

## Team Cajun

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Need Expert: Carolee



## HUSKYADAPT

Accessible Design & Play Technology

## Innovation Challenge

Individuals with varying dexterity need a **modular system of manipulation to assist with dexterity** and to foster greater independence in their daily life, specifically to manipulate a toothbrush.

### Core Functions

- Ease of grip strength and dexterity
- Enhance independence
- Effectively manipulating a variety of objects.

### Design Inspiration



## Design Evolution

Using the stability, durability, and variety of our design inspirations.

### Final Design

- Lateral rotation at 360 degrees
- Centrifugal rotation at ~270 degrees
- Foam insert for modularity
- One piece and easy to assemble



### Iteration #1

- Centrifugal rotation at 360 degrees
- Knob for rotation by fingers
- Toothbrush specific



### Iteration #2

- Lateral rotation at 360 degrees
- Centrifugal rotation at 90 degrees
- Toothbrush specific



Core Objectives		Secondary Objectives		
Ease of Use	Inspires Independence	Lightweight	Reasonable in Size	Durability

### Base Attachment To Hand



- Uses velcro for modularity
- Lightweight
- Comfortable in palm
- Attach final design 1/3 up from either side for better grip

### Additional Feedback

Add your post it here

Needs work...

Almost there

Perfect!

### Next Steps

- User Testing
  - Work with a large population of users to get feedback
- Design iteration
  - Continue to finesse designs and improve on materials used



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