For the reflections, I've chosen Prompt 1, 4 & 5 as a part of this crucial exercise. I believe that these prompts carry important learnings I take away from this capstone project.

Prompt 1: Architecture & Design

- If you had to explain your architecture to a non-technical manager in 2 minutes, how would you describe it?

If I had to explain the architecture of this project to a non-technical manager, I would describe it as a structured assistant that follows the same steps an engineer would take when reviewing process capability, but does so faster and more consistently. The workflow starts by pulling process data from cloud storage, runs statistical checks on process behavior and capability using deterministic tools, and then hands those results to an Aggregator Agent that turns the findings into a clear engineering and management report. The system does not make decisions on its own. Instead, it produces structured recommendations that are intended to be reviewed by an engineer before any action is taken.

Prompt 4: Scalability & Reuse

- Which parts are process-specific (datasets, specs, PDFs) and which parts are reusable (workflow structure, Aggregator Agent pattern)?

The process-specific components are primarily the datasets, the specification limits, and the reference documents used for retrieval. Each new process would require its own data source, USL and LSL values, and potentially different internal guideline documents. Based on the issues observed in this project, additional validation would be needed at scale, particularly to catch specification configuration errors earlier in the workflow. Governance and access controls would also become more important, but the existing human review step makes this system well suited for gradual expansion rather than full automation.

Prompt 5: Application to Your Own Context

- What would be the first small pilot you would propose?

The first pilot I would propose would mirror the scope of this capstone. A single process, a limited dataset, and a clearly defined decision question. For example, using this pattern to generate standardized monthly capability and stability summaries for one production line would allow the organization to evaluate value without introducing risk. As shown in this project, even a small pilot can surface important issues such as unstable behavior or invalid specifications while reducing manual reporting effort and improving consistency across reviews.