# #1

Users swipe up and down to move across the wheel in order to acquire the desired letters. The wheel is organized in alphabetical order, which is an order that is familiar to users. Once the letters are selected, they will appear on the right side of the screen in both capital and lowercase form, allowing the user to select the desired form with a tap. The letters/targets are larger in this design, making it easier to select, but the wheel scrolling may take longer than desired
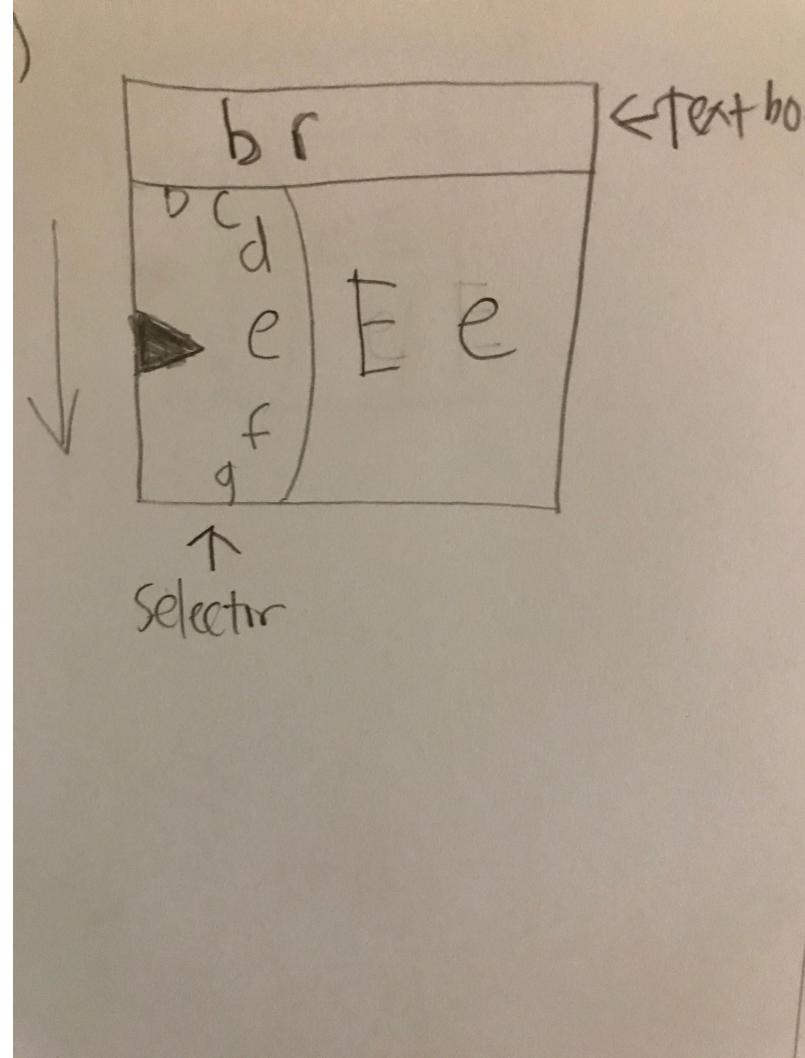
#2

Similar to the SwipeBoard, this design uses nine grid spaces and swipes to make selections. However, instead of the second board being a three character selection screen, it is another nine grid board with room for additional characters. This allows for more characters to be used while maintaining the same gestures. The one drawback is that the placement of special characters will take some getting used to.
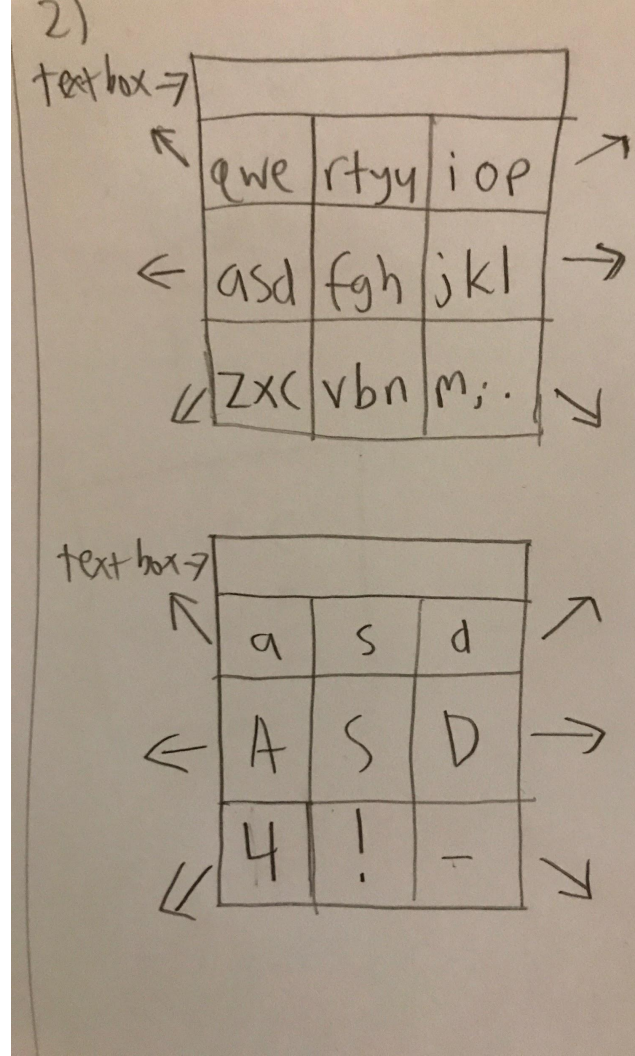
#3

