-4b6c-9c6f-8465ffd46b3f-89ca/" frameborder="0" allowfullscreen></iframe>

ML Based API: https://teachablemachine.withgoogle.com/models/S9bzKmbM7/