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Ergonomics of human-system interaction —

Part 161: Guidance on visual

<u>Visual</u> user-interface elements

Ergonomie de l'interaction homme-système —

Partie 161: Partie 161: Éléments <u>visuels</u> de l'interface utilisateur

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee Technical Committee ISO/TC 159, Ergonomics, Subcommittee SC 4, Ergonomics of human-system interaction, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 122, _________Ergonomics, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 9241-161:2016), which has been technically revised.

The main changes are as follows:

- Termsrevision of terms and definitions updated clause;
- Added chapteraddition of information on the relationship of input techniques and visual userinterface elements;
- Revisionrevision of states of visual user-interface elements;
- Useraddition of user-interface elements added;
- Guidance revision of guidance on user-interface elements edited.

A list of all parts in the ISO 9241 series can be found on the ISO website.

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.

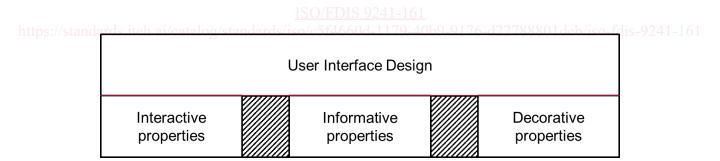
Introduction

In different communities in the interactive system development ecosystem, the use, the names and the understanding of user-interface elements differs significantly. One of the results is that users have tomust cope with elements which differ in terms of keyboard entry and control, mouse behaviour, visual presentation of functionality and different options to control elements. Consistent element behaviour, functionality and rendering is crucial for the usability of user interfaces. This causes added efforts in all stakeholders in human-centred design activities, since this multitude must be managed in order to ensure high-quality collaboration of various specialists. Especially in the light of new emerging user-interface concepts and designs, a common definition of visual user-interface elements and the rationale for their selection as well as their use can be regarded as an effort to sustain cooperation and ensure a sound basis for professional conversation. This document, covering visual user-interface elements, in no waysway predetermines a visual style of the elements themselves, thus avoiding to impressimpressing determinants in creation, brand usage and style development, as outlined in Figure 1. In addition, this document is laid out in an independent of platform specifics, so that no specific industrial user-interface styleguidestyleguide, implementation technology or development process needs tomust be observed in order to conform to this document.

This part of ISO 9241 document aims to provide information on visual user-interface elements to help those responsible for managing software design and re-design processes, create user interface specifications, guidelines, styleguides design systems and visual concepts to identify, plan and design effective, efficient and satisfactory interactive systems.

Visual user-interface elements described in this part of ISO 9241 document complement existing systems design approaches, methods or processes. They can be referenced in any kind of user interface strategy, regardless of the technology used for the user interface.

Figure 1 shows an overview of different visual user interface properties that are used to build a user interface design.



 $\underline{Figure~1-Overview~of~different~visual~user~interface~properties}\underline{This~document}$