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SINGAPORE STANDARD

Guidelines on user interface design for older adults

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Mind Lens Worldwide Pte Ltd
Nanyang Technological University
National University of Singapore
SIM University

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Foreword

This Singapore Standard was prepared by the Technical Committee on Technology for Older Adults under the direction of the Silver Industry Standards Committee.

With the ageing population and increasing use of the Internet, there is a need to 'bridge the gap' between older adult users and the Internet. Many services that are traditionally delivered over-the-counter are increasingly being curtailed or transformed to be delivered online. This standard does not only take into consideration that the older adults are likely to develop age-related impairments such as visual and/or mobility related disabilities, but also consider the designing of user interface to enhance both usability and user experience for older adults. It helps in encouraging active ageing among older adults in Singapore and promotes Singapore as an age-inclusive society, ensuring that the older adults are not left behind even as Singapore advances toward a Smart Nation.

The Government has adopted the World Wide Web Consortium's (W3C) Web Content Accessibility Guidelines (WCAG) as a standard, after web accessibility was identified as one of the strategic priorities aimed at providing convenient access to government websites and online services to all segments of the population. The WCAG is an international standard adopted by governments worldwide, including the United Kingdom, Australia and Canada for the design of user interface that is friendly to people with disabilities. However, it is not developed with the specific needs of older adults in mind, and much less targeted at older adults in Singapore. Moreover, studies have also indicated that the needs of older adults are different from those of the disabled.

The standard aims to provide guidance to user interface designers in designing user interface that is senior-friendly, and to enhance usability and user experience of older adults in the Singapore context.

In preparing this standard, reference was also made to the following publications:

1. BS 8878 : 2010 Web accessibility – Code of practice

2. ISO/IEC 40500 : 2012 Information technology – W3C Web Content Accessibility Guidelines (WCAG) 2.0

3. ISO/IEC Guide 71 : 2014 Guide for addressing accessibility in standards

4. Japanese Industrial Standard, JIS X 8341 Guidelines for older persons and persons with disabilities – Information and communications equipment, software and services

   Part 3 : 2010 – Web content
   Part 5 : 2006 – Office equipment
   Part 7 : 2011 – Accessibility settings

5. Developing Websites for Older People: How Web Content Accessibility Guidelines (WCAG) 2.0 Applies, by W3C. (http://www.w3.org/WAI/older-users/developing.html)

6. Making Your Website Senior Friendly – A Checklist, by the National Institute on Aging and the National Library of Medicine (https://www.nlm.nih.gov/pubs/checklist.pdf)

7. Usability for Senior Citizens, by Nielsen Norman Group (https://www.nngroup.com/articles/usability-for-senior-citizens/)

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Acknowledgement is made for the use of information from the above publications.

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Guidelines on user interface design for older adults

1 Scope

This Singapore Standard provides guidance on the principles of user interface design to enhance the user experience of older adults. This standard may be used by any organisations or individuals designing user interface for older adults. It is not intended for older adults with severe forms of impairments. The general principles of user interface design to enhance the user experience of older adults are documented in Clause 4 of this standard. For each principle, corresponding requirements to address the principle are listed. Where appropriate, illustrative figures are provided to showcase recommended examples as well as undesirable examples in addressing the requirements. While these illustrative figures are meant to be examples, they are neither absolute nor exhaustive as technologies and designs evolve over time.

Annex A is included as a tutorial to provide an understanding of the needs of older adults when using computers so as to facilitate an informed application of the principles and provisions presented in the standard. Annex B is included to differentiate between provisions that are of primary consideration and those that are of secondary consideration as it may not always be possible to adopt all of them.

2 Normative reference

The following referenced document is indispensable for the application of this Singapore Standard.

Web Content Accessibility Guidelines (WCAG) 2.0, published by the World Wide Web Consortium (W3C) (latest edition applies)

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