IssueCopilot.AI :
Your Virtual Dev Partner

Simplifying Issue Management...

Team : elasticSearch

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Motivation

- **Existing CRM** systems rely heavily on **manual processes** to convert customer feedback into actionable tickets, leading to **delays** and potential **omittance of critical issues**.

- Without robust data visualization and trend analysis, **developers struggle** to **prioritize** issues effectively, impacting customer satisfaction.

- Our solution addresses these issues by **auto-generating tickets** from **social media** platforms and **auto-assigning** them to **proper teams** and providing **developers** a **user friendly chat interface** to query for analytics so they can effectively plan their daily SCRUM.

# Total Addressable Market (TAM)

- **Enterprise Clients**- This solution is perfect for enterprise business with a need to efficiently cater to a high volume of customer feedback.

- **Tech Startups**- Tech Startups valuing velocity and efficiency can use this application to effectively facilitate their development workforce.

- **Integration with existing CRM and Productivity tools**- This solution can be easily integrated with existing tools like Jira and Slack, to provide a unified and consolidated experience.

Utility of IssueCopilot.AI

- **Automated Ticket Generation**: Automatically parses and categorizes customer reviews, generating tickets that are routed to appropriate developer teams based on predefined criteria, ensuring prompt resolution and facilitating iterative enhancement processes.

- **RAG Powered Chat Interface**: Implements a Hierarchical & Agentic RAG system within a user-friendly chat interface, enabling teams to efficiently communicate, retrieve relevant information, and make informed decisions through intelligent query processing and response generation.

- **Visual Representation of Data**: Provides a visual representation of relevant issue ticket data allowing teams to identify recurring trends, and prioritize issues for resolution.

Creating Hierarchical knowledge base for RAG

vectara

Hierarchical knowledge base
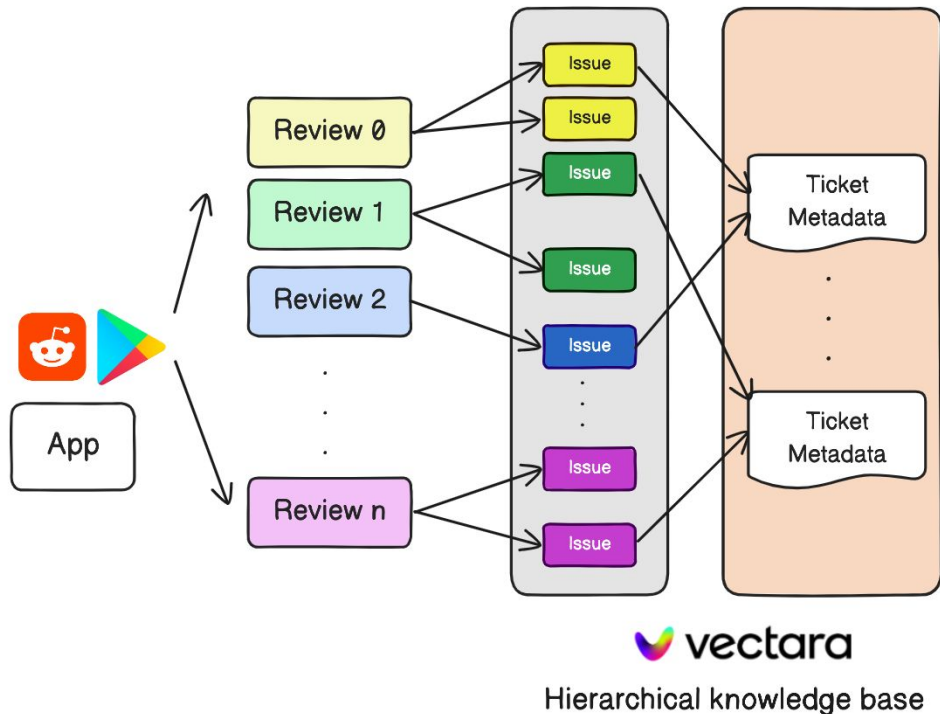
1. Obtain and process review data for specific apps from diverse voice channels such as the **Play Store review section and Reddit**, utilizing **MistralAI LLM** model available at **together.ai.**

2. Extract sets of technical issues mentioned in each review and store them as **vector embeddings** in **Vectara**, alongside relevant metadata.

3. **Group similar issues** identified from recent reviews to efficiently generate tickets for resolution or further analysis.

