

PUBLIC RESTROOM ADAPTATION FOR INDIVIDUALS OF SHORT STATURE

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Accessible Design & Play Technology

The Challenge

- Individuals with dwarfism (little people) have difficulty using public restrooms because they are not adapted to their short stature
- Accessible public restrooms currently are designed with taller toilet seats to assist wheelchair users

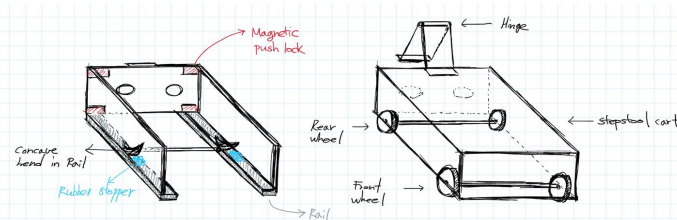
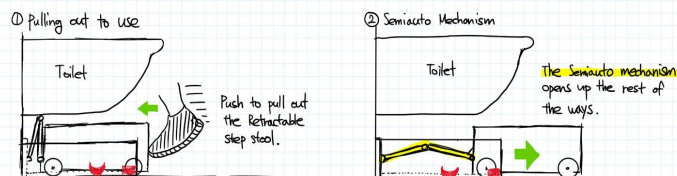
The Challenge: Design an inexpensive, easy-to-use public restroom installation to assist little people without impeding the access of others.

Design Goals

- **Compatibility:** The Retractable Step Stool is designed only to be placed underneath the wall mounted toilet. Our design requires enough space beneath the wall mounted toilet.
- **Push to Open Mechanism:** Determine the **semiauto** operation mechanism of Retractable Step Stool. (Gas-Spring, Push-Latch, etc.).
- **Production Cost:** Keep the material cost **inexpensive**
- **Safety:** The overall safety of this design.
 - **Stability:** The Step Stool should be in a **fixed position** during users in use. (Use brake to hold the step stool)



Retractable Step Stool – Final Design



Current Progress (Winter 18)

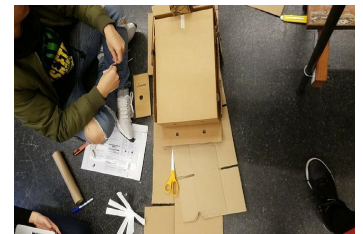
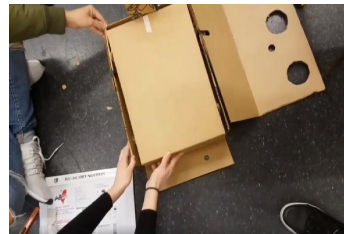
- User Research(Interview Date: Jan 12 2018)

- Collected user's **needs**
- Obtained **raw feedback**
- Understood **user behavior**



- Finalized Prototype Design (Still **adjustable** through **creative ideas** and **feedback** for better design)
- Deciding the proper materials for the high fidelity prototype in our budget

Low Fidelity Prototype



The Future

- Work with needs expert to prototype designs
- Produce the high fidelity prototype
- Usability testing with a few target users
- Modify the high fidelity prototype based on user feedback

We want your feedback!

Please add a post-it note with your comments and suggestions here.



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