

4) Entender cómo un sistema se usa en el mundo real

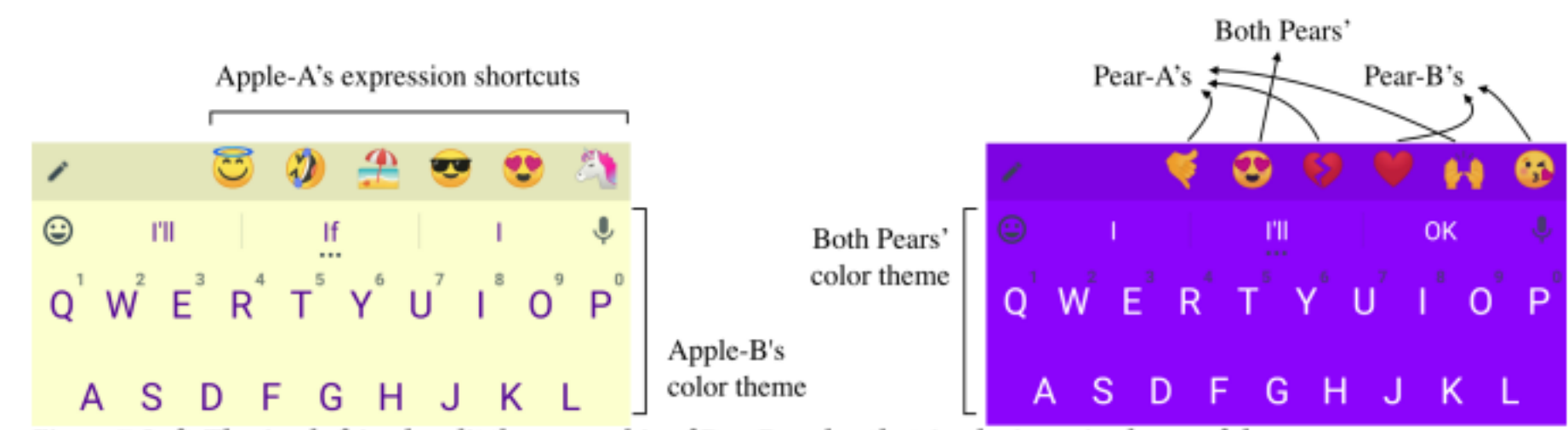
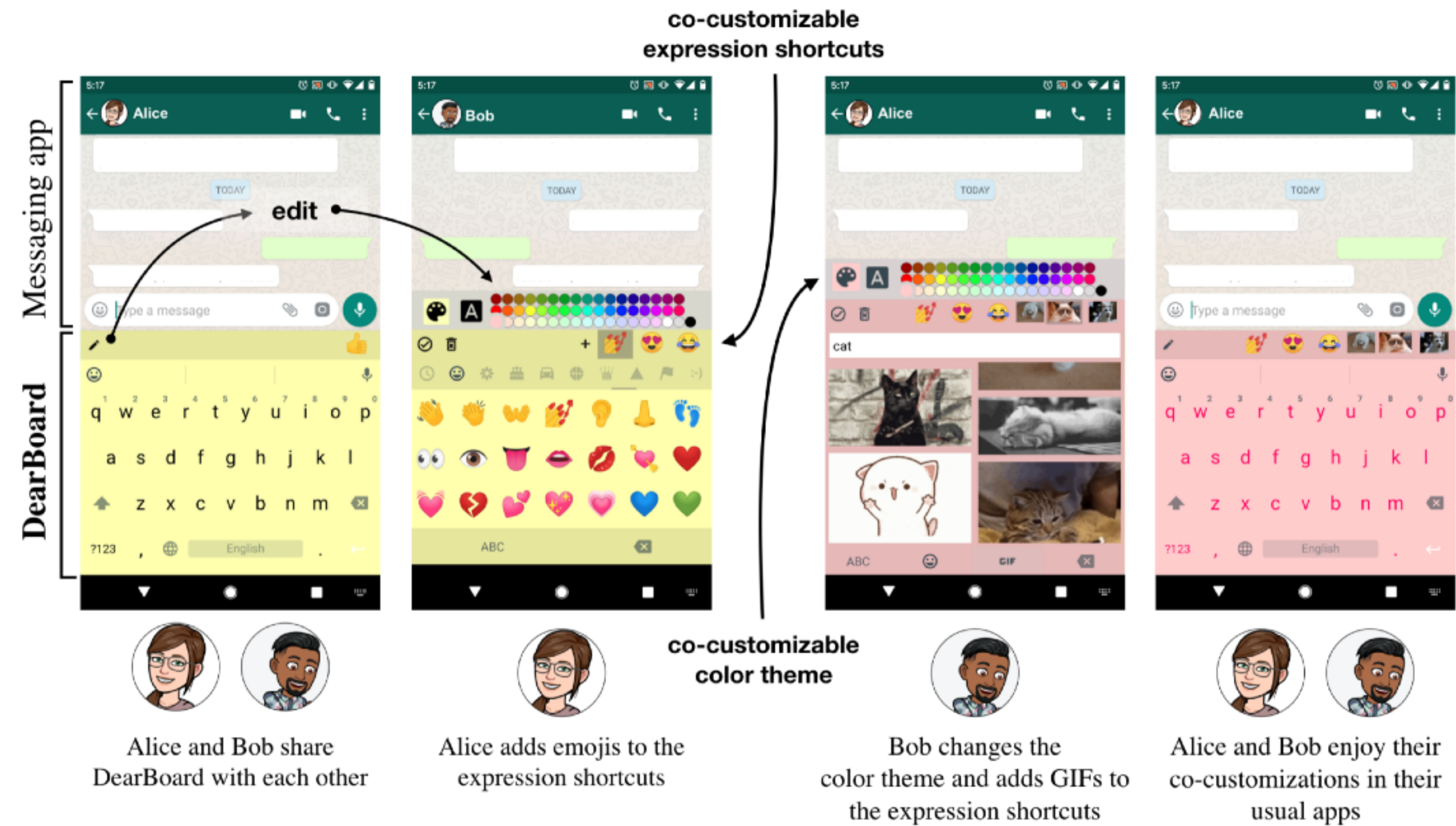