The user can drag their finger across the squares, leaving their finger on a square for a second to select the square. Instead of bringing the user to another board to select the desired letter, the design would use T9-like prediction to suggest the words in a text box above, where the user could then select the word with a tap, or possibly a gesture. This board maintains the QWERTY layout, while also having predictive-text for faster input. Dragging the finger across may lead to fat finger problems, however.
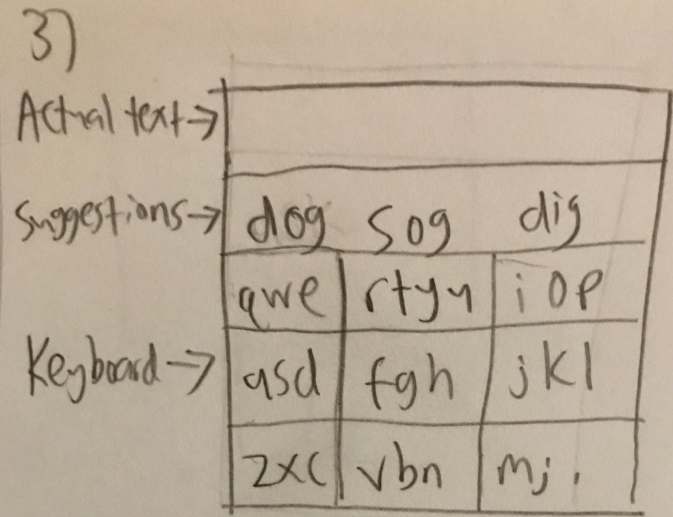
#4 - RadiBoard
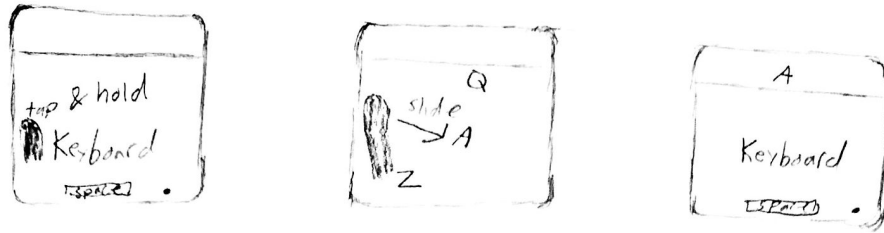
This design operates similar to ZoomBoard where users tap on the area of the keyboard where the letter they want is. Instead of zooming in, the letters in the tapped area appears around the finger. To input a letter, users slide over to the letter.

Benefit: Familiar QWERTY layout, letters are equidistance once an area is tapped

Con: There might be an occlusion problem when a user taps & holds. Some areas may have too many letters making it hard to swipe to a specific one.

