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## **PolicyPulse – Internal Policy Compliance Checker**

**Aim** Create a service that scans documents or emails via API, flags potential policy violations, and displays them in a web UI.

**Overview** PolicyPulse ingests plain text, applies rule‑based or simple ML logic, and shows flagged lines in a browser dashboard.

**Detailed Steps**

1. Project setup
   * Git repo; choose Node.js or Python.
   * Install free libraries (scikit‑learn, spaCy).
2. Define policy rules
   * Store rules in JSON (e.g. forbidden terms, PII patterns).
3. Scan API
   * POST /scan accepts text or document URL, returns scanId.
4. Email integration
   * Mock GET /emails/{inbox} returning sample emails.
   * On POST /scan, auto‑fetch inbox content.
5. Report API
   * GET /reports/{scanId} returns JSON with flagged sentences and rule IDs.
6. Web UI
   * Build a dashboard listing scans, click to view highlighted text with inline warnings.
7. Testing
   * Write tests for rule matching and API responses.
8. Documentation
   * README.md with setup, rule format, API spec, UI guide
   * prompt\_log.md for any prompts used to refine rules or ML model.

**Constraints**

* Only free open‑source or free‑tier tools.
* No paid NLP or compliance APIs.

**Deliverables**

* GitHub repo with code, sample rule files, email mocks
* README.md, prompt\_log.md
* Sample dataset (documents/emails)
* UI screenshots or demo video