

# ISO 9241-161:2025-12 (E)

## Ergonomics of human-system interaction - Part 161: Visual user-interface elements

<b>Contents</b>		<b>Page</b>
<b>Foreword</b>		<b>x</b>
<b>Introduction</b>		<b>xi</b>
<b>1</b>	<b>Scope</b>	<b>1</b>
<b>2</b>	<b>Normative references</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions</b>	<b>1</b>
<b>4</b>	<b>Accessibility</b>	<b>3</b>
<b>5</b>	<b>Compositions of visual user-interface elements</b>	<b>3</b>
<b>6</b>	<b>Relationship of input techniques and visual user-interface elements</b>	<b>4</b>
<b>7</b>	<b>States of visual user-interface elements</b>	<b>4</b>
<b>8</b>	<b>Describing visual user-interface elements</b>	<b>5</b>
<b>9</b>	<b>Visual user-interface elements</b>	<b>6</b>
9.1	Accordion	6
9.1.1	Description	6
9.1.2	Components	6
9.1.3	States	7
9.1.4	When to use an accordion	7
9.1.5	How to use an accordion	8
9.2	Analogue form element or slider	8
9.2.1	Description	8
9.2.2	Components	8
9.2.3	States	8
9.2.4	When to use an analogue form element	8
9.2.5	How to use an analogue form element	9
9.3	Avatar	9
9.3.1	Description	9
9.3.2	Components	9
9.3.3	States	9
9.3.4	When to use an avatar	10
9.3.5	How to use an avatar	10
9.4	Badge	10
9.4.1	Description	10
9.4.2	Components	10
9.4.3	States	11
9.4.4	When to use a badge	11
9.4.5	How to use a badge	11
9.5	Breadcrumb	11
9.5.1	Description	11
9.5.2	Components	11
9.5.3	States	12
9.5.4	When to use a breadcrumb	12
9.5.5	How to use a breadcrumb	12
9.6	Button (push button, command button)	12
9.6.1	Description	12
9.6.2	Components	13
9.6.3	States	13
9.6.4	When to use a button	13
9.6.5	How to use a button	13
9.7	Carousel and carrousel	13
9.7.1	Description	13
9.7.2	Components	14
9.7.3	States	14

9.7.4	When to use a carousel	14
9.7.5	How to use a carousel	15
9.8	Check box	15
9.8.1	Description	15
9.8.2	Components	15
9.8.3	States	15
9.8.4	When to use a check box	16
9.8.5	How to use a check box	16
9.9	Collapsible container	16
9.9.1	Description	16
9.9.2	Components	16
9.9.3	States	17
9.9.4	When to use a collapsible container	17
9.9.5	How to use a collapsible container	17
9.10	Colour picker	17
9.10.1	Description	17
9.10.2	Components	18
9.10.3	States	18
9.10.4	When to use a colour picker	18
9.10.5	How to use a colour picker	18
9.11	Combination box (combo box)	18
9.11.1	Description	18
9.11.2	Components	18
9.11.3	States	19
9.11.4	When to use a combination box	19
9.11.5	How to use a combination box	20
9.12	Cursor	20
9.12.1	Description	20
9.12.2	Components	20
9.12.3	States	20
9.12.4	When to use a cursor	20
9.12.5	How to use a cursor	20
9.13	Date picker	20
9.13.1	Description	20
9.13.2	Components	21
9.13.3	States	21
9.13.4	When to use a date picker	22
9.13.5	How to use a date picker	22
9.14	Dialogue box	22
9.14.1	Description	22
9.14.2	Components	22
9.14.3	States	23
9.14.4	When to use a dialogue box	23
9.14.5	How to use a dialogue box	23
9.15	Disclosure	23
9.15.1	Description	23
9.15.2	Components	23
9.15.3	States	24
9.15.4	When to use a disclosure	24
9.15.5	How to use a disclosure	24
9.16	Dropdown list box and select	24
9.16.1	Description	24
9.16.2	Components	24
9.16.3	States	25
9.16.4	When to use a dropdown list box	25
9.16.5	How to use a dropdown list box	26
9.17	Entry field, input field and text box	26
9.17.1	Description	26
9.17.2	Components	26