#5 - NineBoard

text and gesture pad
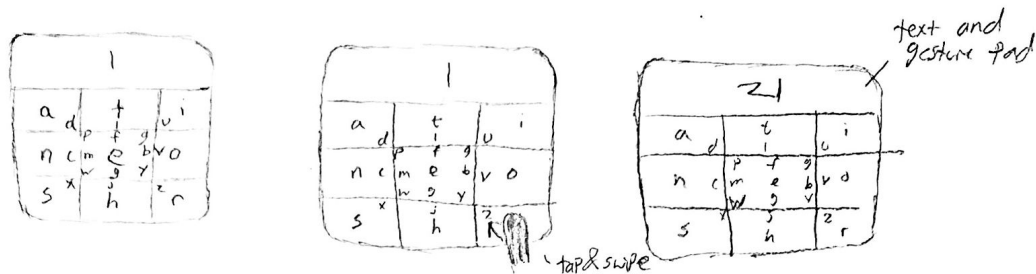
tap & swipe

The goal of this design is to increase the size of the buttons by limiting the number of buttons to 9. The most common of letters will be the biggest and are inputted with taps. The other letters are smaller, and are inputted as tap then swipe. Spaces are inputted with a right swipe on top, and a tap will input a period. Benefits include large buttons that are easy to interact with, negatives are the lack of affordance with spaces & periods, and the unfamiliar keyboard layout.

#6 - OffsetBoard

This design uses an offset cursor to deal with the fat finger problem. The keyboard is on the top of the screen instead of the bottom so that users can reach all parts of the keyboard.

Benefit: familiar QWERTY layout

Con: Users cannot aim at actual targets, users will most likely not expect the offset cursor the first time.

#7

Handwriting input. User uses finger to write in input space. Swipe up for Shift, right for Enter, down for Space, left for Back. A suggestions list appears under the textbox.

Pros: Users can immediately input the letter/symbol they want. Suggestions list saves writing time.

Cons: Users with larger fingers may have a more difficult time with precision
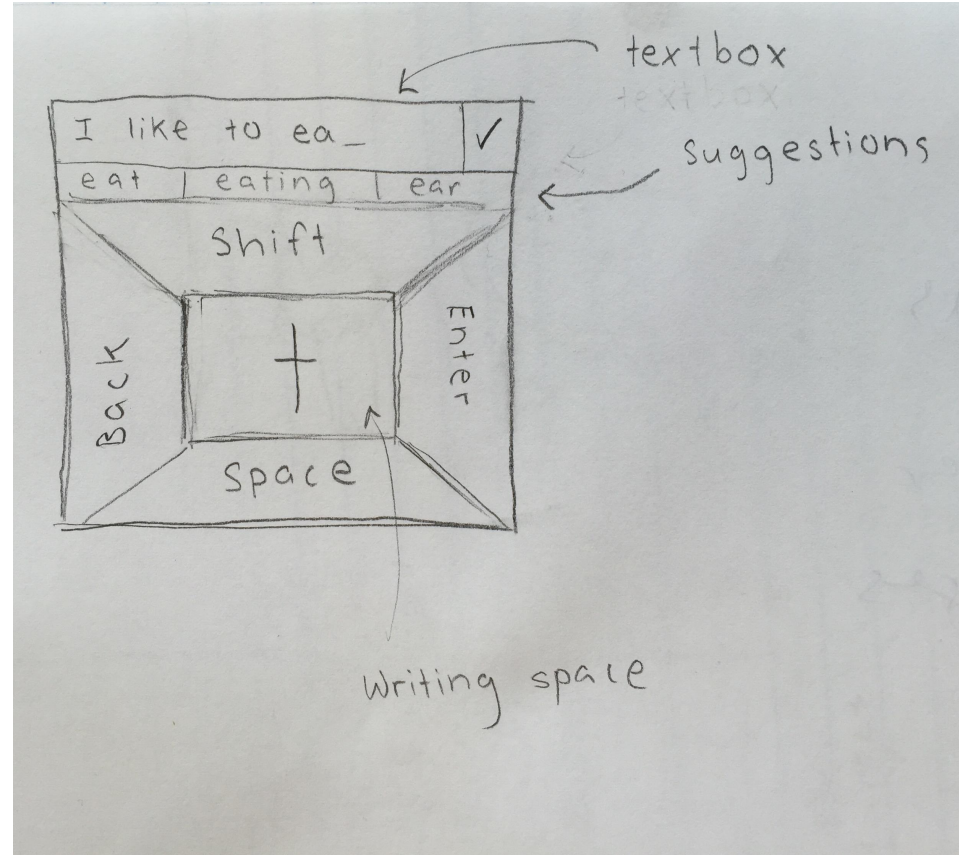
#8

This design has the alphabet arranged around the border of the screen. Top: A-G, Right: H- M, Bottom: N - T, Left: U-Z. To zoom in/select, users can swipe in the respective directions of the letters they need. As the user types, a suggestions list will appear under the textbox.

