# Feedback on the Assignment

This assessment was a valuable opportunity to build an end-to-end prototype focused on processing, analyzing, and exposing structured insights from regulatory data.

To keep the scope manageable during prototyping, I worked with Title 1 of the eCFR dataset. This allowed me to validate the data model, processing pipeline, and API structure. The solution is designed to be easily extendable to include the full eCFR dataset in the future with minimal changes.

On the backend side, I implemented logic to:

* Download and parse current eCFR data
* Store and manage the data on the server
* Build APIs to serve structured summaries for analysis
* Expose useful endpoints to support the frontend UI

The backend was central to the assignment, especially in calculating meaningful insights like:

* Word count per agency
* Historical change tracking
* Unique checksums for data integrity

I also added a custom metric:

Average word count per section per agency to help better evaluate consistency and verbosity across different agencies.

While I’m not a subject-matter expert in legal texts or eCFR data specifically, I focused on implementing metrics that could provide meaningful insights to an end user or analyst.

On the frontend, I built a simple UI to visualize the summary data returned from the API

# Duration

The task took about 12 hours, including:

* 0.5 hours: Reading and fully understanding the assessment instructions
* 2 hours: Exploring eCFR documentation to understand the data format and how to download it
* 1 hours: Data ingestion + parsing
* 3 hours: Backend API implementation
* 4 hours: Frontend UI
* 1 hour: documentation, review, and polish

# Screenshot of UI