9.17.3	States	26
9.17.4	When to use an entry field	26
9.17.5	How to use an entry field	26
9.18	Entry field with dialogue button	27
9.18.1	Description	27
9.18.2	Components	27
9.18.3	States	27
9.18.4	When to use an entry field with dialogue button	27
9.18.5	How to use an entry field with dialogue button	27
9.19	Geographical map	27
9.19.1	Description	27
9.19.2	Components	27
9.19.3	States	28
9.19.4	When to use a geographical map	28
9.19.5	How to use a geographical map	28
9.20	Group	28
9.20.1	Description	28
9.20.2	Components	29
9.20.3	States	29
9.20.4	When to use a group	29
9.20.5	How to use a group	29
9.21	Handle	30
9.21.1	Description	30
9.21.2	Components	30
9.21.3	States	30
9.21.4	When to use a handle	30
9.21.5	How to use a handle	30
9.22	Hierarchical list, tree view and tree list	31
9.22.1	Description	31
9.22.2	Components	31
9.22.3	States	31
9.22.4	When to use a hierarchical list	32
9.22.5	How to use a hierarchical list	32
9.23	Implicit designator	32
9.23.1	Description	32
9.23.2	Components	32
9.23.3	States	32
9.23.4	When to use an implicit designator	32
9.23.5	How to use an implicit designator	32
9.24	Instructive Information	33
9.24.1	Description	33
9.24.2	Components	33
9.24.3	States	33
9.24.4	When to use instructive information	33
9.24.5	How to use instructive information	33
9.25	Input tokenizer	34
9.25.1	Description	34
9.25.2	Components	34
9.25.3	States	34
9.25.4	When to use an input tokenizer	34
9.25.5	How to use an input tokenizer	35
9.26	Label	35
9.26.1	Description	35
9.26.2	Components	35
9.26.3	States	35
9.26.4	When to use a label	35
9.26.5	How to use a label	35
9.27	Legend and chart key	36
9.27.1	Description	36

9.27.2	Components .....	36
9.27.3	States .....	36
9.27.4	When to use a legend .....	36
9.27.5	How to use a legend .....	36
9.28	Link and hyperlink .....	36
9.28.1	Description .....	36
9.28.2	Components .....	37
9.28.3	States .....	37
9.28.4	When to use a link .....	37
9.28.5	How to use a link .....	37
9.29	List box .....	38
9.29.1	Description .....	38
9.29.2	Components .....	38
9.29.3	States .....	38
9.29.4	When to use a list box .....	39
9.29.5	How to use a list box .....	39
9.30	List and menu button .....	39
9.30.1	Description .....	39
9.30.2	Components .....	39
9.30.3	States .....	40
9.30.4	When to use a list button .....	40
9.30.5	How to use a list button .....	40
9.31	Menu and menu bar .....	41
9.31.1	Description .....	41
9.31.2	Components .....	41
9.31.3	States .....	41
9.31.4	When to use a menu .....	42
9.31.5	How to use a menu .....	42
9.32	Meter .....	42
9.32.1	Description .....	42
9.32.2	Components .....	42
9.32.3	States .....	43
9.32.4	When to use a meter .....	43
9.32.5	How to use a meter .....	43
9.33	Output pane .....	43
9.33.1	Description .....	43
9.33.2	Components .....	43
9.33.3	States .....	44
9.33.4	When to use an output pane .....	44
9.33.5	How to use an output pane .....	44
9.34	Pointer .....	44
9.34.1	Description .....	44
9.34.2	Components .....	44
9.34.3	States .....	44
9.34.4	When to use a pointer .....	44
9.34.5	How to use a pointer .....	45
9.35	Pop-up menu and contextual menu .....	45
9.35.1	Description .....	45
9.35.2	Components .....	45
9.35.3	States .....	45
9.35.4	When to use a pop-up menu .....	46
9.35.5	How to use a pop-up menu .....	46
9.36	Progress indicator .....	46
9.36.1	Description .....	46
9.36.2	Components .....	46
9.36.3	States .....	46
9.36.4	When to use a progress indicator .....	46
9.36.5	How to use a progress indicator .....	46
9.37	Prompt .....	47