Pros: Intuitive, users can see where letters are. Suggestions list can speed up the typing process. Zooming helps solve fat-finger problem

Cons: Lots of swiping back and forth
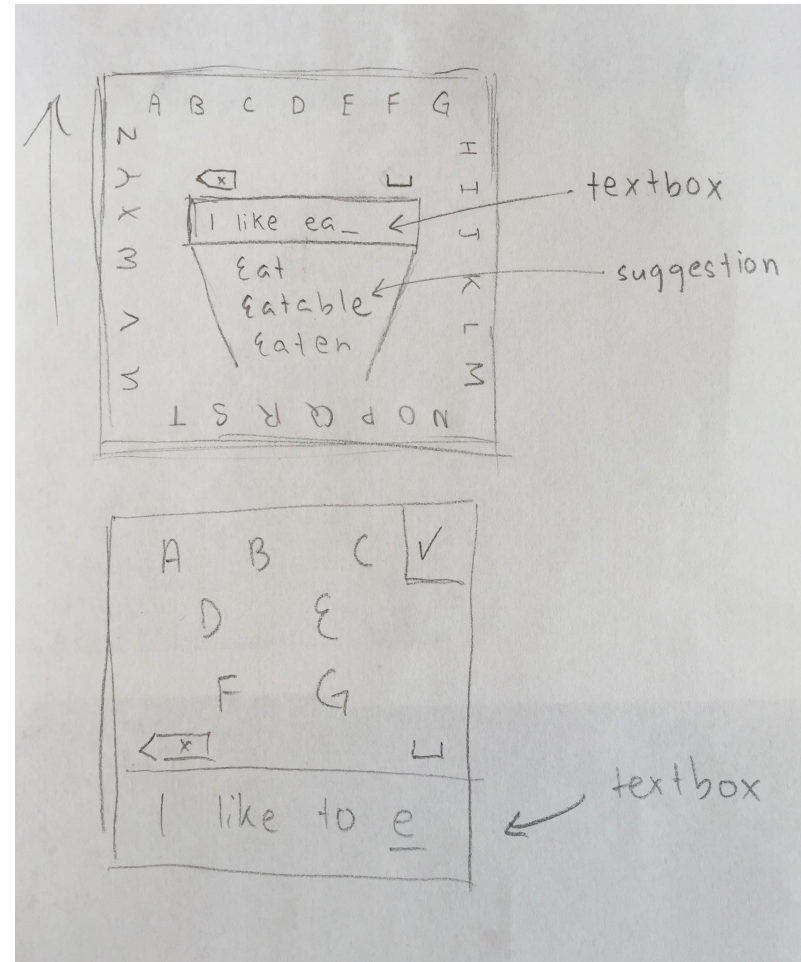
#9

Multi-scroll. Main screen has lists A-I, J-Q, R-Z. User scrolls through these lists to find the letter they want. Double tap screen to access upper case letters. Swipe right to access lists for numbers, punctuation, and symbols

Pros: Don't need to scroll through 26 letters, saves space, is fairly intuitive to use

Cons: It is time-consuming to scroll, users need to be familiar with alphabetical order
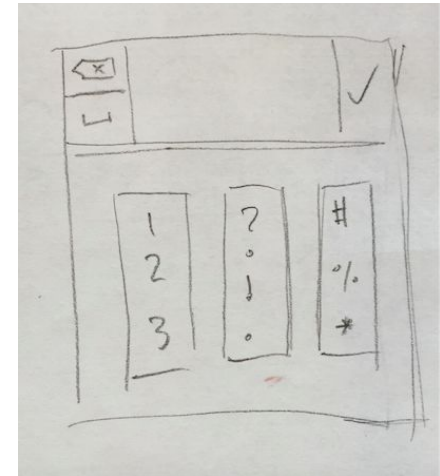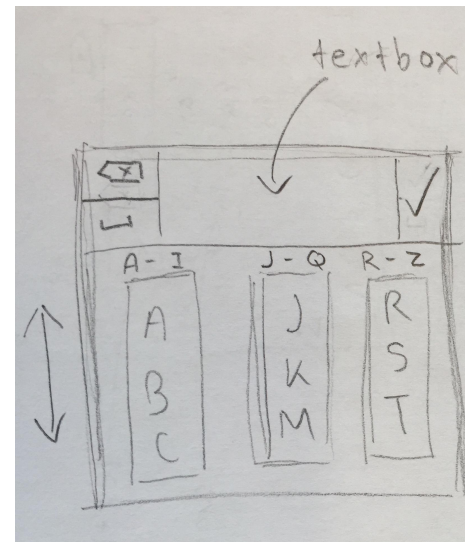
#10

Description: This design uses the ZoomBoard's zoom mechanism to zoom in on the keyboard. The main difference is that it uses an internal dictionary where when a user press a letter, a list of words appear on the right (as shown on the 3rd diagram). The list of words are sorted by the popularity/usage of the word. The user therefore will not have to type every single letters out.

