

4-25-2023

## Wearable Assistive Communication Device

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### Repository Citation

Wunder, Johanna; Vallee, Zakary; Tagen, Jeffrey; and Urban, Nicole, "Wearable Assistive Communication Device" (2023). *Student Research Design & Innovation Symposium*. 60.

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# Wearable Assistive Communication Device

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# Rationale

- Today's market is filled with many affordable assistive communication apps
  - Current apps are loud, over stimulating, and complicated to maneuver
  - Most apps impact the sound function and close off other applications
- Our solution:
  - An inexpensive, portable, and customizable assistive communication device
    - With the ability to attach to common apparel, such as the straps of a backpack for easy accessibility
    - The outer device housing is flexible and washable allowing the user to customize the device to their desired dimensions, layout, and style preferences

# Research

- Current devices used can be expensive and complicated, yet data clearly demonstrate that millions of people could benefit from an affordable and accessible communication devices
- Two to three children out of each thousand born in the U.S. are deaf or hearing impaired, and 15% of adults are diagnosed with hearing impairments which means that 37.5 million people in the United States, and globally 430 million are affected
- 12% of the population in the U.S. will be diagnosed with a level of Social Anxiety significant enough to interfere with daily activities for at least a portion of their adult life
- 1/44 children born in the U.S annually is diagnosed with autism spectrum disorder (ASD)
  - 40% of these individuals are nonverbal
  - These data do not include other conditions or situations that affect one's ability or comfort with communicating using spoken language

# Objective

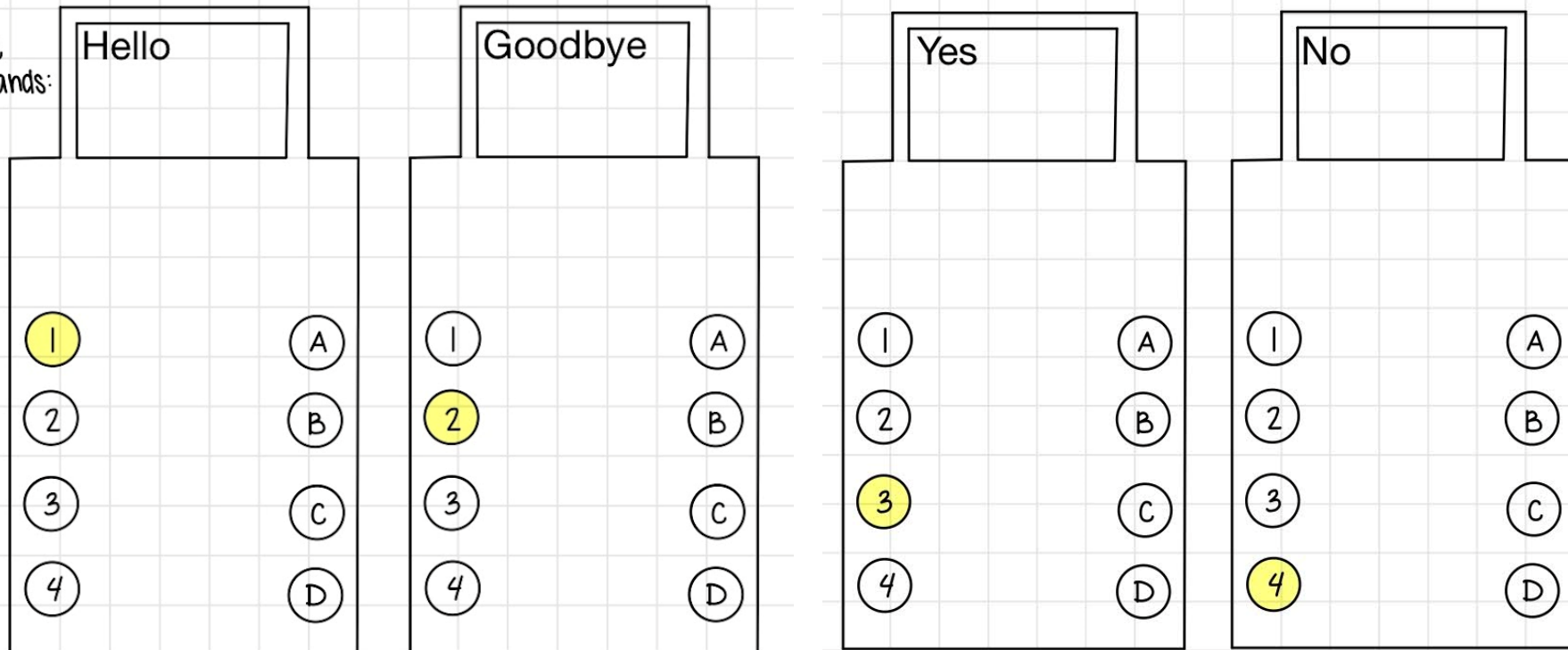
- Accessible
- Customizable
- Non-auditory
- Portable