9.37.1	Description .....	47
9.37.2	Components .....	47
9.37.3	States .....	47
9.37.4	When to use a prompt .....	47
9.37.5	How to use a prompt .....	47
9.38	Radio and option buttons .....	47
9.38.1	Description .....	47
9.38.2	Components .....	48
9.38.3	States .....	48
9.38.4	When to use a radio button .....	48
9.38.5	How to use a radio button .....	49
9.39	Read only field and protected field .....	49
9.39.1	Description .....	49
9.39.2	Components .....	49
9.39.3	States .....	49
9.39.4	When to use a read only field .....	49
9.39.5	How to use a read only field .....	50
9.40	Scroll bar .....	50
9.40.1	Description .....	50
9.40.2	Components .....	50
9.40.3	States .....	50
9.40.4	When to use a scroll bar .....	51
9.40.5	How to use a scroll bar .....	51
9.41	Scroll handle, elevator, scroll box and thumb .....	51
9.41.1	Description .....	51
9.41.2	Components .....	51
9.41.3	States .....	51
9.41.4	When to use scroll handle .....	51
9.41.5	How to use scroll handle .....	51
9.42	Selection cursor .....	52
9.42.1	Description .....	52
9.42.2	Components .....	52
9.42.3	States .....	52
9.42.4	When to use a selection cursor .....	52
9.42.5	How to use a selection cursor .....	52
9.43	Selection indication .....	52
9.43.1	Description .....	52
9.43.2	Components .....	53
9.43.3	States .....	53
9.43.4	When to use a selection indication .....	53
9.43.5	How to use a selection indication .....	53
9.44	Selection list and choice list .....	53
9.44.1	Description .....	53
9.44.2	Components .....	53
9.44.3	States .....	54
9.44.4	When to use a selection list .....	54
9.44.5	How to use a selection list .....	54
9.45	Status information .....	54
9.45.1	Description .....	54
9.45.2	Components .....	54
9.45.3	States .....	55
9.45.4	When to use status information .....	55
9.45.5	How to use status information .....	55
9.46	Stepper and spin button .....	55
9.46.1	Description .....	55
9.46.2	Components .....	55
9.46.3	States .....	56
9.46.4	When to use a stepper .....	56
9.46.5	How to use a stepper .....	56

9.47	System message.....	56
	9.47.1 Description.....	56
	9.47.2 Components.....	56
	9.47.3 States.....	57
	9.47.4 When to use a system message.....	57
	9.47.5 How to use system message.....	57
9.48	Tab set.....	57
	9.48.1 Description.....	57
	9.48.2 Components.....	57
	9.48.3 States.....	58
	9.48.4 When to use a tab set.....	58
	9.48.5 How to use a tab set.....	58
9.49	Table.....	59
	9.49.1 Description.....	59
	9.49.2 Components.....	59
	9.49.3 States.....	59
	9.49.4 When to use a table.....	59
	9.49.5 How to use a table.....	60
9.50	Text field.....	60
	9.50.1 Description.....	60
	9.50.2 Components.....	60
	9.50.3 States.....	60
	9.50.4 When to use a text field.....	60
	9.50.5 How to use a text field.....	61
9.51	Time picker.....	61
	9.51.1 Description.....	61
	9.51.2 Components.....	61
	9.51.3 States.....	61
	9.51.4 When to use a time picker.....	62
	9.51.5 How to use a time picker.....	62
9.52	Title and heading.....	62
	9.52.1 Description.....	62
	9.52.2 Components.....	62
	9.52.3 States.....	62
	9.52.4 When to use a title.....	63
	9.52.5 How to use title.....	63
9.53	Toggle button and switch.....	63
	9.53.1 Description.....	63
	9.53.2 Components.....	63
	9.53.3 States.....	63
	9.53.4 When to use a toggle button.....	63
	9.53.5 How to use a toggle button.....	64
9.54	Tool bar.....	64
	9.54.1 Description.....	64
	9.54.2 Components.....	64
	9.54.3 States.....	64
	9.54.4 When to use a tool bar.....	64
	9.54.5 How to use a tool bar.....	65
9.55	Tool tip.....	65
	9.55.1 Description.....	65
	9.55.2 Components.....	65
	9.55.3 States.....	65
	9.55.4 When to use a tool tip.....	65
	9.55.5 How to use a tool tip.....	65
9.56	Window.....	66
	9.56.1 Description.....	66
	9.56.2 Components.....	66
	9.56.3 States.....	66
	9.56.4 When to use a window.....	66
	9.56.5 How to use window.....	66
	<b>Bibliography.....</b>	<b>67</b>

9.56.5 How to use window.....	66
<b>Bibliography.....</b>	<b>67</b>