TAILORED: Training for Independent Living through Observant Robots and Design

Laurel Riek[1], Elizabeth Twamley[2], Kamalika Chaudhuri[1]

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Difficulties with everyday tasks

Confusion in familiar environments

Difficulty with words and numbers

Memory loss

Changes in mood and behaviour

World Health Organization
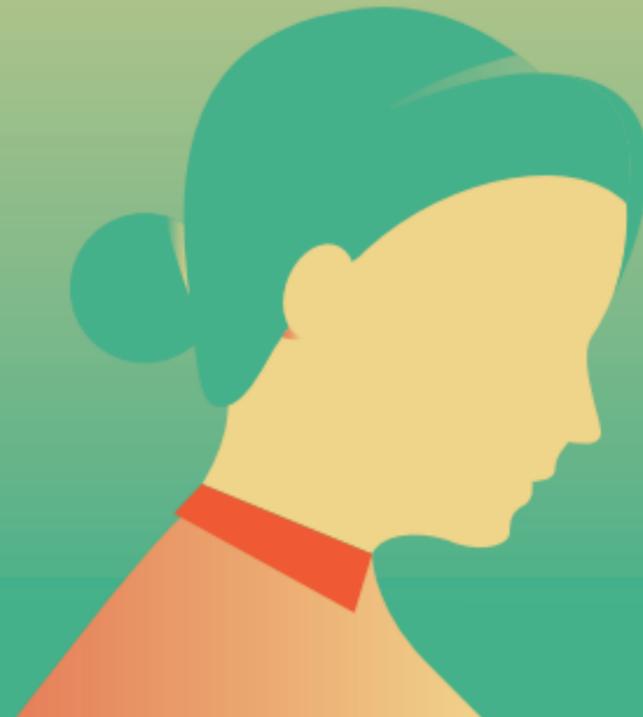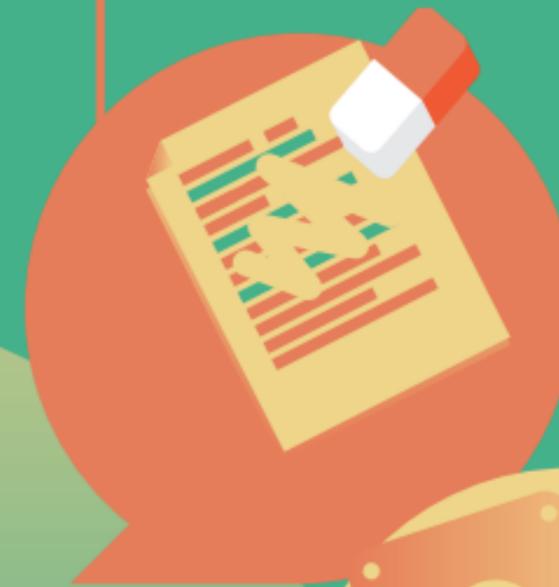
Cognitively Assistive Robots Deliver Neurorehabilitation @ Home

