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Part 3: Virtual keyboards interactions

Technologies de l'information — Interface utilisateur des claviers virtuels —

Partie 3: Modes d'interactions des claviers virtuels

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Foreword

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A list of all parts in the ISO/IEC 22121 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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Introduction

The use of virtual keyboards is becoming a widespread means of input. Due to their virtual nature, they offer unlimited possibilities to interact through different ways. This can potentially generate inconvenience on the user side because from one device to another, and even in the same device, users can be faced with different practices. However, virtual keyboards are also an opportunity for users with disabilities to get a keyboard adapted for their specific needs. There is also the opportunity for all users to use a keyboard that is adapted to be more efficient for a particular application or environment.

A virtual keyboard can be adapted to a specific user (e.g. with visual, motor, cognitive, tactile or hearing constraints), a specific technical context (no physical keyboard available, on a large or a tiny tactile device as a phone, or a large one as a kiosk, or on a TV, etc.), a specific task (e.g. editing big documents, or editing occasionally a password) or a specific context of use (in a hurry, walking, driving, switching between several languages, etc.).

This document provides guidelines for the design of specific keyboards dedicated to specific interaction modes.

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Information technology — Virtual keyboards user interfaces —

Part 3:
Virtual keyboards interactions

1 Scope

This document provides guidelines on assistive technologies and functionalities that are to be included in accessible virtual keyboards. This document underlines which kinds of interaction modes can be embedded, which kinds of assistive technologies can be easily bound to virtual keyboards, and which kinds of functionalities are to be taken into account within virtual keyboards.

This document does not apply to physical keyboards that use real physical keys or adaptable keys, which can be customized to user needs, for example with LCD display.

2 Normative references

ISO/IEC 9995-1, *Information technology — Keyboard layouts for text and office systems — Part 1: General principles governing keyboard layouts*

ISO/IEC 9995-9, *Information technology — Keyboard layouts for text and office systems — Part 9: Groups and mechanisms for multilingual and multiscript input*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 9995-1, ISO/IEC 9995-9 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
on-screen keyboard
virtual keyboard (3.3) displayed on any type of screen

Note 1 to entry: On-screen keyboards are one specific type of virtual keyboards, probably the most common, that use a screen to display a visual keyboard.

Note 2 to entry: This type of virtual keyboard can be used on personal computer screens, on feature phones and tablets, mobile phones and tablets, TVs, kiosks and whiteboards.

[SOURCE: ISO/IEC 22121-2:2023, 3.1]

3.2
physical keyboard
mechanical or electronic input device using an arrangement of buttons or keys

Note 1 to entry: Some physical keyboards can be adaptable (for example, using LCD screens instead of keys with printed symbols and characters).

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