## FORM FIELDS FILLING DETECTION

## **RESULTS:**

Metric	Value
Total Forms Processed	43
Forms Fully Fillable	18 (41.86%)
Incomplete Forms Logged	25
Forms Ignoring Captcha Fields	6
Forms Ignoring Checkbox Fields	11
Unfilled Forms Due to Only Unrequired Fields	21
Unfilled Forms Due to Required Fields	4

## **SCRIPT BRIEF:**

This script analyzes a folder of contact form HTML files to determine whether each form is fully fillable using a predefined set of field groups (e.g., name, email, message, phone, etc.). It:

- 1. Parses each form's fields by:
  - Parsing all <input>, <textarea>, and <select> fields.
  - Extracting labels via aria-label, placeholder, name, or associated <label for=...> tags.
  - Matching each field to a known category using:
    - The type attribute (priority)
    - Then the normalized label text
    - Including fuzzy matching logic.
    - Forms are considered **fully fillable** if **every visible field** (both required and optional) can be matched to a known predefined field.
  - Forms are logged as:
    - Filled: all fields matched
    - Unfilled: one or more unmatched fields (stored under non filled fields)
  - Ignores:
    - Hidden (type="hidden" or styled with display:none)
    - Submit buttons (type="submit")
    - Checkbox inputs (type="checkbox")
    - Captcha/quiz-related fields (e.g., labels like "captcha", "quiz", "g-recaptcha")
    - Any field or parent with style="display: none"
- 2. **Normalizes and smartly matches each field** to one of the predefined field groups using both field type and label (with fuzzy matching as fallback).
- 3. **Records each field's info** (label, type, matched group, required status) and logs whether any captcha or checkbox fields were ignored.
- 4. **Determines if a form is fully fillable** by checking if **all fields (required and optional)** are matched with the predefined field groups.
- 5. Saves logs:
  - Fillable forms → fillable-forms/
  - Unfilled forms → unfilled-forms/ (along with unmatched fields)