CLINIC

Kubota et al. *HRI 2020, HRI 2022*
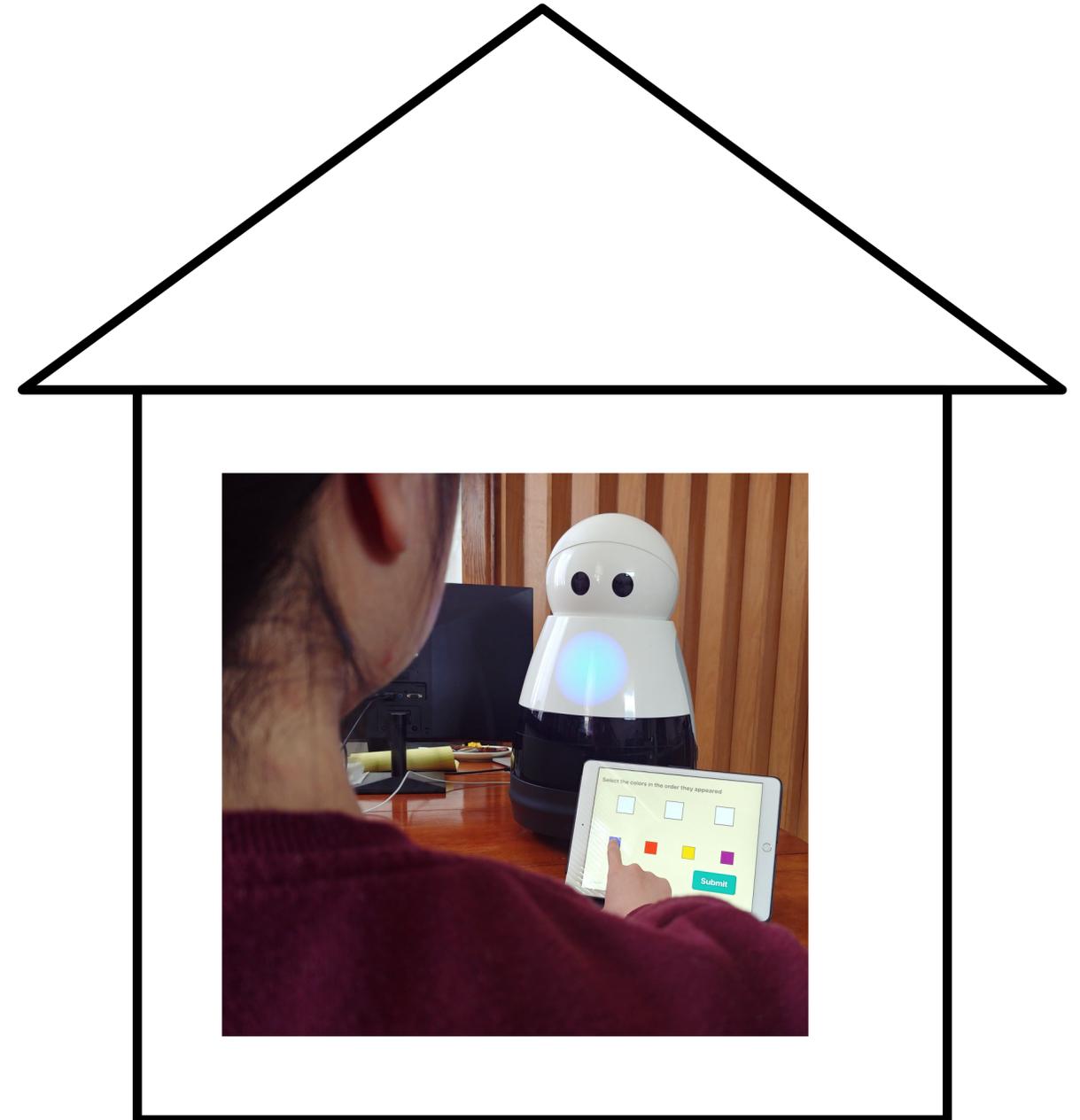