*Act as an expert VBA reverse-engineer, business analyst, and software architect. You are analyzing a VBA codebase exported from an Excel .xlsm workbook. Your goal is to produce a* ***comprehensive analysis document (VBA\_ANALYSIS.md)*** *that captures the full functionality and logic of the workbook.*

**Deliverables in VBA\_ANALYSIS.md:**

**1. High-Level Summary**

* Describe the overall business purpose of the tool.
* Summarize the main user workflows (inputs → processing → outputs).

**2. Module & Class Inventory**

* List every VBA module, class, and UserForm.
* For each, describe its responsibilities and main functions/subroutines.
* Highlight dependencies (which module/function calls which).

**3. Event-Driven Code**

* Identify all event handlers (Worksheet\_Change, Workbook\_Open, Button\_Click, etc.).
* Explain when they trigger and what workflows they drive.

**4. Business Rules (Structured Catalog)**

* Extract all conditional logic from the VBA codebase.
* Document each rule in a structured table with:
  + Rule ID
  + Condition
  + Action
  + Location (module/function)
  + Dependencies (named ranges, hidden sheets, formulas, lookup tables)
  + Notes (assumptions/clarifications needed)
* Example format:

| **Rule ID** | **Condition** | **Action** | **Location** | **Dependencies** | **Notes** |
| --- | --- | --- | --- | --- | --- |
| BR-001 | If ISDA or CSA field is blank | Show error and block progression | ValidationModule.bas → CheckMandatoryFields() | Named range MasterDataFields | Confirm list of mandatory fields |

**5. Business Rules – Pseudocode Expansion**

* For each business rule, provide detailed pseudocode with:
  + **Conditions** (If/Else, Select Case, loops).
  + **Actions** (validation, formatting, calculations, UI updates).
  + **Error handling**.
  + **Inputs/Dependencies** (cells, ranges, sheets, lists).
  + **Expected Outputs/Actions** (block navigation, highlight cells, recalc score, etc.).
  + **Notes** (edge cases, assumptions).
* Example format:

Rule ID: BR-001

Pseudocode:

IF ISDA = "" OR CSA = "" OR JustificationComments = "" THEN

Show error "Mandatory fields missing"

Prevent workflow progression

ELSE

Allow workflow to continue

Inputs/Dependencies: Named range `MasterDataFields`

Expected Outputs: User cannot proceed until all mandatory fields are completed

Notes: Confirm whether requirements vary by submission type

**6. Data Flow Mapping**

* Trace how data moves: from user input → VBA/macros → intermediate sheets/tables → outputs.
* Identify external dependencies (other Excel files, databases, APIs).

**7. Complexity & Risks**

* Highlight VBA constructs that may be fragile or complex (e.g., dynamic sheet protection, event-driven code, UI manipulations).
* Call out logic that may require business clarification or additional documentation.

**Final Output**

A well-structured VBA\_ANALYSIS.md file with all sections above, suitable for use by developers and business stakeholders to understand the full functionality and rules of the workbook.