GenAl in Action on Databricks

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Businesses use GenAl

1. For building customer-facing products (OpenAI, Adobe, Midjourney, etc)

2. For internal process optimizations

- 1. You are a Data Scientist at a multinational company that manufactures and sells cameras.
- 2. Recently ran an ad-campaign and the sales took off.
- 3. Thousands of people from all over the world bought your product.
- 4. However, your customers have been leaving a lot of negative reviews.
- 5. Your job is to **iteratively** identify the problems with your product and help **fix** them.
- DO IT QUICKLY!!!

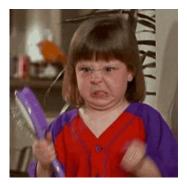
Project Requirements

- 1. Process multilingual audio (or video) reviews
- 2. Process multilingual textual reviews
- 3. Classify the reviews as positive, neutral, or negative
- 4. Identify **specific** types of reported issues
- 5. Generate a report highlighting **key areas** of improvement
- 6. **Translate** the report to other languages for your international coworkers
- 7. **Generate content** for ad-campaign highlighting positive user experiences
- 8. DO IT QUICKLY!!!

Project Manager: So, what do you have in mind for this?

You: Well, let's build a Compound Al System.

Project Manager: Are you out of your mind??? That sh*t takes months to build! We need something NOW!!!



You: Hold my Jupyter Notebook!

aggressively logs in to Databricks



But wait, what is a **Compound Al System**?

A system of different AI models **working together** to solve a complex problem by handling different parts of the task.



Architecture Diagram

An Important Question First

Am I proud of this diagram?

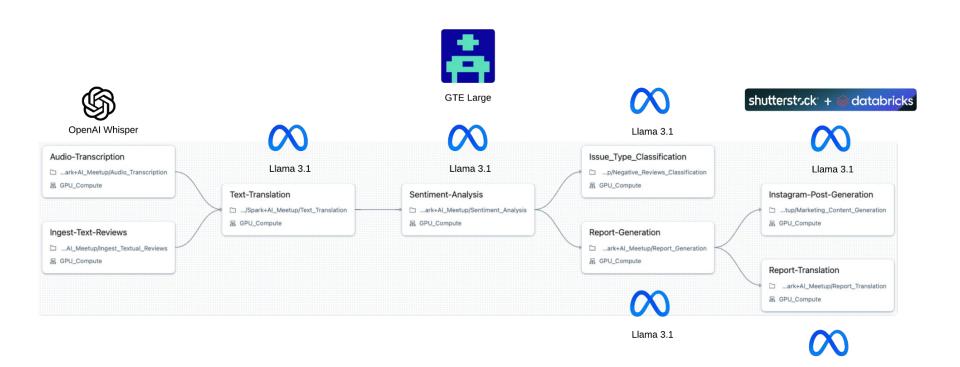
No!

But, did I try my best?

Because that's what matters!

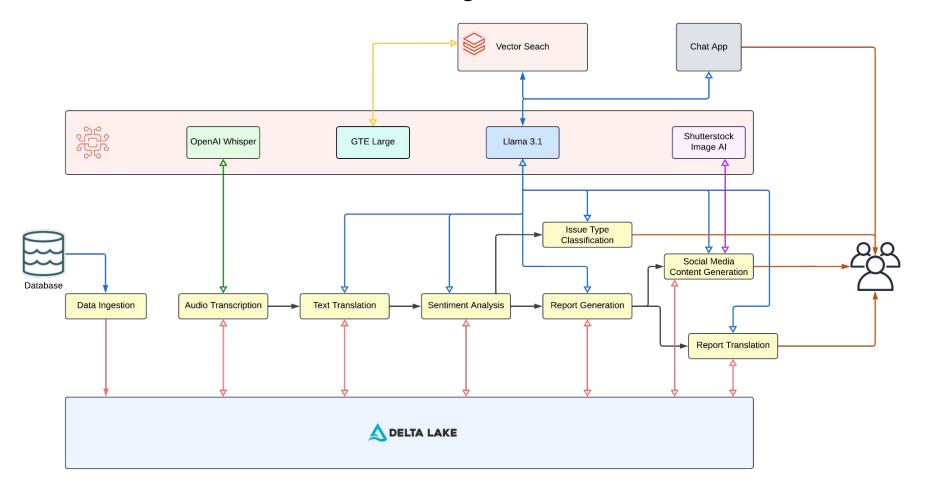
Also No!

Architecture Diagram for Dummies



Llama 3.1

Architecture Diagram for Nerds



TIME FOR SOME ACTION...



How much time did it take for you to build this demo?

2 DAYS !!!

Not including this presentation. Making this presentation was more painful.



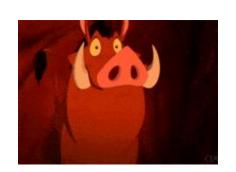
A couple of years ago, building a system like this would have taken several weeks or even months.

Your PM

Your VP

Your CEO







You just saved your company!

You got a promotion!!

You also got a hefty bonus!!!

THE END!

