

HackRx 6.0

Ideate • Co-create • Impact



Team Name :

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Tell us a bit about yourself

- We've worked on a previous project called ANAKTO, a web 3.0 based blockchain wallet integrating MetaMask and other features like spend limit and beneficiary functions.
- BITS Hyderabad TechXcelerate 2025 1st Runner Ups for project ANAKTO in the WEB-3.0 domain winning a cash prize of Rs. 20,000/-
- 1st Runner Ups in BITS Hyderabad TechXcelerate 2024

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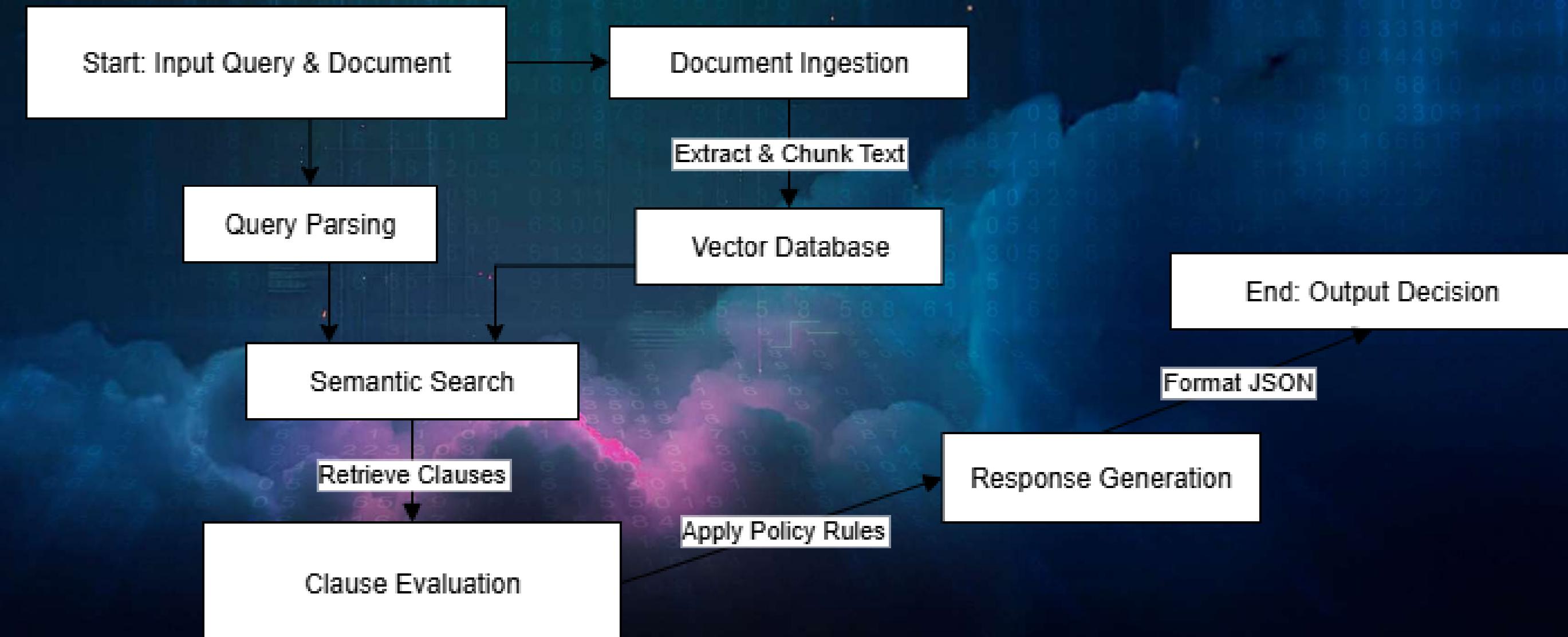
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Problem statement

- Develop an LLM-based system to process natural language queries and extract information from unstructured documents like insurance policies, delivering structured JSON responses with decisions, amounts, and clause references. Ensure accuracy, compliance, and scalability for insurance and legal applications.

