

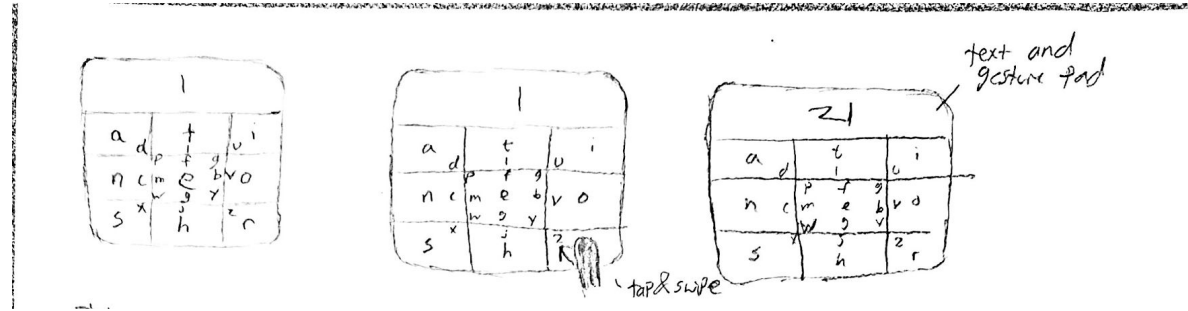
# NineBoard

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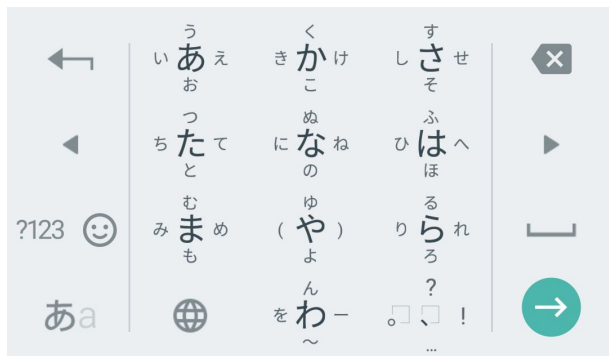
# Description

Inspired by the Japanese mobile keyboard, NineBoard is a keyboard that limits the number of letter buttons to 9 on a 3x3 grid, allowing for larger buttons versus a standard QWERTY keyboard. The layout on NineBoard was created with letter frequencies in mind. The most common nine letters each get their own button and can be inputted the quickest with a tap. The other 17 letters spread across the nine buttons, and are inputted with a swipe gesture. Letters that have a high probability of being after one another are placed closer together. For example, the letter 'a' has a high probability of coming right after the letter 'w'. To input in the letter 'w', users would need to do a right swipe on the top left button, which would bring the user right over the button for 'a'. Spaces are inputted with a tap on the space button, or with a right swipe on the text field. A backspace is inputted with a left swipe.

A BC	D EF	G HI
J KL	M NO	P QRS
T UV	W XYZ	. , ?
CAP	—	123



## Keyboard Inspiration



## NineBoard on the Apple Watch



# Task: Typing a “c”



Touch the e button



Swipe down towards  
the o button



The letter c is inputted  
once the finger is no  
longer making contact

# Task: Typing Uppercase Letters



Tap the caps lock button



Input in letters



Tap the caps lock button again to return to default state



# Swiping Gestures

Gestures can only be done on the text field at the top



Swipe Right: Space



Swipe Left: Backspace



Swipe Up: Exit Keyboard

# Pros and Cons

## **Pros**

Large buttons that are easy to interact with

Arrangement of letters is optimized

Low KSPC

## **Cons**

Unfamiliar keyboard layout

Finger may occlude tiny letters

Requires target awareness

No predictive text

May be difficult to use with vision impairment