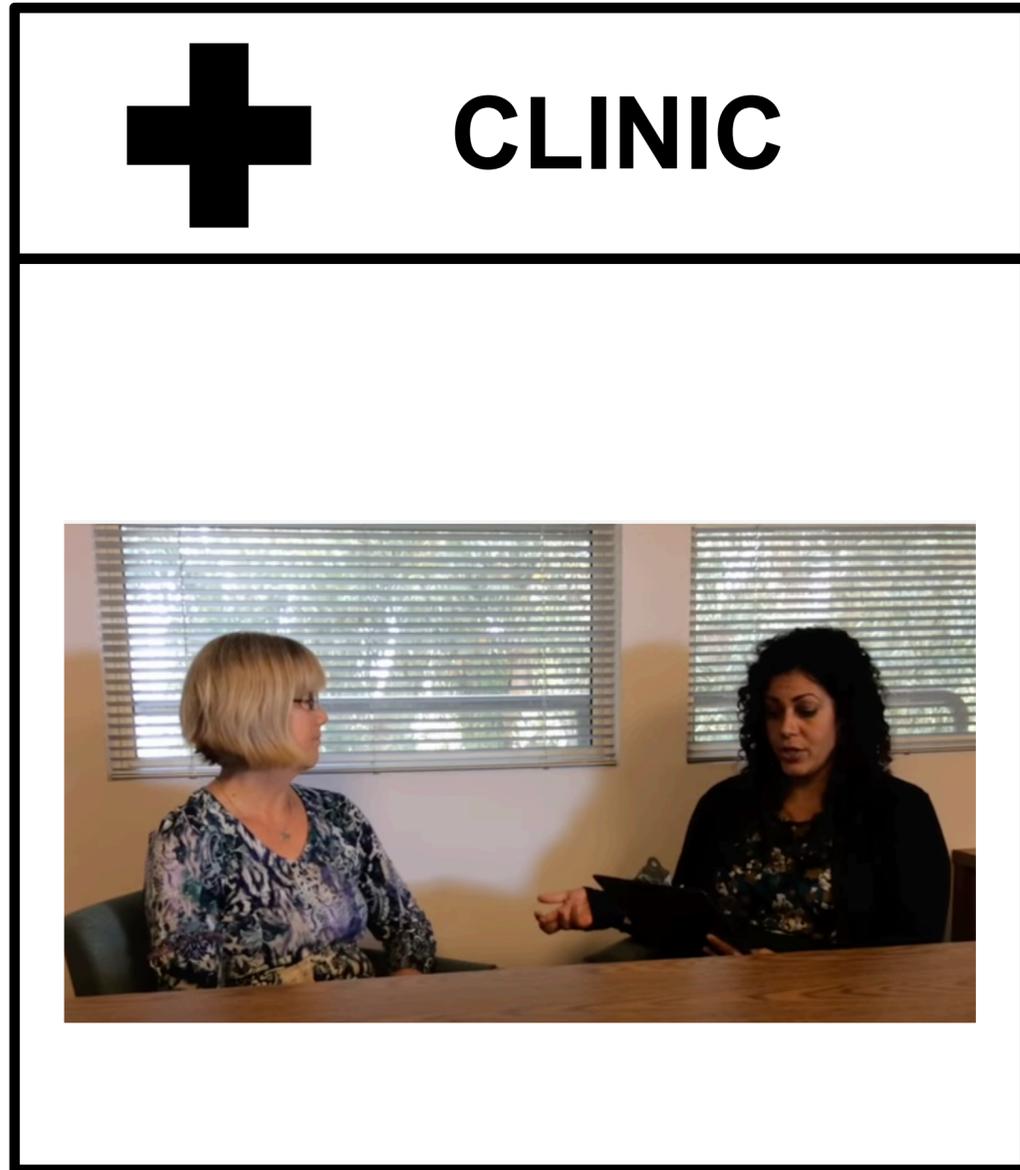
Our Robot Prototypes which Administer CCT

