**Databricks Insurance Analytics Platform Overview**

**1. Data Ingestion**

* **Source**: Excel file uploaded from **UI**
* **Storage**: File saved in **Azure Blob Storage**

**2. Raw Data Load**

* Load Excel file from Azure Blob → **Raw Table (Bronze Layer)** in **Delta Lake**

**3. Data Quality Checks**

* Use **Delta Live Tables (DLT)** or **Workflows** to:
  + Apply quality rules (e.g., null checks, type validation)
  + Capture Remarks (Why its failed)
  + **Split data**:
    - ✅ **QC Passed → Staging Table**
    - ❌ **QC Failed → QC Failed Table**

**4. QC Failed Review**

* From UI:
  + User **reviews failed records**
    - Option 1: **Fix & reprocess**
    - Option 2: **Reject record**
* After fixing → Move to **QC Passed Staging Table**

**5. Aggregation & Transformation**

* Use DLT delta live table ETL / Workflow:
  + Perform aggregations / business logic on staging
  + Create **Curated Table (Gold Layer)**

**6. Reporting Layer**

* Curated Table used as source for:
  + Power BI / Tableau / other **reporting tools**

**Workflow Diagram Description**

[UI Upload]

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[Azure Blob Storage]

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[Raw Table - Bronze Layer]

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[DLT(delta live table) / Workflow]

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|--> [QC Passed → Staging Table]

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|--> [QC Failed → QC Failed Table]

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[User Review via UI]

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[Reject] [Fix & Approve]

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| [Move to QC Passed Staging]

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[DLT / Workflow - Aggregation]

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[Curated Table - Gold Layer]

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[Reporting & Analytics]