

Get to know insights about your consumers

By

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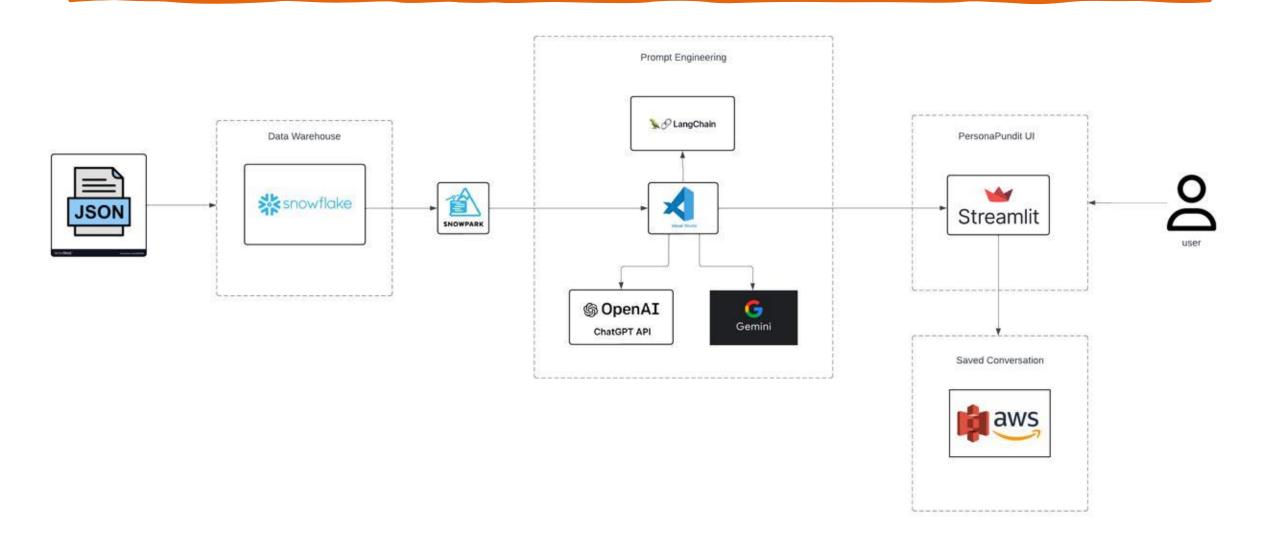
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## What is a Persona?

In the current competitive market, understanding customer needs, preferences, and pain points is crucial for businesses to tailor their products and services effectively. Relying on manual analysis and synthesis of customer data, are often time-consuming and may not fully capture the nuanced and dynamic nature of customer behaviors and preferences. There is a need for automation in this segment to increase efficiency and to reduce manual workload. There is a critical need for an innovative solution that can swiftly and accurately process and analyze this extensive qualitative data to generate detailed and dynamic user personas.

# Architecture diagram



## Insights from data source





Originating from 1998, the dataset is a valuable repository of historical data.



Curated Dataset: A meticulously curated dataset comprising 150 GB of data.



**Data Division** 

Approach: Employing a systematic approach, the dataset will be divided into manageable chunks, consolidated into a structured table format for ease of analysis.



**Data Cleaning Process:** 

Rigorous data cleaning procedures will be implemented, removal of duplicates and standardization of formats, ensuring data integrity.

## Features that will be included

# Persona Generation using RAG:

Utilize RAG to create personas rich in context by querying Snowflake database for relevant data matching identified traits.

## User Input Analysis:

LangChain analyzes user inputs to determine persona requirements.

## LLM Management:

LangChain facilitates communication with LLM, augmenting prompts with retrieved data and processing generated text.

## **Group Persona Generation:**

Generate group personas and combined personas based on user preferences.

## **Product Recommendation**

Grouping
personas and
providing
product
recommendations
based on
preferences.

#### **PROJECT TIMELINE**

#### Week 1:

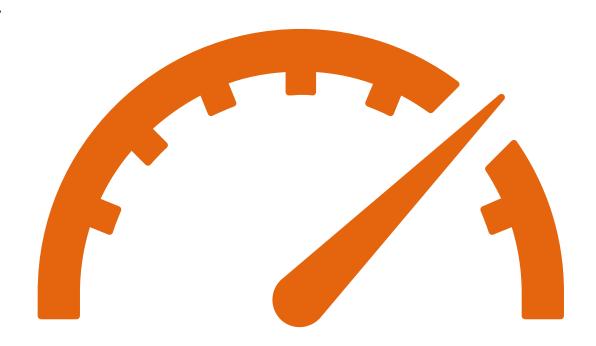
- Snowflake data upload and Data preprocessing
- Big data handling
- LLM discovery
- GPT 3.5 LLM integration
- Persona generation

#### Week 2:

- RAG with LangChain
- Prompt engineering refinement
- Group persona generation
- GPT 3.5 integration
- Gemini integration

## Evaluating Project Performance

- Key Metrics: Accuracy of persona generation, user engagement rates, and response times.
- Calculation Methods: Use precision and recall for accuracy, session length for engagement, and average API response time for system responsiveness.
- Initial Results: High accuracy in persona detail with some delays in response times during peak usage.
- Observations: Positive user feedback on persona relevance, noting areas for speed optimization.



### Methods to Improve Metrics

- Machine Learning Optimizations: Integrate advanced model fine-tuning techniques to improve the efficiency and accuracy of the GPT-3.5 and Gemini LLMs.
- Data Handling Enhancements: Implement better data indexing and query optimization in Snowflake to speed up data retrieval and processing.
- Model Upgrades: Upgrade the LLM configurations to leverage the latest advancements in Al, ensuring more nuanced text analysis and persona generation.
- Algorithm Enhancements: Apply newer, faster algorithms for data processing that reduce latency and improve throughput during high-demand periods.





# Conclusion

- KYC..ai seamlessly combines advanced Al technologies with practical business applications, transforming product review data into detailed user personas.
- Utilizes OpenAl's GPT-3.5 and Gemini models, enhancing the depth and accuracy of customer insights.
- Offers businesses enhanced customer understanding, facilitating targeted marketing and product development for improved satisfaction and success.

# Future Scope







INTEGRATION WITH CRM SYSTEMS (E.G., SALESFORCE) WORKFLOW AUTOMATION WITH WORKATO

ETHICAL AND PRIVACY CONSIDERATIONS



# Thank you

# Q&A