Process flow



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Tech Stack

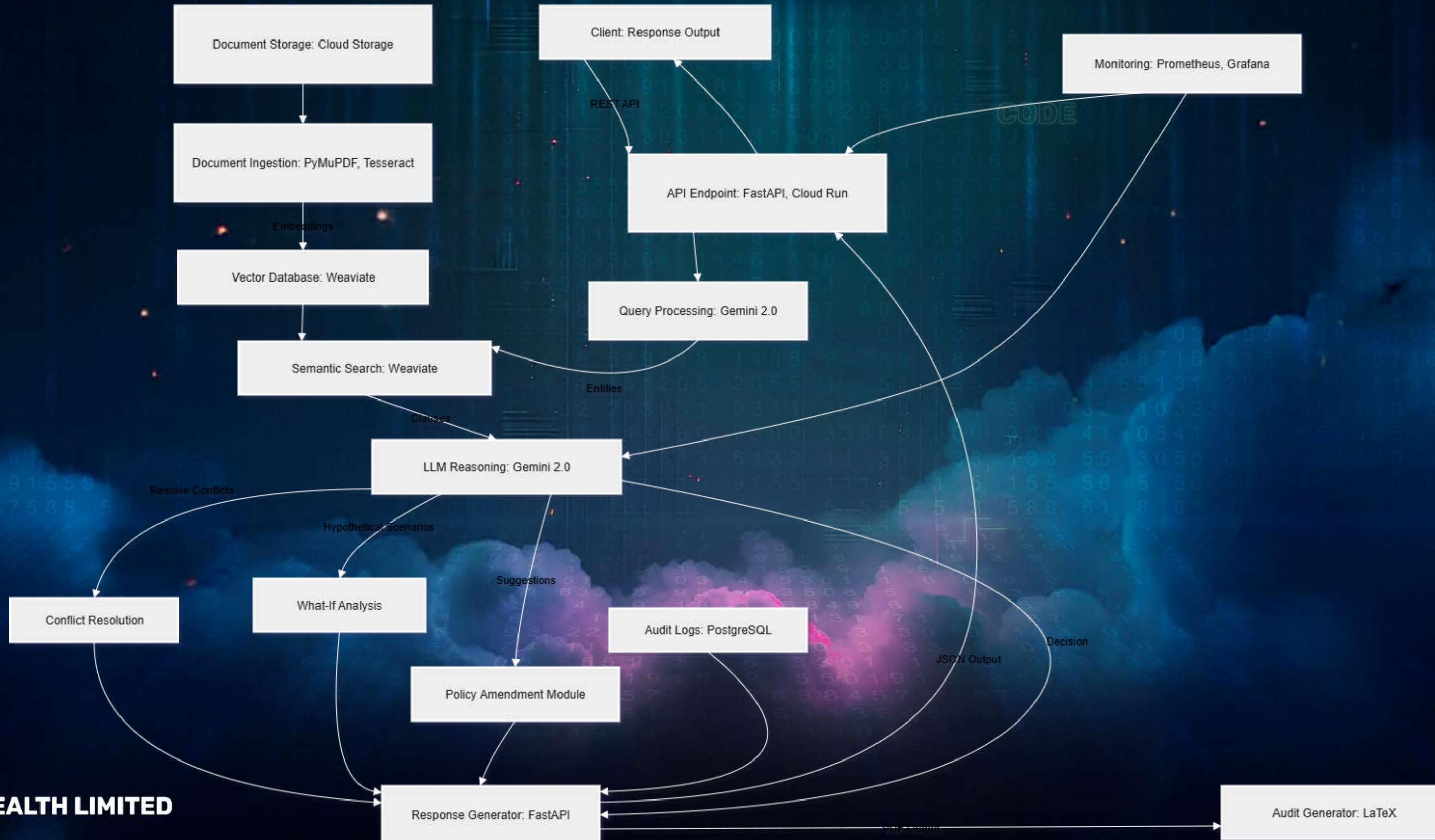
- Cloud Service : AWS
- Database : PostGRE (with pgvector) or weaviate
- Backend : FastAPI or Flask
- Frontend : React + Tailwind CSS
- Docker (containerization)
- Prometheus or Grafana for system monitoring
- Auth0
- Gemini 2.0 flash as LLM and Hugging Face TRL + LoRA (qLoRA) for fine tuning and optimization of runtime

