

IssieBoard: A Virtual Keyboard with Customizable Options

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Nowadays everyone uses typing on a daily basis, but for people with disabilities, for many different reasons, typing is an indispensable skill. Frequently due to motor disabilities, people with cerebral palsy (CP) may be unable to write (manually), and for them typing is an essential skill for studying, using communication devices, for work, to access social media and so on.

At the Technology Centre of Beit Issie Shapiro in Ra'anana, Israel, we aim to promote the use of assistive technology for people with disabilities and to develop technological solutions according to needs which arise from users in the community.

The app [IssieBoard](#) is an excellent example of how professionals can identify a need in the community and work with others to come up with a solution. This app was developed by the team of occupational therapists at Beit Issie Shapiro in conjunction with the incredible team at SAP Labs, Israel. We have received a lot of great feedback from users telling us that the app is helping children and adults type successfully on their iDevices.

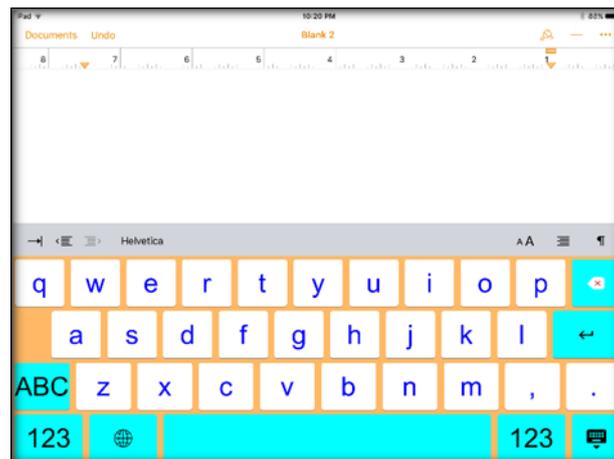
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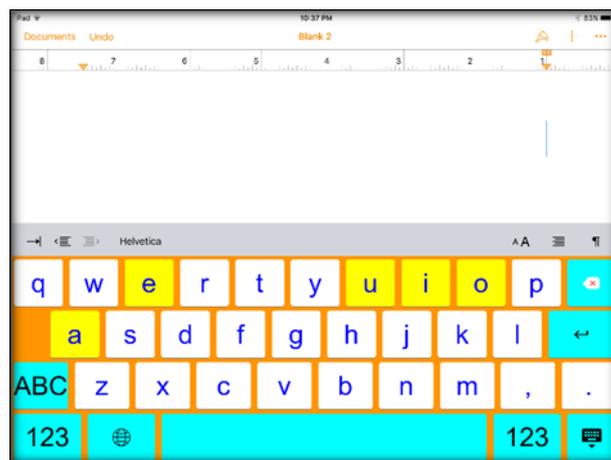
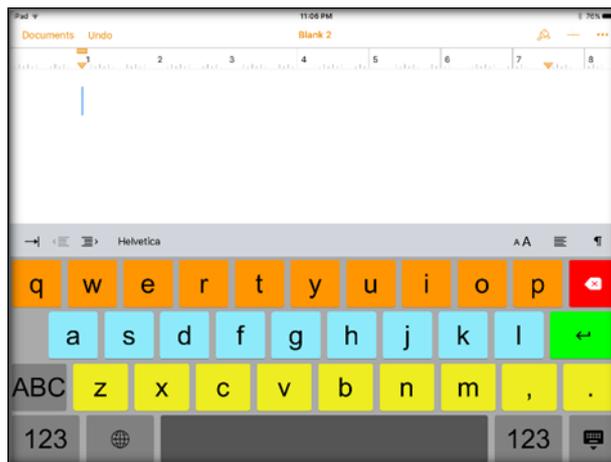
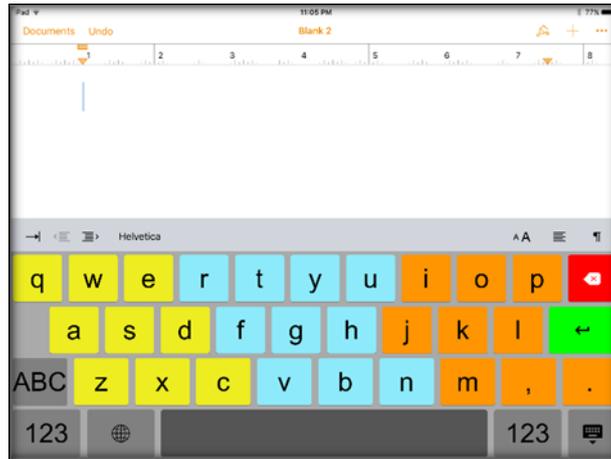
Typing demands many skills which are frequently challenging for people with CP. Skills such as motor accuracy, visual spatial perception, cognitive skills (remembering where the letters are on the keyboard, letter recognition) can be impaired. In the past, therapists would often put different colored stickers on the keyboard keys to provide the user with visual cues, helping the user learn to type more efficiently. The native keyboard of the iPad does not allow for these kinds of adaptations and typing on an iDevice is often difficult for people with disabilities due in large part to the lack of contrast. It is here that the idea for IssieBoard was born.

IssieBoard is a virtual keyboard app that allows the user to customize a variety of visual aspects of the keyboard. This customization can be very useful for children and adults with learning difficulties, visual impairments, motor impairments, cognitive impairments, and even users who are just beginning to learn to type. There are a variety of colors and options to choose from, maximizing the customization for each user. The visual cues of the different colors give hints as to letter location making the typing process more efficient.

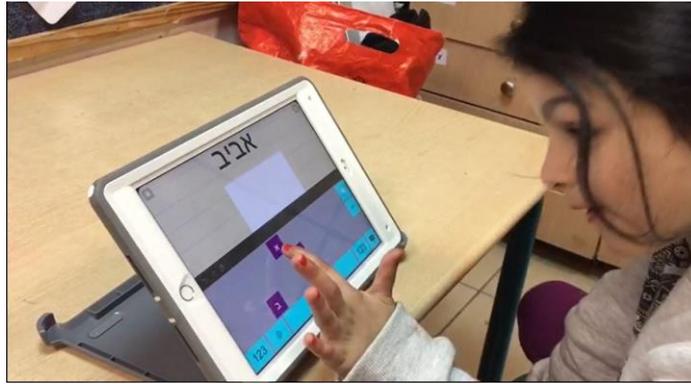
Once the keyboard is set up it can be used in any app on the device

Below are some screenshots of possible keyboard designs, using the available settings.





One of the most unique features of the app, is the ability to have only specified letters appear, a feature that is extremely useful for people learning to type. The full keyboard can be over-stimulating, and if the user does not yet have the motor memory to locate the letters quickly, scanning through a full keyboard to find the required letters can be very time consuming and frustrating. Imagine how exciting it is for a child to successfully type his or her name for the first time! For parents and educators, it is an exhilarating experience as well!



For a full description of the app and explanation on how to set up the keyboard, please see our blog post: [Tech it Issie](#)