

ISO/IEC 17549-1

First edition 2022-05

Information technology — User interface requirements and recommendations on menu navigation —

Part 1: Framework

Technologies de l'information — Exigences et recommandations d'interface portant sur la navigation dans les menus —

Partie 1: Cadre



Reference number ISO/IEC 17549-1:2022(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Page

Contents

Fore	word			iv
Intro	oductio	on		v
1				
_		Normative references		
2	Normative references Terms and definitions Conformance			
3				
4				
5	Framework of the ISO/IEC 17549 series			2
	5.1	5.1 Software interfaces		
	5.2	Menu	s heterogeneity	
		5.2.1	Manipulation of menus	
		5.2.2	Several menus on different devices	
		5.2.3	Same menu for different users	
		5.2.4	Hardware interfaces (devices)	
	5.3	Menu	accessibility	3
		5.3.1	General requirements	
		5.3.2	Cognitive aspect	
		5.3.3	Perceptual aspect	4
		5.3.4	Motor and speech ability aspect	
	5.4	Displa	ays and commands coherency	
		5.4.1	Global coherency	
		5.4.2	Coherency between interface rendering and navigation commands	
		5.4.3	Horizontally displayed menus	
		5.4.4	Vertically displayed items	
		5.4.5	Items horizontally organized in a tile menu	
		5.4.6	Items vertically organized in a tile menu	
	5.5	Interface action means		
		5.5.1	Minimal requirement about interface action means	
		5.5.2	Direct action (pointing, gesture shortcut, key shortcut, vocal shortcut)	

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

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 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 or www.iso.org/directiv

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see https://www.iso.org/patents) or the IEC list of patent declarations received (see https://www.iso.org/patents) or the IEC list of patent declarations received (see https://www.iso.org/patents) or the IEC list of patent declarations received (see https://www.iso.org/patents) or the IEC list of patent declarations received (see https://www.iso.org/patents) or the IEC list of patent declarations received (see https://www.iso.org/patents) or the IEC list of patent declarations received (see https://www.iso.org/patents) or the IEC list of patents) or the list o

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

A list of all parts in the ISO/IEC 17549 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 <u>www.iso.org/members.html</u> and <u>www.iec.ch/national-committees</u>.

Introduction

Menus are frequently used for human-machine interface navigation of functions and contents. But many different types of menus exist and many different manipulation procedures occur. Such a variety of procedures often disturbs the user.

Menus and associated means of action should offer users an easy and continuous ergonomics experience.

The ISO/IEC 17549 series defines menu navigation logic associated to a set of directional devices. It provides descriptions of functions for supporting navigation and activation.

The ISO/IEC 17549 series consists of three parts:

- This document provides an overview of the design of navigation methods based upon menu selection for human-machine interfaces. It provides a framework of the "menu" user-interface element to help design an effective, efficient and satisfactory interactive system.
- ISO/IEC 17549-2, provides guidelines on the design of navigation methods for selection menus with use of a 4-direction device. It also provides recommendations for parameters to display screen settings, character sets and languages in use.
- ISO/IEC 17549-3 provides requirements and recommendations on the design of navigation methods for selection menus with use of a 1-direction device. It also provides recommendations for parameters to display screen settings, character sets and languages in use.

This is a preview - click here to buy the full publication

INTERNATIONAL STANDARD

Information technology — User interface requirements and recommendations on menu navigation —

Part 1: Framework

1 Scope

This document provides a framework for the ISO/IEC 17549 series describing user interface guidelines on menu navigation. It specifies requirements and recommendations on how to design usable and consistent navigation through the interface component called a "menu". This document specifies how to select and validate elements displayed on menus.

This document covers design-consistent navigation inside menus. It does not include testing or organization of menus.

2 Normative references

There are no normative references in this document.