Healthcare Robotics Lab @UC San Diego
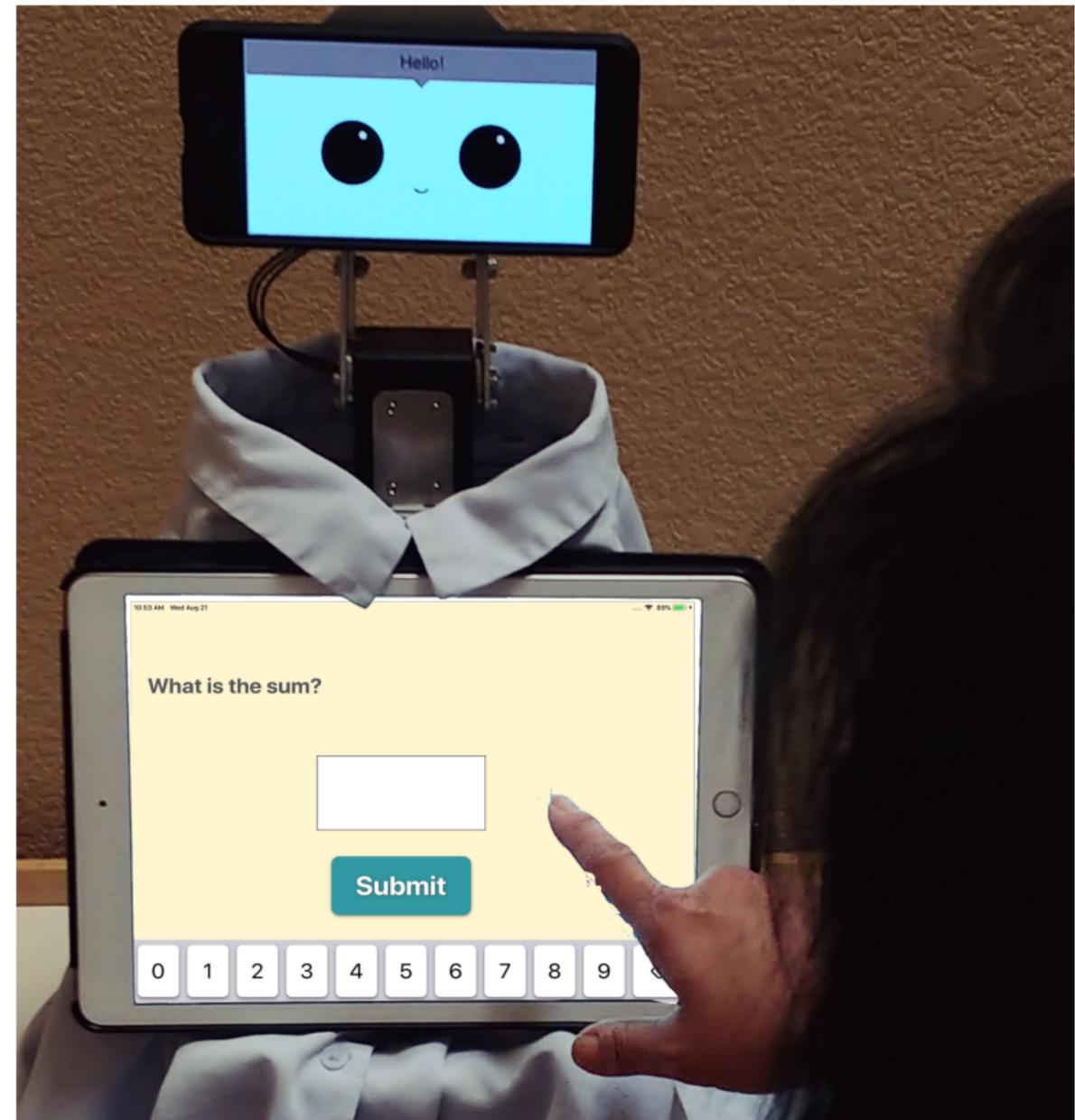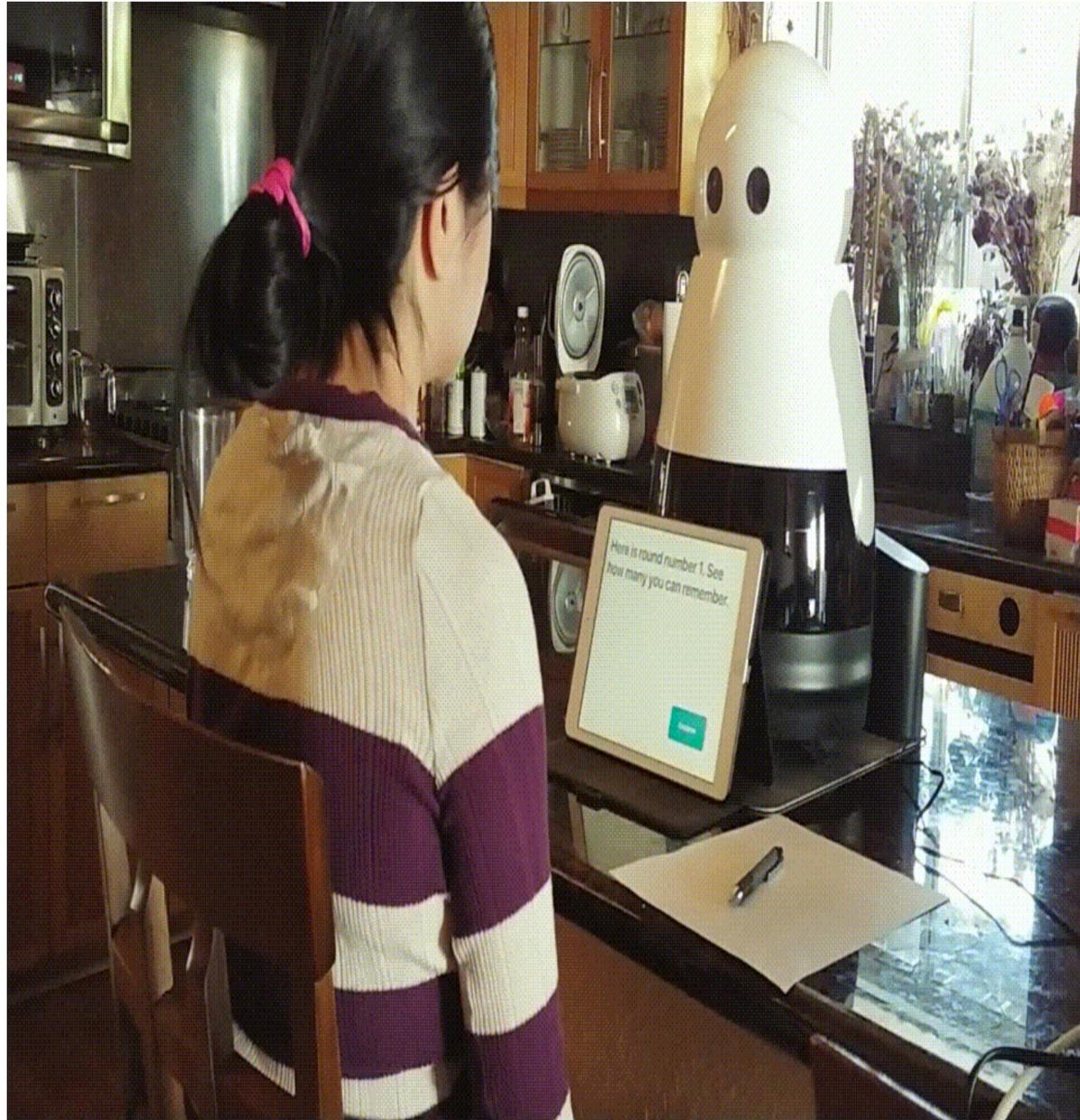
HRI Design Patterns for Translational Science

