

Accessibility check: Excel workbook, before remediation

Produced by `xlsx_a11y_check.py` (our rule-based checker, modelled on Microsoft Accessibility Checker rules for Excel) v1.0. This is our own rule-based script that reads the workbook's SpreadsheetML directly. Its rules are modelled on the rules Microsoft publishes for the Excel Accessibility Checker, with a few additions marked "our addition"; it is **not** Microsoft's tool, severities are ours, and counts will not match Excel's own checker exactly. File: `accessible-excel-before.xlsx`

Errors: 4 Warnings: 23 Tips: 6

ID	Rule	Severity	Count
X01	Workbook title property is empty Modelled on: Our addition (not an Excel checker rule): document title, WCAG 2.4.2 / EN 301 549 10.2.4.2; becomes the PDF title on export	error	1
X02	Workbook language property (dc:language) not set Modelled on: Our addition: WCAG 3.1.1 / EN 301 549 10.3.1.1; Excel stores no language per cell	warning	1
X03	Picture, chart, shape or group without alternative text (and not marked decorative) Modelled on: Missing alternative text	error	2
X04	Alternative text is a generic label or file name ("Picture", "Chart 1", "logo.png") Modelled on: Missing alternative text (meaningful alt text; manual review)	warning	0
X05	Excel Table without a header row (headerRowCount="0") Modelled on: Missing table header	error	1
X06	Excel Table header names are generic ("Column1", "Sütun1") Modelled on: Missing table header (header must describe the column)	warning	0
X07	Merged cells Modelled on: Merged cells	warning	4
X08	Default sheet name ("Sheet1", "Sayfa1", "Tabelle1" ...) Modelled on: Default sheet names	warning	2
X09	Hyperlink text is non-descriptive ("buraya tıklayın", "click here") or a raw URL Modelled on: Unclear hyperlink text	warning	1
X10	Blank row or column inside an Excel Table Modelled on: Blank table rows or columns	warning	0
X11	Blank row or column used as a spacer inside the used range of a sheet Modelled on: Our addition, related to "Blank table rows or columns": screen-reader users may assume the data ended	tip	4

X12	Cell text contrast below WCAG 2.2 AA (4.5:1, or 3:1 for 18 pt / 14 pt bold) Modelled on: Hard-to-read text contrast	warning	14
X13	Hidden sheet Modelled on: Hidden sheets	warning	1
X14	Data range (3+ rows x 2+ columns) not defined as an Excel Table Modelled on: Our addition: without a Table there is no programmatic header row	tip	1
X15	Possible colour-only meaning: fill/font colour varies among numeric cells of one column, or conditional formatting on numbers Modelled on: Our addition (heuristic, manual review): WCAG 1.4.1 Use of Color	tip	1

Workbook facts

Title: **(empty)** · Language: **(not set)** · Author: Ali Karabüyük · Cells checked for contrast: 96 (undetermined: 0)

Sheet	State	Used range	Excel Tables	Merged	Freeze	Print titles	Objects / alt text
Sheet1	visible	A1:K19	-	4	-	-	chart at A21: NO alt text; pic at M1: NO alt text
Sayfa2	hidden	A1:C4	Table1 A1:C4 (NO header row)	0	-	-	-

Findings

▼ X01 - Workbook title property is empty (1)

- {"value": ""}

▼ X02 - Workbook language property (dc:language) not set (1)

- {"value": ""}

▼ X03 - Picture, chart, shape or group without alternative text (and not marked decorative) (2)

- {"sheet": "Sheet1", "object": "Chart 1", "type": "chart", "anchor": "A21", "alt": "", "decorative": false}
- {"sheet": "Sheet1", "object": "Image 2", "type": "pic", "anchor": "M1", "alt": "", "decorative": false}

▼ X05 - Excel Table without a header row (headerRowCount="0") (1)

- {"sheet": "Sayfa2", "table": "Table1", "ref": "A1:C4", "header_row": false, "totals_row": false, "columns": ["Column1", "Column2", "Column3"]}

▼ X07 - Merged cells (4)

- {"sheet": "Sheet1", "range": "A2:K2"}
- {"sheet": "Sheet1", "range": "A1:K1"}
- {"sheet": "Sheet1", "range": "A4:D4"}
- {"sheet": "Sheet1", "range": "F4:K4"}

▼ X08 - Default sheet name ("Sheet1", "Sayfa1", "Tabelle1" ...) (2)

- {"sheet": "Sheet1"}
- {"sheet": "Sayfa2"}

▼ X09 - Hyperlink text is non-descriptive ("buraya tıklayın", "click here") or a raw URL (1)

- {"sheet": "Sheet1", "cell": "D17", "text": "buraya tıklayın", "target": "https://www.example.com/ornek-as/butce-yonergesi-2026"}

▼ X11 - Blank row or column used as a spacer inside the used range of a sheet (4)

- {"sheet": "Sheet1", "row": 3}
- {"sheet": "Sheet1", "row": 10}
- {"sheet": "Sheet1", "row": 16}
- {"sheet": "Sheet1", "column": "E"}

▼ X12 - Cell text contrast below WCAG 2.2 AA (4.5:1, or 3:1 for 18 pt / 14 pt bold) (14)

- {"sheet": "Sheet1", "fg": "BFBFBF", "bg": "FFFFFF", "ratio": 1.84, "required": 4.5, "source": "cell style", "cells": ["A2", "A19"], "cell_count": 2, "example_text": "Tüm tutarlar TL / All amounts in TRY – kırmızı hücreler önem"}
- {"sheet": "Sheet1", "fg": "FFFFFF", "bg": "FFFF00", "ratio": 1.07, "required": 4.5, "source": "cell style", "cells": ["A4", "F4"], "cell_count": 2, "example_text": "BÜTÇE / BUDGET"}
- {"sheet": "Sheet1", "fg": "FFFFFF", "bg": "FFC000", "ratio": 1.64, "required": 4.5, "source": "cell style", "cells": ["A5", "B5", "C5", "D5", "F5", "G5", "H5", "I5", "J5", "K5"], "cell_count": 10, "example_text": "Departman"}

▼ X13 - Hidden sheet (1)

- {"sheet": "Sayfa2", "state": "hidden"}

▼ X14 - Data range (3+ rows x 2+ columns) not defined as an Excel Table (1)

- {"sheet": "Sheet1", "rows_with_2plus_values": 12, "used_range": "A1:K19"}

▼ X15 - Possible colour-only meaning: fill/font colour varies among numeric cells of one column, or conditional formatting on numbers (1)

- {"sheet": "Sheet1", "column": "C", "reason": "numeric cells in one column use 2 different font/fill colour pairs", "groups": {"000000 on FFFFFFFF": ["C6", "C8", "C9", "C11", "C14", "C15"], "000000 on FF0000": ["C7", "C12", "C13"]}}

What this script does not check

- Whether alt text is accurate, complete or useful (only presence and generic / file-name values).
- Colours applied by Excel Table styles, cell styles of themes it cannot resolve, sparklines, chart colours and text inside charts or images; sheet background images. Unfilled cells are assumed to sit on a white sheet.
- Whether colour is the only carrier of meaning - X15 is a heuristic that only points at places to review.
- Logical reading / navigation order of a dashboard, whether formulas and abbreviations are understandable, whether number formats are announced sensibly by a screen reader.
- Form controls, ActiveX, macros, comments/notes, data validation messages, pivot tables, external links.
- Screen-reader or keyboard testing with real users; Excel's own Accessibility Checker was not run.