4. All mentioned workflow has been integrated using **Llama index** query pipeline.

Routing to Dev teams
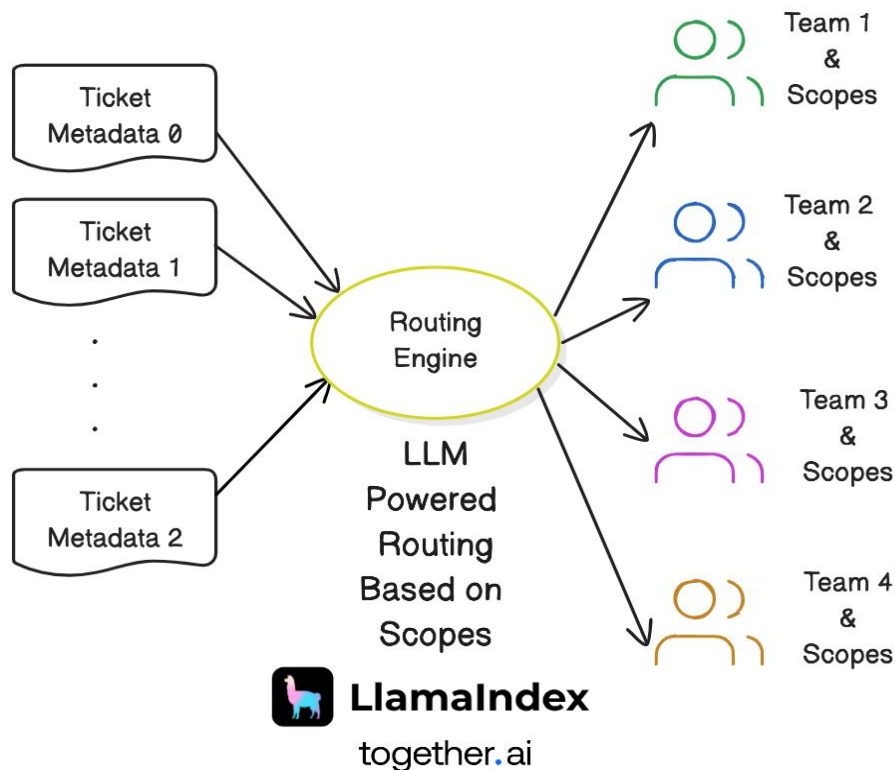
We route the tickets to relevant teams based on the match between the issues mentioned in the ticket and the scope of work of the team by utilizing **MistralAI LLM** model available at **together.ai**. All mentioned workflow has been integrated using **Llama index** query pipeline.

Hierarchical +Agent Powered RAG
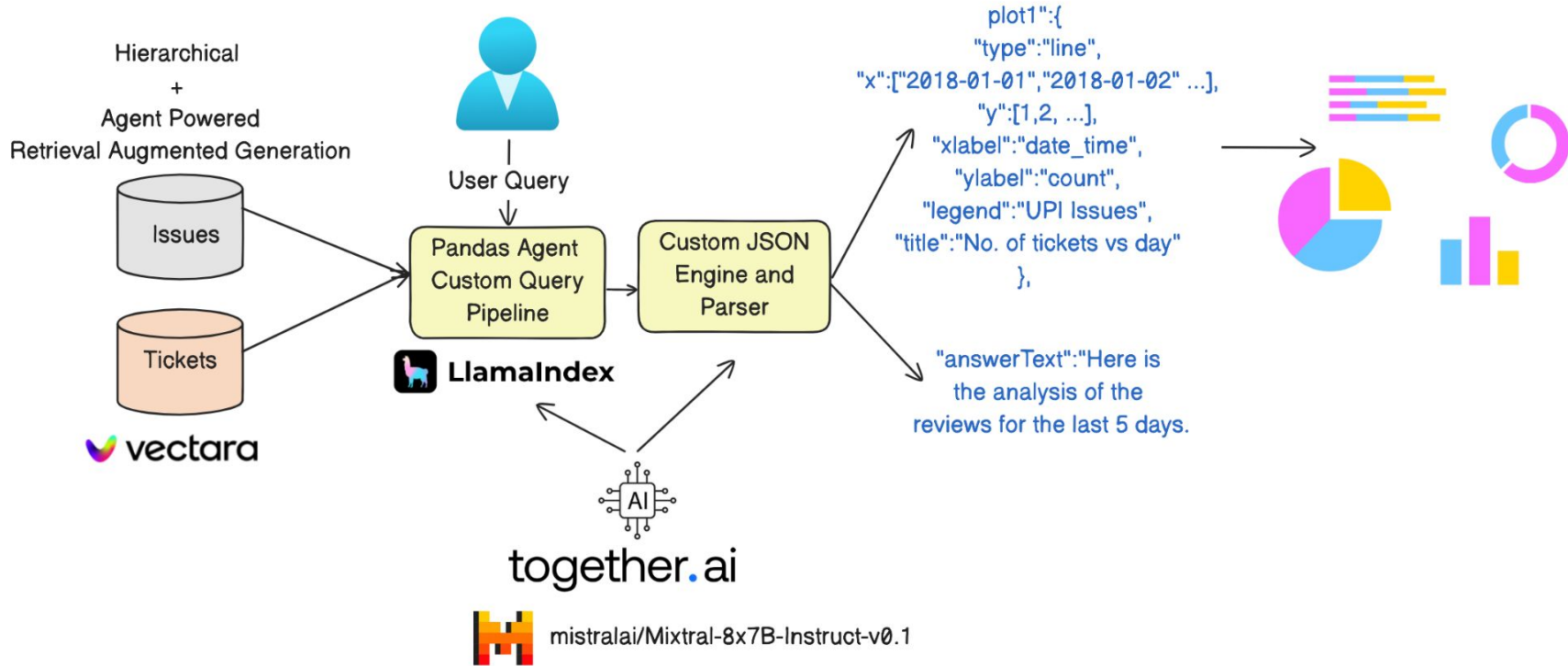
Technologies we used

Python

ReactJS

Chart.js

Flask

vectara

mistralai

together.ai

LlamaIndex

TONIC Tonic.ai

Vercel

aws Amazon Web Services

Challenges and Solutions

- LLMs typically **hallucinate** while using large prompts and high temperatures.

- We use a **very low temperature (0-0.1) LLM** to mitigate this problem. We employ a **Hierarchical & Agentic design pattern** to improve token generation and decision-making.

- Our design is **highly scalable**, as we can add as many as reviews and apps without distorting the existing knowledge base.
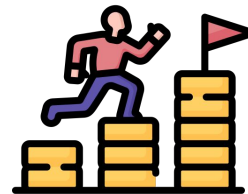
Future scopes...

- Integrating data sources like Github, Twitter and LinkedIn to increase the diversity of the ingested data and provide higher quality insights.

- Integrate a basic solution template along with the ticket while routing it to the respective teams, this could be generated from previously routed problems and their final resolutions.

THANK YOU!