Figure 7: Left: The Apple friends split the ownership of DearBoard so that Apple-A was in charge of the **EXPRESSION SHORTCUTS** and Apple-B in charge of the **COLOR THEME**. Right: The Pear couple split the ownership of the **EXPRESSION SHORTCUTS** to have some for Pear-A and some for Pear-B, and some for both; their **COLOR THEME** was purple, their favorite color.

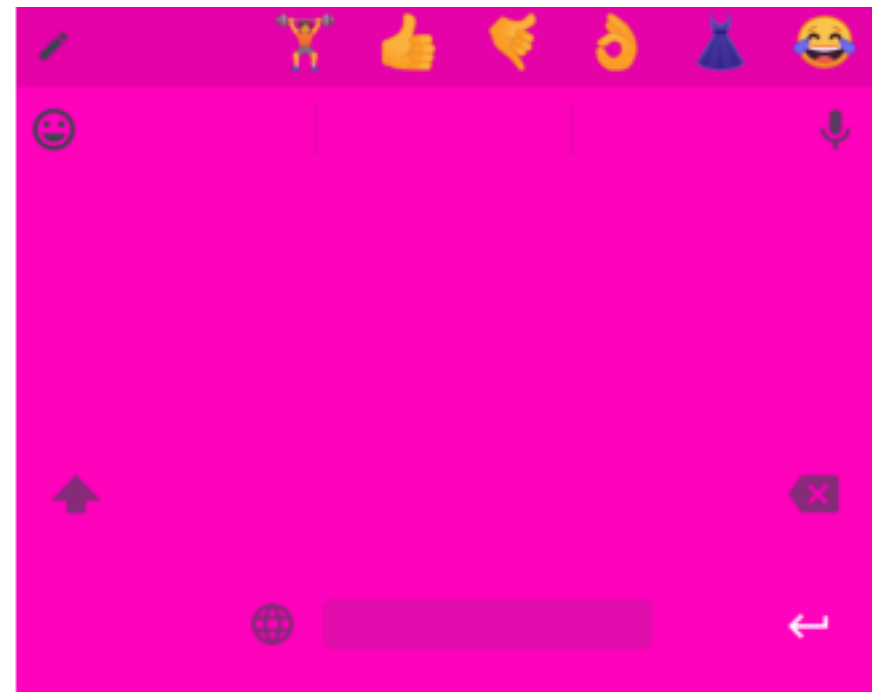


Figure 5: The Peach friends typed on an “invisible” keyboard for eight days straight after one of them chose the same color for the background and text as a joke.