1. Reward perseverance over performance
2. Connect the intervention to the real world
3. Relate the intervention to a user's interests
4. Goal setting
5. Promote engagement
6. Obtain feedback from users
7. Reminders
8. Personalization

Healthcare Robotics Lab @ UCSan Diego

1) Rewarding perseverance over performance

You've practiced 3 days in a row! Keep it up!
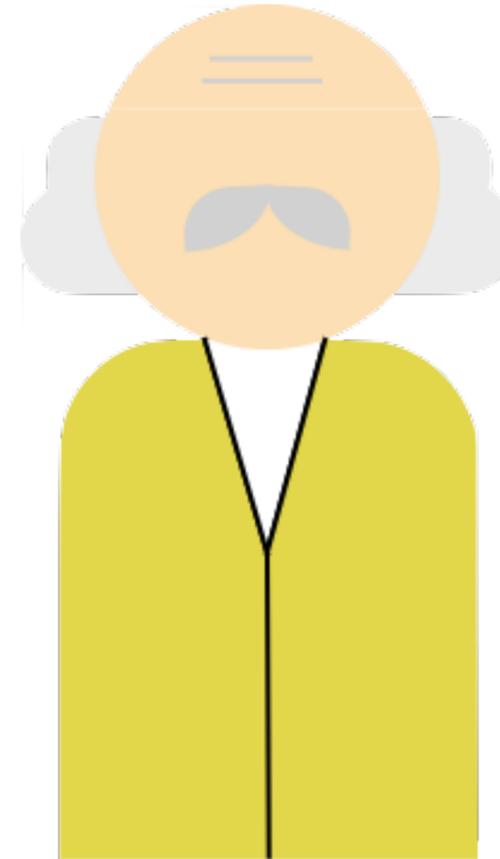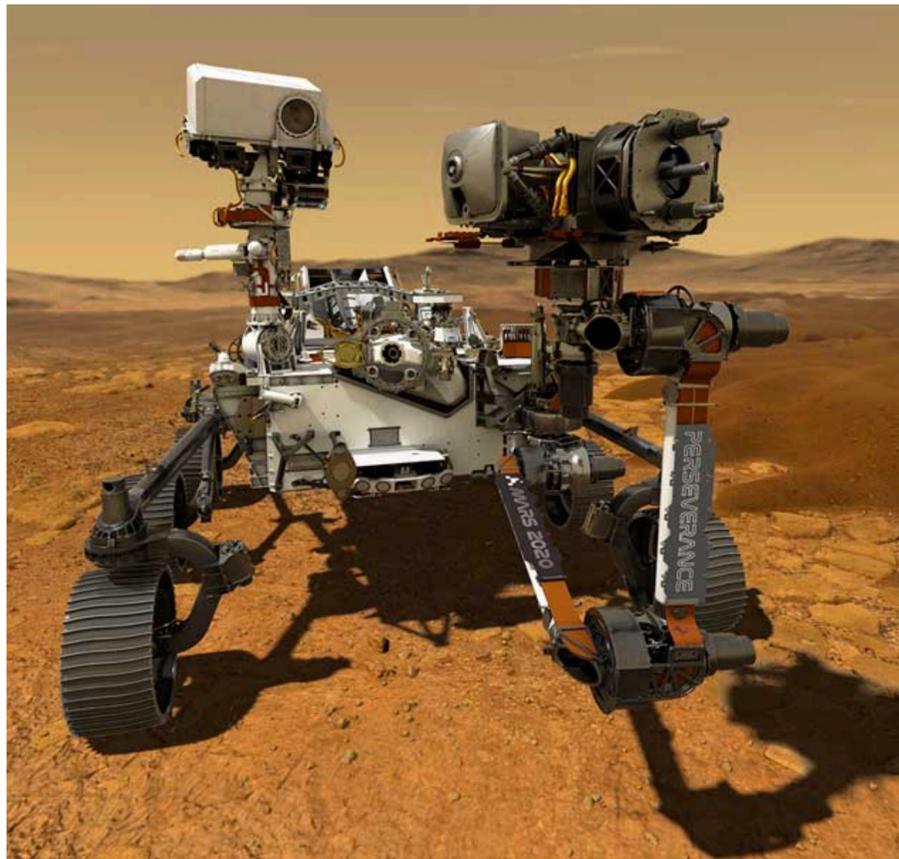
2) Connecting the intervention to the real world