Detailed description of the solution

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- **Architecture flow:**



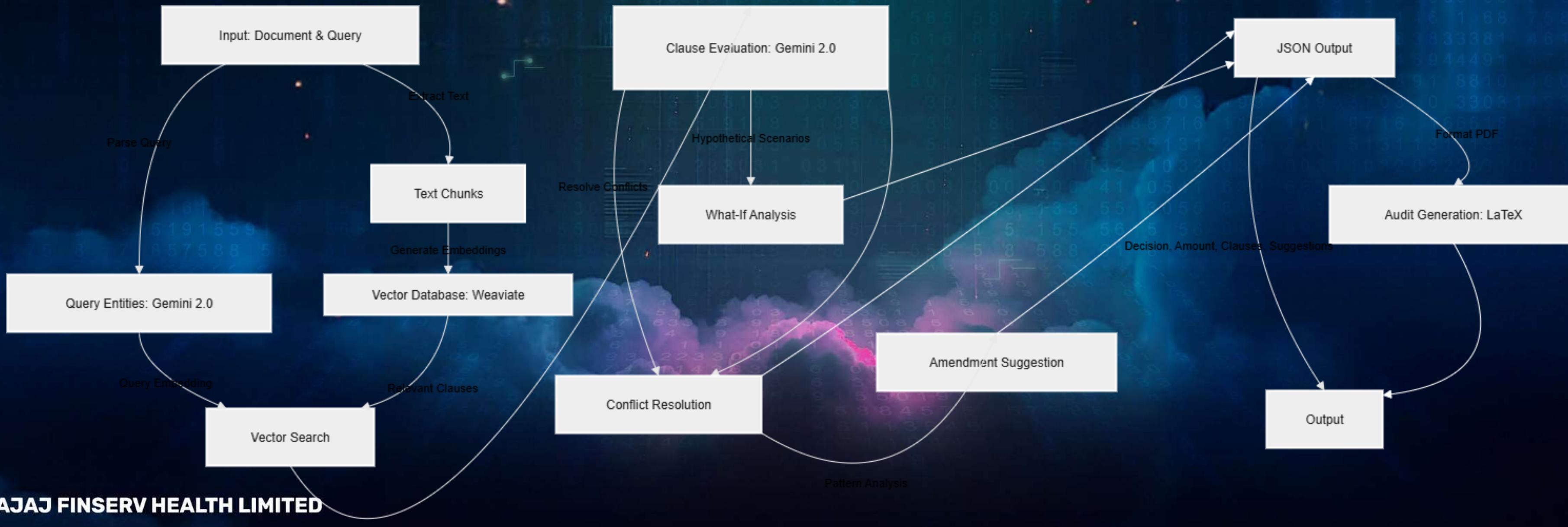
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Data Flow Diagram

- Data Flow of the solution:



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So, how if your solution different?

- Gemini 2.0 with few-shot prompts and Weaviate enable precise queries, conflict resolution, what-if analysis, policy amendments, and PDF audits, revolutionizing insurance processing.
- We are essentially fine tuning a pre-existing LLM to ONLY specifically read documents, legal closures and give appropriate responses and outputs. Since we are only training our model for a specific cause, we are focusing on accuracy and efficiency making it our utmost priority.
- Features such as what-if analysis, policy amendments and PDF audits also help consolidating our project as an investable SaaS app in the future.

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Future possible enhancements

- In the future, we aim to make the final product as user friendly as possible, make it as efficient and accurate as possible, keeping the basic functionality intact and adding extra features if time allows.
- We already have multiple functions including what if scenarios, that helps in reducing any discomfort while troubleshooting; another function is the conflict resolution that deals with any conflicts related to the existing policies, suggesting only the best one and explaining why the others are not up to mark. We will also feed our model layouts for audits so it generates a formal audit document listing the asked policy.

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Risks/Challenges/Dependencies

- On the topic of show stoppers, its going to be optimizing the model to run as efficiently as possible. Along with that, the scale of our vision is extremely ambitious, and will be possibly INCREDIBLY difficult to implement as 2nd year students.
- Mastering embedded searching through vector databases is another problem that we aim to tackle.
- We are also limited by our hardware, so all our ML development is going to be through the cloud, or inferior hardware. So developing it in the given time constraint is going to be tricky.

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Acceptance Criteria Coverage

- We have aimed to cover all the topics of the given problem statement, and are adding even more functionality that required to make our project stand out from the existing competition. We have focused more on efficiency and user friendly interactions that we consider to be the most important part of maintaining such an application.