Estudios de campo

5) Descubrir nuevas oportunidades de diseño / innovación

Emoji Accessibility for Visually Impaired People

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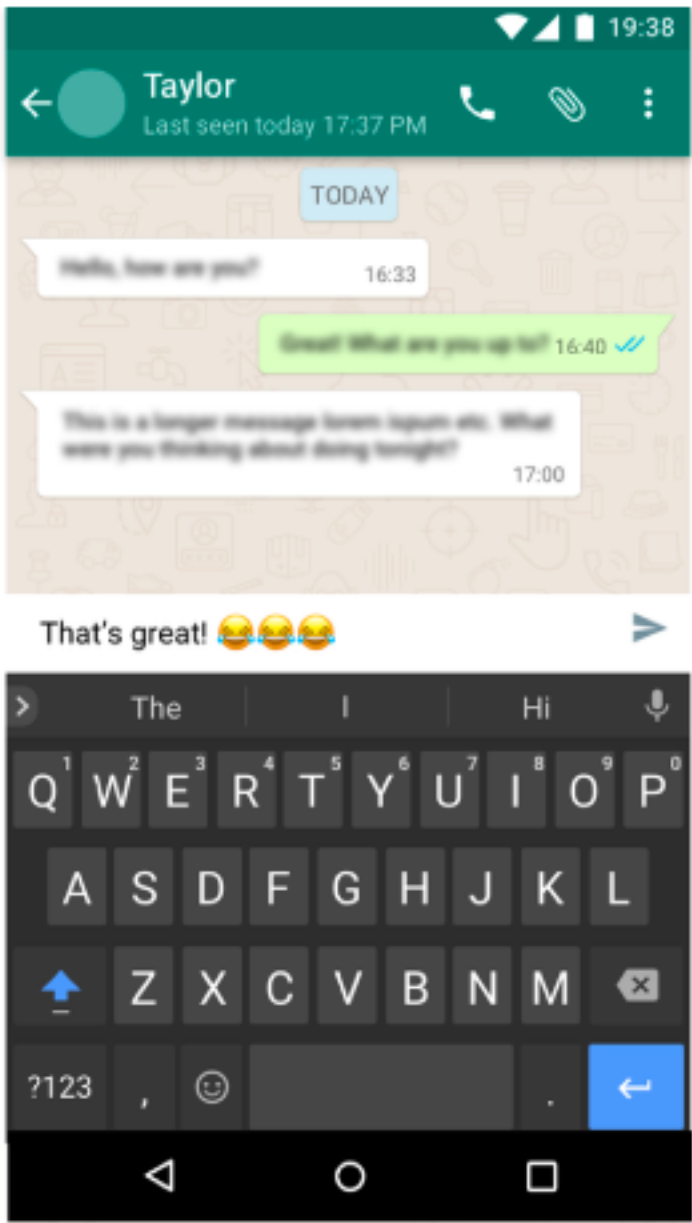
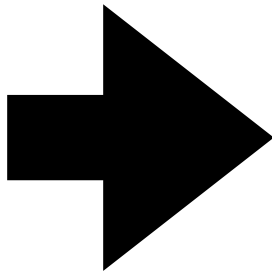
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ABSTRACT

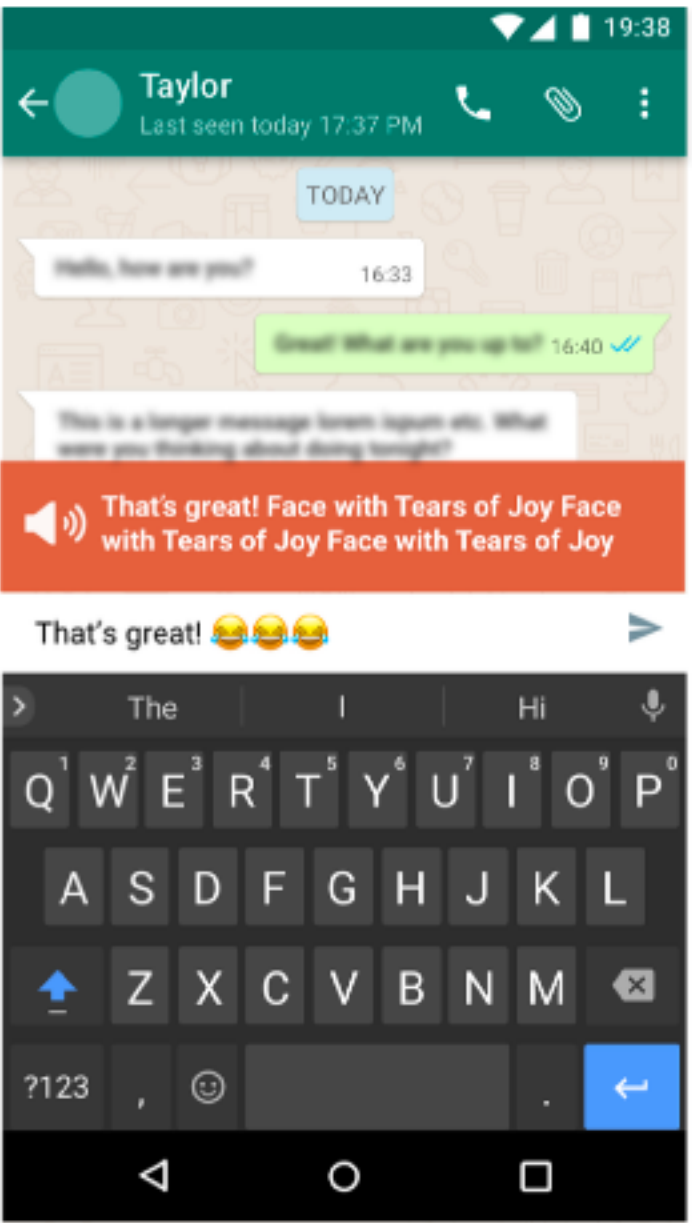
Emoji are graphical symbols that appear in many aspects of our lives. Worldwide, around 36 million people are blind and 217 million have a moderate to severe visual impairment. This portion of the population may use and encounter emoji, yet it is unclear what accessibility challenges emoji introduce. We first conducted an online survey with 58 visually impaired participants to understand how they use and encounter emoji online, and the challenges they experience. We then conducted 11 interviews with screen reader users to understand more about the challenges reported in our survey findings. Our interview findings demonstrate that technology is both an enabler and a barrier, emoji descriptors can hinder communication, and therefore the use of emoji impacts social interaction. Using our findings from both studies, we propose best practice when using emoji and recommendations to improve the future accessibility of emoji for visually impaired people.