Can you try using the *Categorizing* strategy to remember your grocery list?
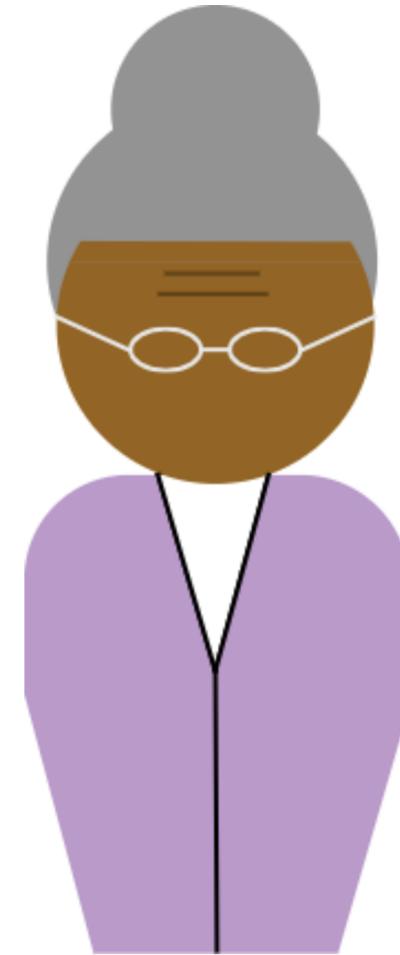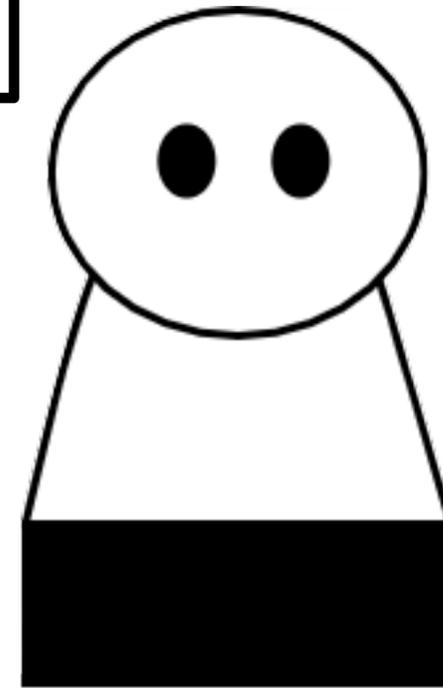
3) Relating the intervention to a user's interests

