**A Brief Explanation of Solution for a Non-Technical Manager/Stakeholder**

**Executive Summary**

This solution is a test automation framework designed to validate regulatory report files and ensure data consistency and compliance with regulatory requirements. It provides a fast, reliable, and repeatable way to verify reports before submission, reducing manual effort and human errors.

**What Does This Automation Do?**

I implemented two key test scenarios to verify regulatory data in report files. More scenarios can be added to this solution.

**Test Scenario 1: Duplicate Column Validation**

* What it does: Ensures that no column appears twice in the same report file.
* Why it's important: Duplicate columns can cause inconsistent data and reporting errors.
* Outcome: If a duplicate column is found, the test fails and logs the issue for correction. Alerting can be added in future steps.

**Test Scenario 2: Yes/No Value Validation**

* What it does: Checks if specific columns (marked as Yes/No fields) contain only "Yes" or "No" values.
* Why it's important: Regulatory data often requires strict value formats, and incorrect entries can cause submission failures.
* Outcome: If an invalid value (e.g., "Maybe") is found, the test fails and highlights the incorrect data.

**How the Results Are Provided**

* Clear Pass/Fail Reports – Results are displayed in a detailed HTML test report.
* Automated Execution – The tests can be run on demand, as part of CI/CD pipelines (future state), or integrated into existing workflows.

**Business Impact & Value**

✔ Saves Time & Effort – Reduces manual validation from hours to seconds.  
✔ Improves Data Accuracy – Ensures error-free regulatory reports before submission.  
✔ Prevents Compliance Risks – Helps avoid potential fines or penalties due to incorrect data.  
✔ Scales with Business Needs – New validation rules can be added easily, making it future-proof.