and are used by politicians and government bodies [36, 55], travel companies [54], media outlets, and public figures (e.g., singer Katy Perry who has one of the largest Twitter followings [51]). Emoji have even been discussed within official court transcripts [35], and resulted in convictions [23].

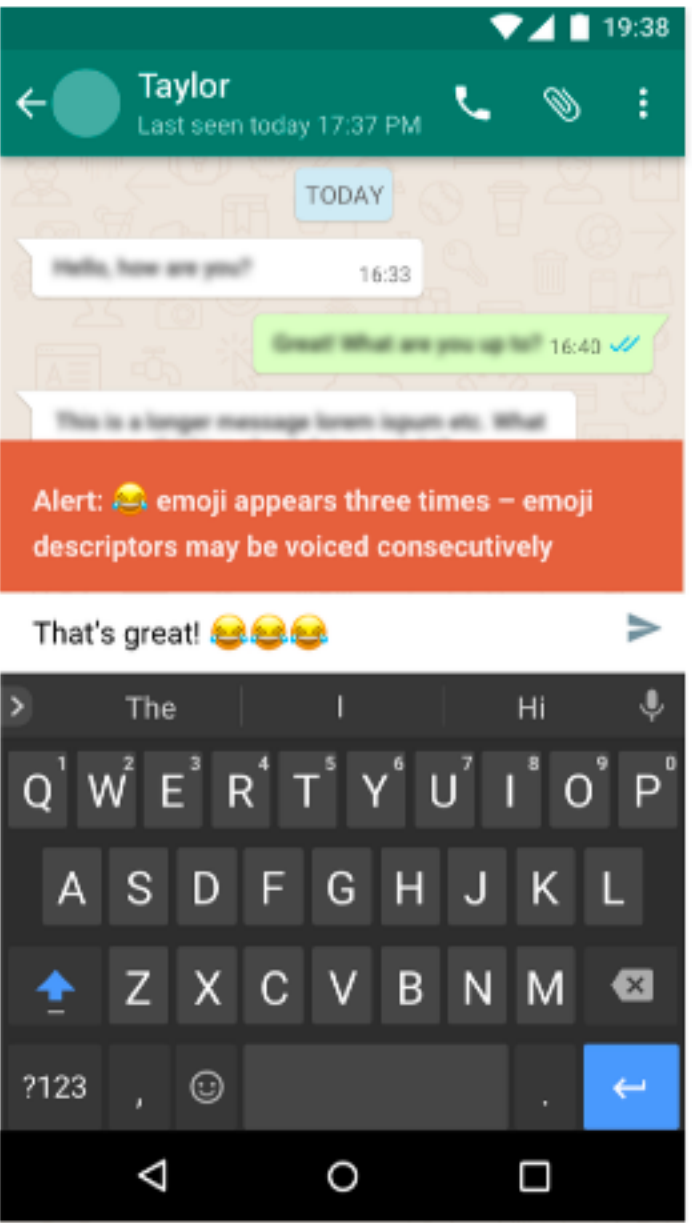
People interpret emoji differently, and emoji design variations across different platforms (e.g., iOS vs Android) can exacerbate misunderstandings [45, 64]. Furthermore, emoji are often used beyond their original intended meaning, which adds another layer of complexity to disambiguating the intended use of an emoji [64, 74]. Prior research on emoji has largely focused on those with typical vision. However, it is estimated that 36 million people worldwide are blind and 217 million have a moderate to severe visual impairment [73]. Prior work highlighted challenges visually impaired people face when using technology [7] and social media [22, 49]. However, it is not clear what accessibility challenges occur with emoji.



A) No Support



B) Preview Support



C) Alert Support