University of Ottawa

Faculty of Engineering

GNG2101 Introduction to product Development and management for Engineers

Project Deliverable H

Submitted by

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Script:

Hi this is team SuperSpeak

Speech, a thing we take for granted but over 440,000 Canadians experience speech disabilities. Imagine after our presentation, you had questions about this project,but the words simply could not be formed or said, how frustrating would that be?

The matter grows more concerning, a canadian study shows that almost 1 million Canadians with dexterity disability have reported having some level of unmet need for everyday activity. One example is our client that came to us representing a population of the disabled community that suffers from low dexterity and cognitive speech issues, making them rely on caregivers to complete everyday tasks. With the growing senior population these limitations are way too common.

That is why we developed SuperSpeak. A product that assists people with dexterity and cognitive speech limitations to be able to automate communication and requests through the use of a joystick.

Our team worked closely with our client and created a device that

- Provides an lcd screen that demonstrates phrases and icons for the user.
- A joystick that allows the user to scroll through and select phrases
- A simple user interface to edit the phrases in SuperSpeaker anytime anywhere from any device.
- Finally the device is lightweight, easily mounted on a wheelchair

Currently the market is more focused on device to device communication while we are focused on complementing that with device to human communication.

Despite the fact that our product is more affordable than existing products, Super Speaker is open source and is adaptable for future upgrades. In addition interaction with our device is not limited to a phone application,we have a user interface that is shown through a screen mounted at eye level.

Let me demonstrate what we can do:

- On the home screen the user can move the joystick left or right to pick a category. Then downwards to select it
- Once they are in a category they can see that phrases that are already added in the database
- If the user would like to add a new phase their caregiver can simply go to this link where they can add a phase and select the category it belongs to, click submit and just like that the user can go back to the screen on the home screen.

The user can use the joystick to by moving left and right to browse through options then moving up to select options. When a category is selected the user can then browse between phrases to be selected by moving the joystick left or right the display will automatically scroll and the user selects buttons beyond the width of the screen finally the user can move the joystick upwards to be spoken out loud. If the user wishes to select another phrase they can do so by browning and selecting. By moving the joystick downwards the user can go back to the homepage or the other category.

But this is not the end, superspeak team was able to create this MVP with only $100 and a 2 month time span. Imagine what we can do with more resources.

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