

Client

- Health insurance companies

Need Statement

- People with hand disabilities and injuries face challenges in attending physical therapy sessions multiple times a week during their period of recovery due to the demands of their lives. This will slow or reverse recovery progress if sessions are insufficient or missed.

Goal Statement

- We aim to address this by providing a device that allows clients to perform their exercises at home, reducing in-person visits. Our goal is to make rehabilitation more convenient, accessible, and efficient, enabling clients to have more control over their recovery

Design Objectives in Words


- We aim to reduce physical therapy visits up to 50%, subsequently reducing insurance costs

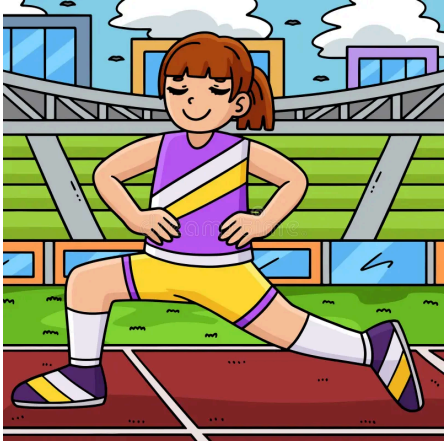
Design Objectives as Quantified Table

Design objective	Unit	Target/Range
Visits	Number of visits	10%-50% less
Device cost	dollars	>\$1440
Accessibility	Minutes	Greater than session time
Weight	lbs	<2lbs

Personas

- End user

 Mark, 36 yrs old	Context <ul style="list-style-type: none">• Worked IT desk job for 12 years• Has one kid and two cats• Enjoys spending time with family• Carpal tunnel syndrome caused from typing most of the day on his computer
Goals <ul style="list-style-type: none">• Wants to start stretching hands to make it better as the pain is debilitating, and he really values	What does this entail <ul style="list-style-type: none">• He struggles to do the hand exercises prescribed from his doctor as he forgets to

<p>being active with his family and pets</p>	<ul style="list-style-type: none"> • The device will help him be consistent
<div data-bbox="302 348 743 787">  </div> <p>Samantha, 25 yrs old</p>	<p>Context</p> <ul style="list-style-type: none"> • Weekend yoga instructor and passionate barista • Enjoys hiking, taking care of her plants, and spending time with friends • Got into car accident and injured hand <ul style="list-style-type: none"> ◦ Lost a lot of strength and mobility because of prolonged cast duration <p>Goals</p> <ul style="list-style-type: none"> • Remain consistent to regain hand mobility <p>What does this entail</p> <ul style="list-style-type: none"> • Struggles with progressing and sticking to physical therapy routine due to active/busy schedule • Stiff/weak joints, time sensitive to regain strength and mobility • Will allow her to progress without losing progress