Need

Small Flights of Stairs

Avoid ramps

Independence
$40
# Product Benchmarking

<table>
<thead>
<tr>
<th>Attributes</th>
<th>UpLift</th>
<th>Regular Walker</th>
<th>Stair-climbing walker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>$30-$50</td>
<td>$50-$100</td>
<td>$200</td>
</tr>
<tr>
<td>Ease of use (on stairs)</td>
<td>✔️</td>
<td>✗</td>
<td>✔️</td>
</tr>
<tr>
<td>Stability</td>
<td>✔️</td>
<td>✗</td>
<td>✔️</td>
</tr>
<tr>
<td>Adaptability</td>
<td>✔️</td>
<td>✔️</td>
<td>✗</td>
</tr>
</tbody>
</table>
## Product Contract

<table>
<thead>
<tr>
<th>Customer Need</th>
<th>Product Attributes</th>
<th>Engineering Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can be used on different height steps</td>
<td>Adaptability and versatility</td>
<td>Between 6” and 8” of leg attachment extension</td>
</tr>
<tr>
<td>Is easy to use</td>
<td>Activation/Transition</td>
<td>&lt; 5 seconds</td>
</tr>
<tr>
<td></td>
<td>Installation</td>
<td>&lt; 2 minutes, without tools</td>
</tr>
<tr>
<td>Will not slip going down the stairs</td>
<td>Safety</td>
<td>Wheels don’t touch ground</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High friction materials</td>
</tr>
<tr>
<td>Can be used on different types of walkers</td>
<td>Compatibility</td>
<td>Works with wheels and glides</td>
</tr>
</tbody>
</table>
2 ideas

Concept 1: **Bottom Attachment**
- Easy attachment
- Weight directly beneath leg
- Cannot accommodate wheels/gliders

- Walker leg
- Spring
- Extendable leg
2 ideas

Concept 2: **Side Attachment**
- Needs to be weight bearing
- Larger
- Accommodates wheels/gliders
Components

- Walker leg
- Extendable leg
- Casing
- Pin & Spring
- Handle
User Interface

Stair Climbing
User Interface

Simple lever pull

Easy access at hands
Safety

Raise wheels and gliders

Sturdy trip up the stairs

4 points of balance
Compatibility

Side Attachment

Works with most walkers

Does not hinder existing leg
Lessons Learned

Rotation of leg causes pin and hole to misalign

Friction of the pin
Next Steps

Lightweight

Fail Safe Mode

Aesthetics
Thank you!