Can you *Brainstorm* all the items you'd need to renovate your motorcycle?
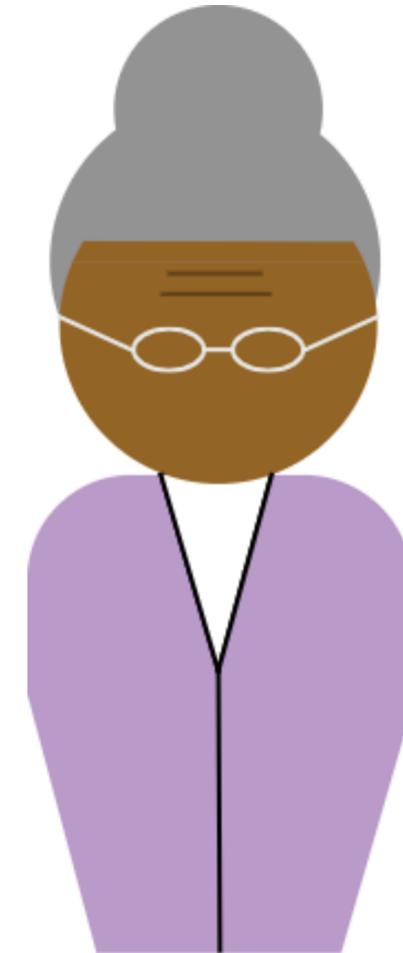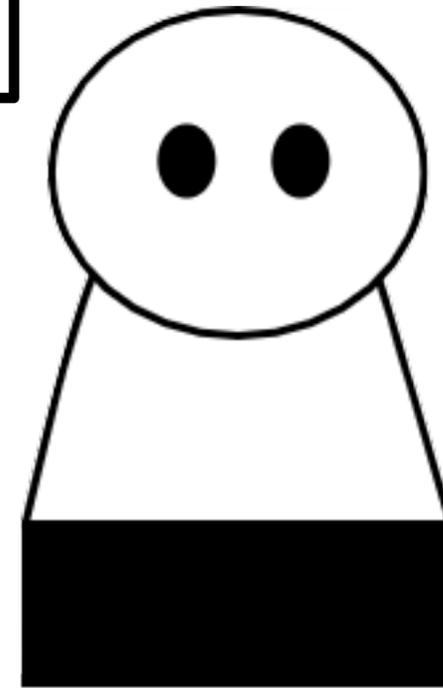
4) Goal setting
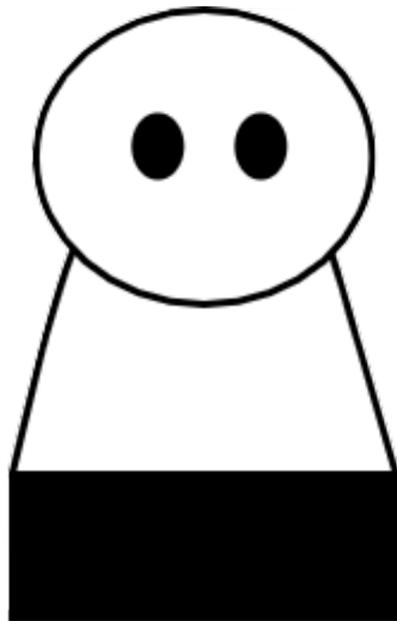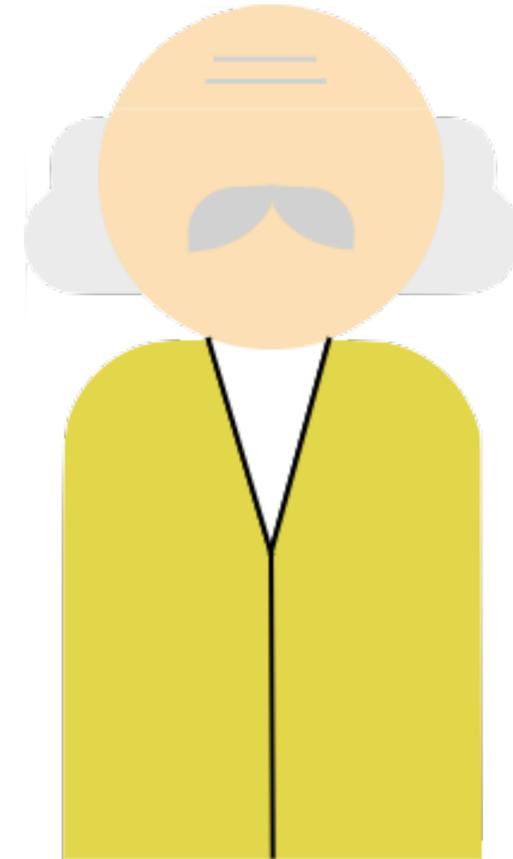
Preference Learning Within and Across Agents

Brian Amadio

Wang., Zhang, Singh, Riek, and Chaudhuri, AISTATS 2021

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