

GNG 2101 – Introduction to Product Design and Development

Design Deliverable H

Group F1.3

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February 7, 2025

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# 3 Minute Elevator Pitch Script

* Welcome judges/everyone! Thank you so much for taking the time to come see our project. Before we officially start our presentation, we would like to call up one volunteer. Anyone?
* Awesome, okay so what you’re going to do is put one hand behind your back and extend this mini makeshift cane. Remember, you’re only allowed to use one hand, but you can utilize any other part of your body to help out.
* Awesome! Now you’re going to fold it up again. This time, you only have 15 seconds and I’m going to give you this bag of materials to hold as well.
* Pretty difficult right? Well, these are the issues our client was facing.
* Our client has limited mobility in one hand, and no mobility in the other. She is an incredibly independent individual and regularly uses public transport to get around.
* However, due to the limited range of canes on the market, she finds it hard to navigate her day-to-day life with a cane that is designed to be opened/closed with both hands and doesn’t serve her need of an aid in balance.
* To summarize, our client needed a cane that could easily collapse, aid in balance, and be stored away efficiently, however, all of these features must be incorporated in a way that can be navigated with a single hand.
* That’s here we come in! Meet our team, the Cane-iacs!
* Our job was to design a lightweight collapsable cane that can be used with a single hand.
* **DEMO (START CLOSED) – done by another person while someone else talks**
* Our design uses telescopic tubes with a twist-lock mechanism to lock the cane once fully extended. We also have an automatic retraction system, similar to the one we see in a tape measure, built into the handle, which aids in quickly storing the cane away when not in use.
* Our design uses 3 lightweight aluminum tubes, 1 power spring, and 2 3D-printed pieces for the tip and handle.
* As you can see from our posterboard, we have gone through various prototyping stages where we’ve tried many different variations of the same idea.
* From a clamp lock to a geared spring casing, our design has been repeatedly tested to ensure that we have an efficient, yet simple system to use.
* Our design is a low budget, completely mechanical system, ensuring longevity with easily replaceable parts.
* Our poster board also incorporates other features we would like to add into our future design.
* With a higher budget, access to proper suppliers, and an extended time frame, we believe we have a product that could genuinely help a lot of people in a similar situation to our client.
* Would anyone like to test out the cane?
* Thank you so much for listening to our presentation today! Once again, we’re the cane-iacs, we’re crazyyy about canes!
* Does anyone have any questions?

# 2 Line Summary

This project presents a one-handed foldable cane with a rapid retraction mechanism and secure twist-lock. This device prioritizes portability and usability for individuals with mobility challenges.

# Design Day Presentation Material

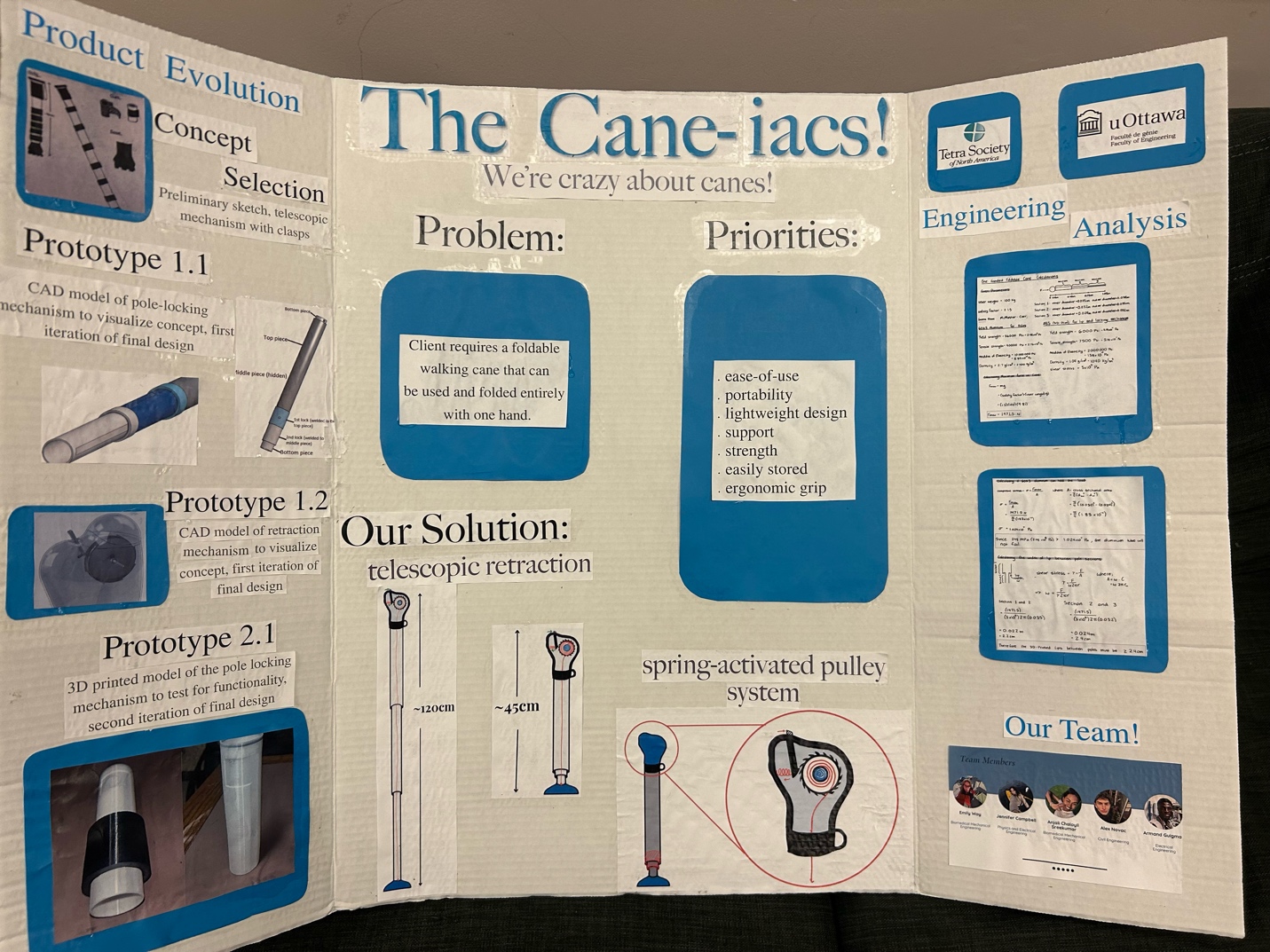
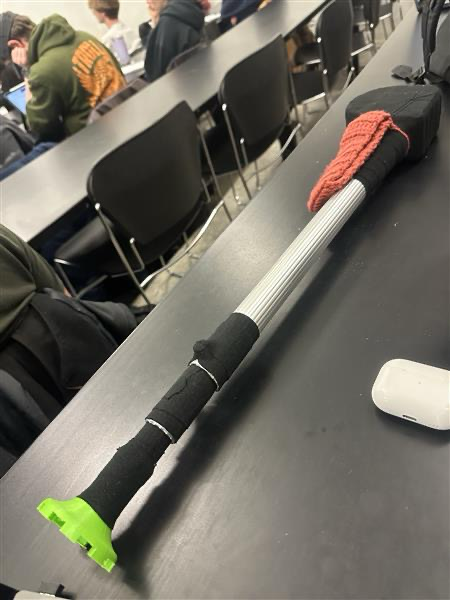


Figure 1: Poster Board

Figure 2: Final Prototype