

# MEC - Textype

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## Abstract

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Textype is a web application meant to facilitate human interaction for those who have trouble talking due to health limitations. It is very user friendly and all that is required for operation is a touch screen device. Using a large on-screen keyboard, a user can type a message and have it read aloud or sent to a desired email address.

## Problem Overview

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We are fortunate enough to live in a time where we can design potentially life altering solutions in as little as 6 hours. Programming has opened up a new realm of possibilities for people in need, and today we are grateful to have the chance of tackling an issue that affects the McMaster community. Bob Loree's brother Don is diagnosed with Progressive Supranuclear Palsy (PSP) which severely limits his physical ability, vision, and speech. Thankfully, Don is still able to use his hands so we want to work around his limitation to develop a web application to aid with his communication.



## Assumptions

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The only assumption made is that Don can comfortably use a touch device for short intervals of time.

## Technical Details

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The app consists of a keyboard, essential buttons (yes, no, bathroom, food, help), a button to read text aloud, and a button send text to a desired email. As Don begins typing, our keyboard will automatically provide suggestions in an attempt to guess his desired word. This feature is necessary in order to reduce the physical stress of pressing extra buttons. We also wanted Don to be able to communicate with loved ones outside of his immediate environment which is why we implemented the email function.

## References

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Hajzer, A. (n.d.). HTML and CSS Keyboard. Retrieved October 20, 2018, from <https://codepen.io/attilahajzer/pen/kydqJ>  
<https://responsivevoice.org/api/>