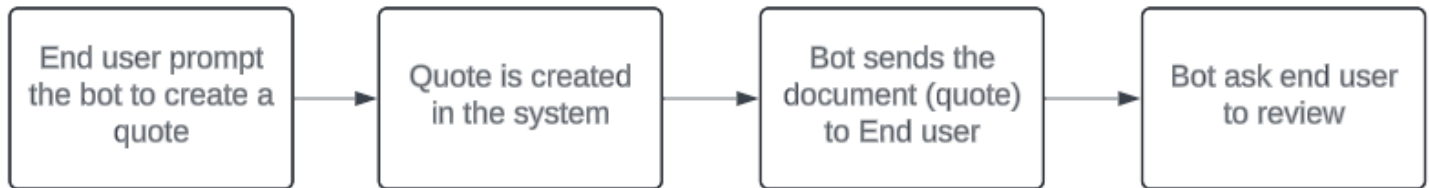


### Case Study:

You just joined a company who is building a Product from 0 to 1. You've been tasked to build the AI features for their quoting engine. The product will include AI agents that will assist end users to create Sales quotes.

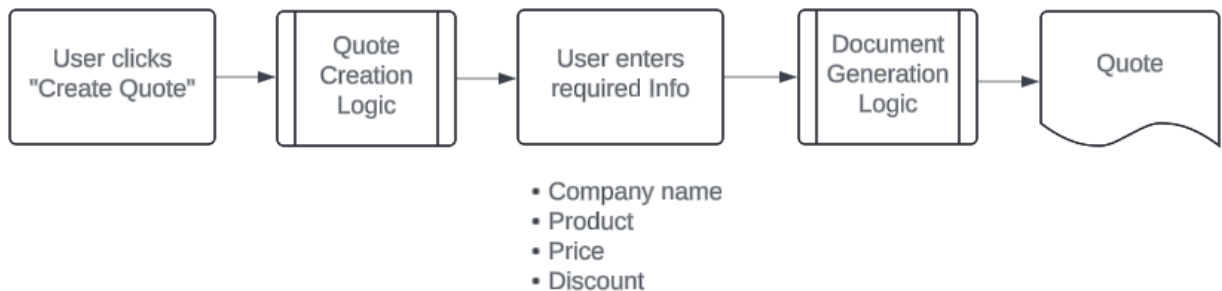
Within a week, please prepare a **30-45 minute presentation** that will cover the following topics:

**Demo 1:** Build a technical solution to demo an End user engaging with an AI agent using chat and/or voice prompt.



\* Note: For the output quote document, you don't need to build an actual quote. A sample attached blank document will be sufficient.

You can use this simple diagram or watch this [sample video](#) for context on the sales quoting process.



### Prepare to discuss:

The backend database can have complex data structure wherein:

- Product SKUs can be setup with parent/child relationships (i.e. catalogs) and multiple pricebooks
- Company accounts may be duplicated across different org IDs or company names can be somewhat similar with some company name words are the same with other accounts
- There could be different sales opportunities or deals in various stages

1. Prepare to discuss how you would address these data challenges in your embedded models to ensure that the AI agents will properly process the end user prompts, respond with proper context and reduce hallucinations at a minimum
2. Discuss other measures you would implement to manage error-handling, increase success rate and improve AI agent performance to eventually move from being a generative AI agent to agentic AI agent

**Demo 2:** You have been assigned to build a predictive model to provide key insights on customer product utilization and identify opportunities to grow revenue. Build a simple solution and prepare to demo.

### Prepare to discuss:

1. Provide sample sourced data that you will be needed to build this model and why those are important or needed

2. If you are only given a framework to build the data model but no actual data to train the model, discuss how you would overcome this challenge to build the solution from the ground up.
3. What measures you would do to ensure the model can generically and repeatedly be applied to other customers while still leaving some flexibility to adjust for any custom use-cases or requirements

**Additional discussion topics:**

1. If you are building AI features that have dependency on backend data that is maintained by another team, how would you approach the access to the data and coordination with other teams or stakeholders
2. How you would approach building the AI features with rapid implementation where you can release features in days, weeks or months while continually reiterating on the solution.
3. Discuss how you can apply security and compliance measures to ensure your solution is meeting the regulatory compliance standards for data security and privacy laws