

Evaluating Mobile Apps Designed for the Elderly People Based on Available Usability and Accessibility Guidelines

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Abstract

Smartphones have become indispensable devices in people's everyday life facilitating many activities, such as taking pills on time, monitoring blood pressure, and socializing with other people. As the global population is rapidly ageing, it is necessary to design mobile interfaces that focuses on elderly people's needs, considering that they use their phones as an assistive technology through their mobile applications. Such needs are related to cognitive, perceptual, and psychomotor changes that take place in the ageing process, which affect the way older people interact with a mobile device. However, most of the mobile interfaces are not designed optimally for older people. To address this issue, some usability and accessibility guidelines, such as having a big enough font size, are suggested to design and evaluate age-specific mobile interfaces. However, there is no evaluation on how and to what extent the industry is implementing these guidelines in the mobile app's design process.

This paper aims to assess the application of these guidelines in industry-built apps. Thus, 18 specific mobile apps have been selected because they address different age-related issues, like visual aid or health support. These apps will then be evaluated on the basis of available guidelines, to better understand how the industry is taking into account the usability and accessibility requirements of older people in the app's design process. As a result, it will be revealed if there is any specific usability and accessibility issue that could be better addressed by the industry to design more appropriate mobile applications for the elderly people.