Pros:
-- Saves time with the dictionary

Cons:
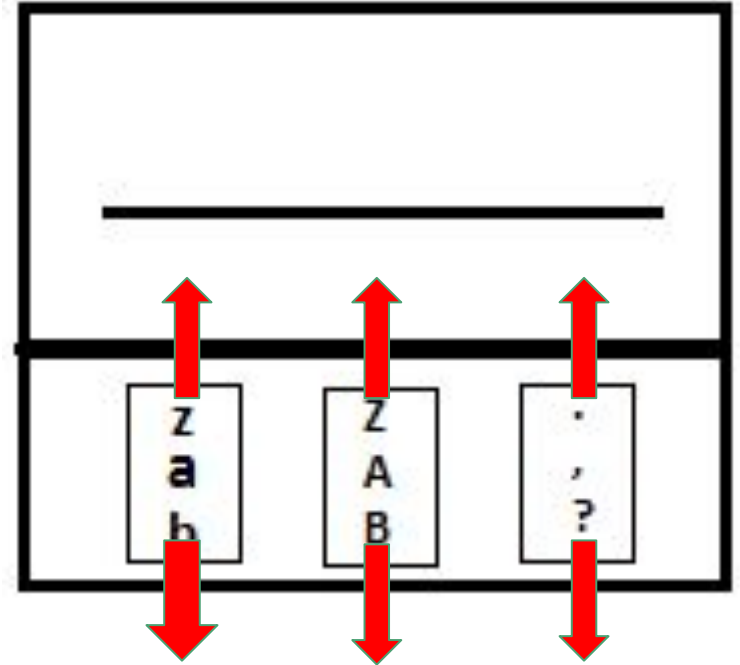-- Time-consuming if the word user are typing isn't in the dictionary
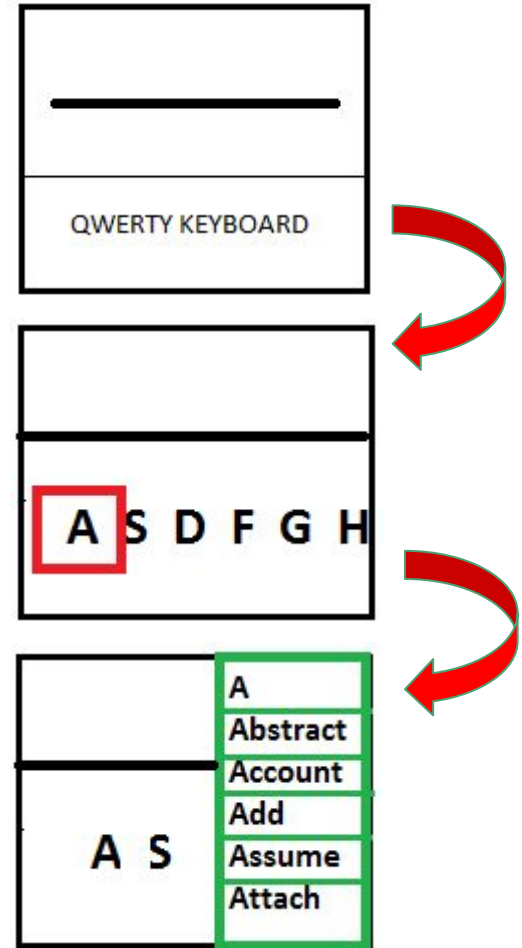
#11

Description: Users can select their input by scrolling (as shown by the red arrows) through a list of alphabets as well as punctuation marks.

Pro's:
-- very intuitive

Con's:
-- Can be time consuming
-- User can overshoot when scrolling

#12

Description:

--Top Letter ➜ Press the area

-- Bottom Letters ➜ Press, hold, swipe (as indicated by the arrow)

-- Has buttons that changes caps, and punctuation mode

Pro's:

-- Text input of each letter will be quick once used to the system

-- Resolves fat finger problem

Con's:

-- can take a while to get use to where the letters, punctuations are