# R&D Process

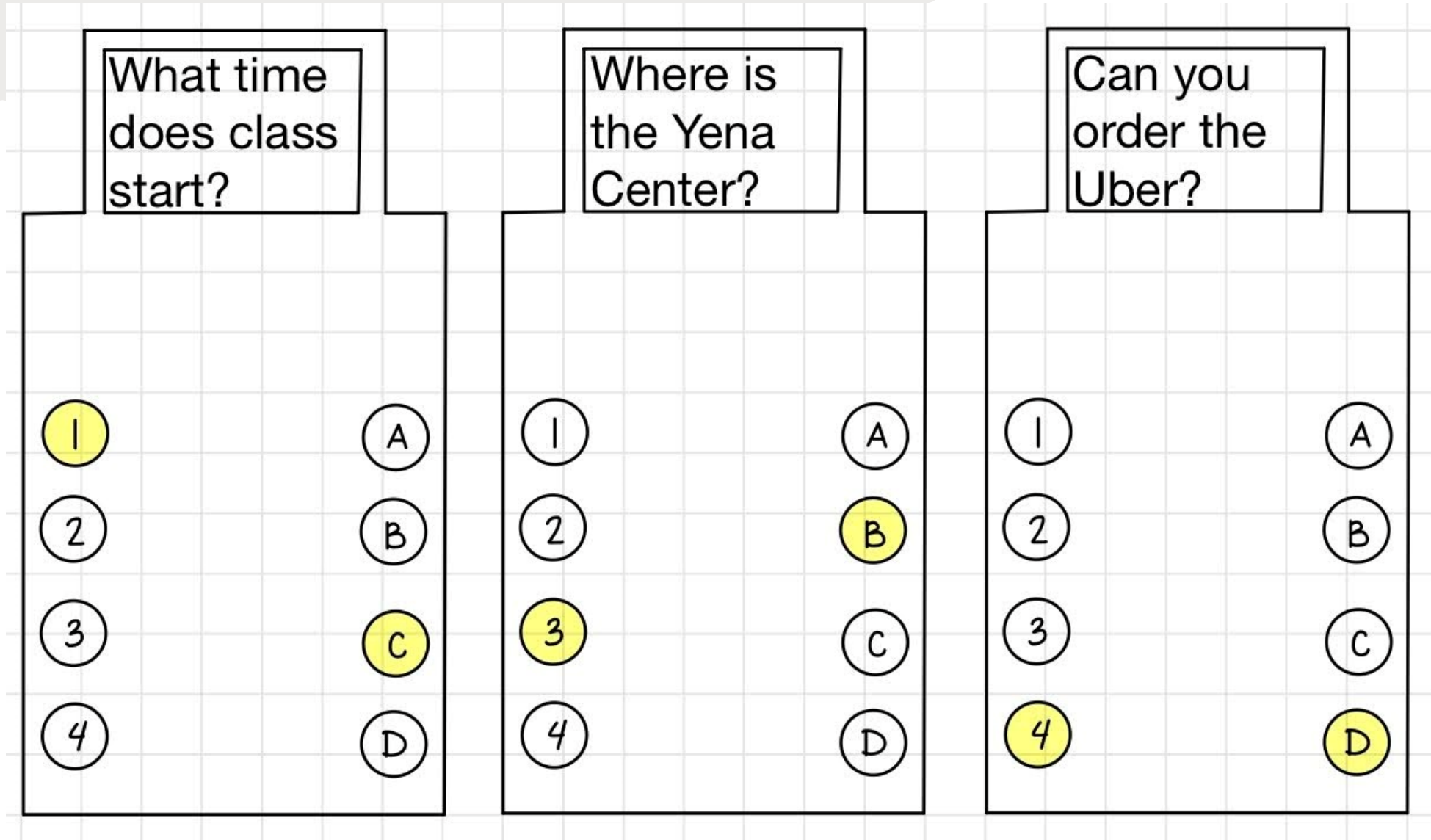
Showcased below are the basic commands that can be used on every profile

★ the highlight is showing which buttons are pressed to display the message

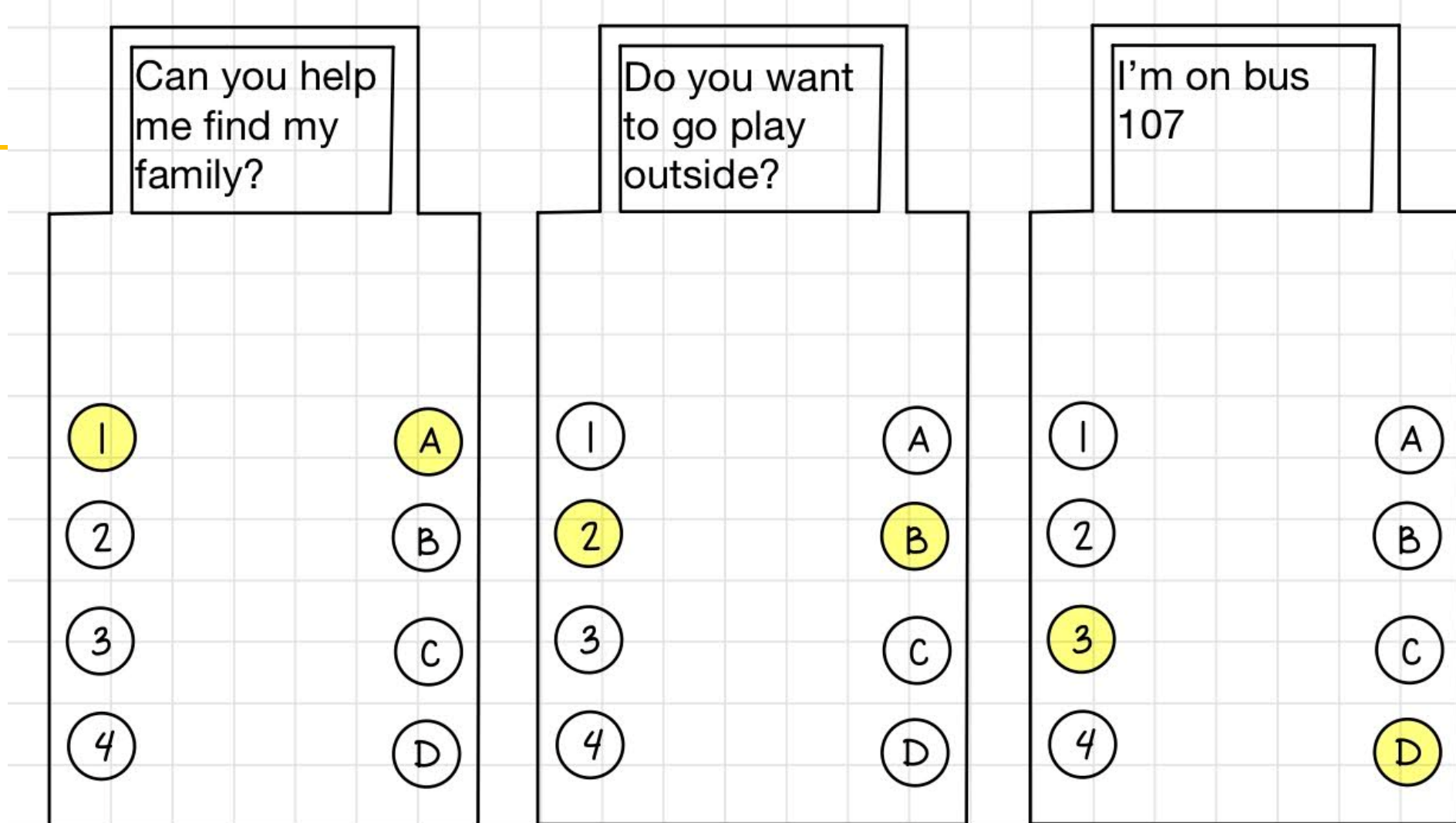
basic commands:



# R&D Process – College Student



# R&D Process – Pediatric





IMAGES OF DEVICE GOES HERE!

IMAGES OF DEVICE GOES HERE!

# References

- “Communicators — AAC Devices Archives.” *Enabling Devices*, <https://enablingdevices.com/product-category/communication-devices/>. Accessed 22 Nov. 2022.
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