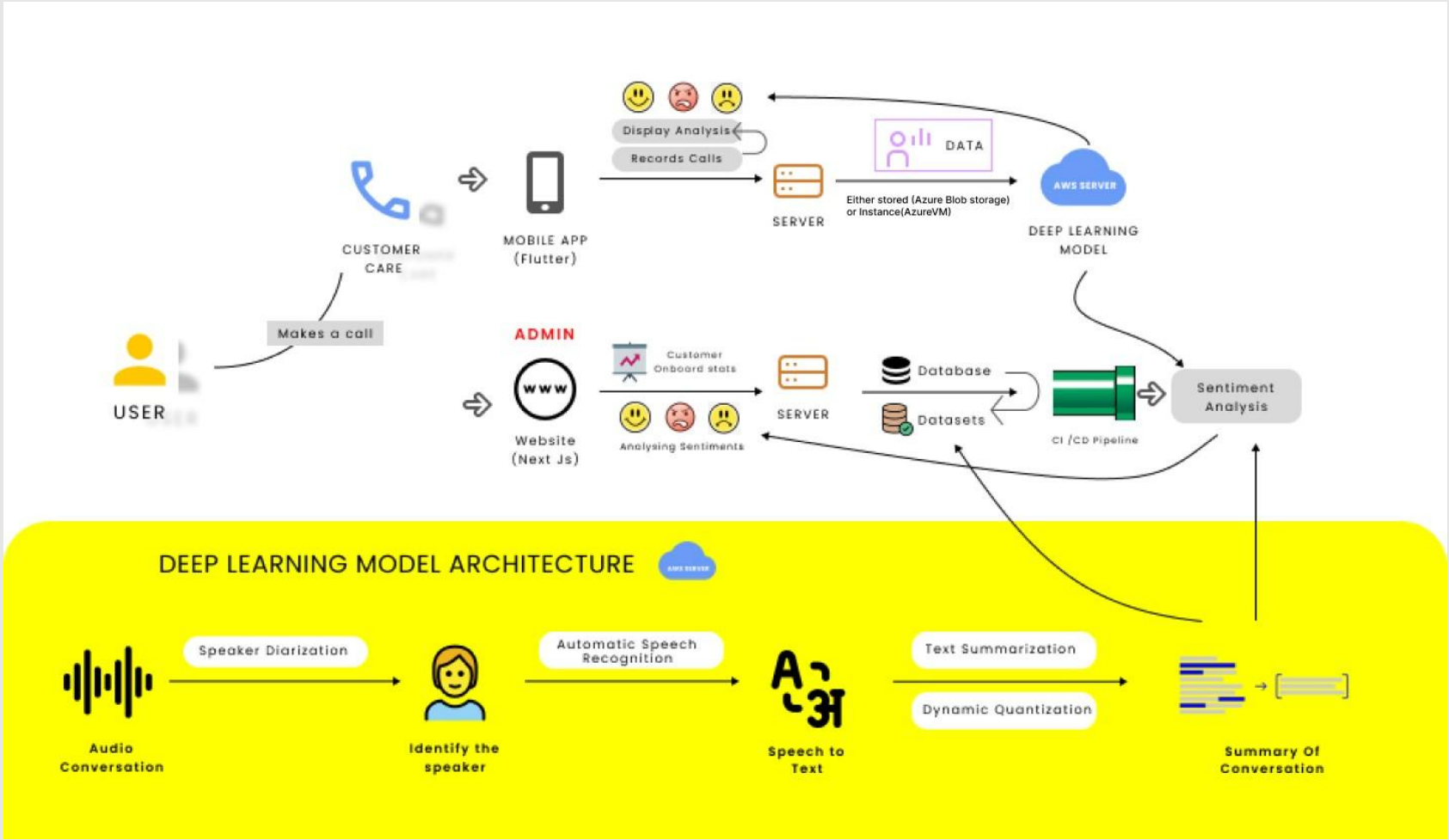
WYSTERIA

Seva AI



1. Analyzing the sentiments of audio call and giving priority to resolve first.
2. Granular sentiment analysis of transcript to analyze the ability of help desk personnel.
3. Due to ever increasing cases, LLM to respond for quick queries of customer in Real Time via offline as well online channels eg Kiosk,Website ,Mobile App
4. Creating A priority and intent classification based on customer query and history Using Stable Matching Algorithm To assign Personalized Ai Agents
5. Creating A vector Store With All Customers Historical Data To Process A Query
6. Personalized Responses -using a form while User Onboarding and Customer Data Collected Will Be Used To Resolve Customer Query

• In speech-to-text accuracy testing Amazon’s ASR had a WER of 22.05% with Google’s Speech-to-Text API performing just a little bit better at 21.49%. • Our model has WER score of 24.0479%

Market Overview

The **banking industry** faces a critical need to provide seamless, personalized customer service to retain trust and loyalty. However, fragmented customer interactions and data challenges hinder this goal. The ideal solution must offer real-time, personalized assistance, integrate smoothly with existing systems, and meet strict security standards, ultimately enhancing the overall customer experience.

CHALLENGES

- Rising customer expectations for quick, personalized service across multiple channels.
- Fragmented customer data and siloed systems leading to inconsistent service delivery.
- Difficulty in analyzing and utilizing customer data, weakening service quality and customer trust.

IDEAL SOLUTION

- 61% of banks struggle to effectively use customer data.
- 93% of customers are more loyal to companies that offer exceptional service.
- Our solution streamlines customer interactions, improves data utilization, and integrates seamlessly with existing infrastructure.

DESIRED OUTCOMES

- AI-driven, real-time sentiment analysis and personalized customer interactions.
- Enhanced customer satisfaction and loyalty through improved service delivery.
- Seamless integration with existing systems, ensuring compliance with privacy standards.
- Future-proof platform driving operational efficiency and sustainable growth.

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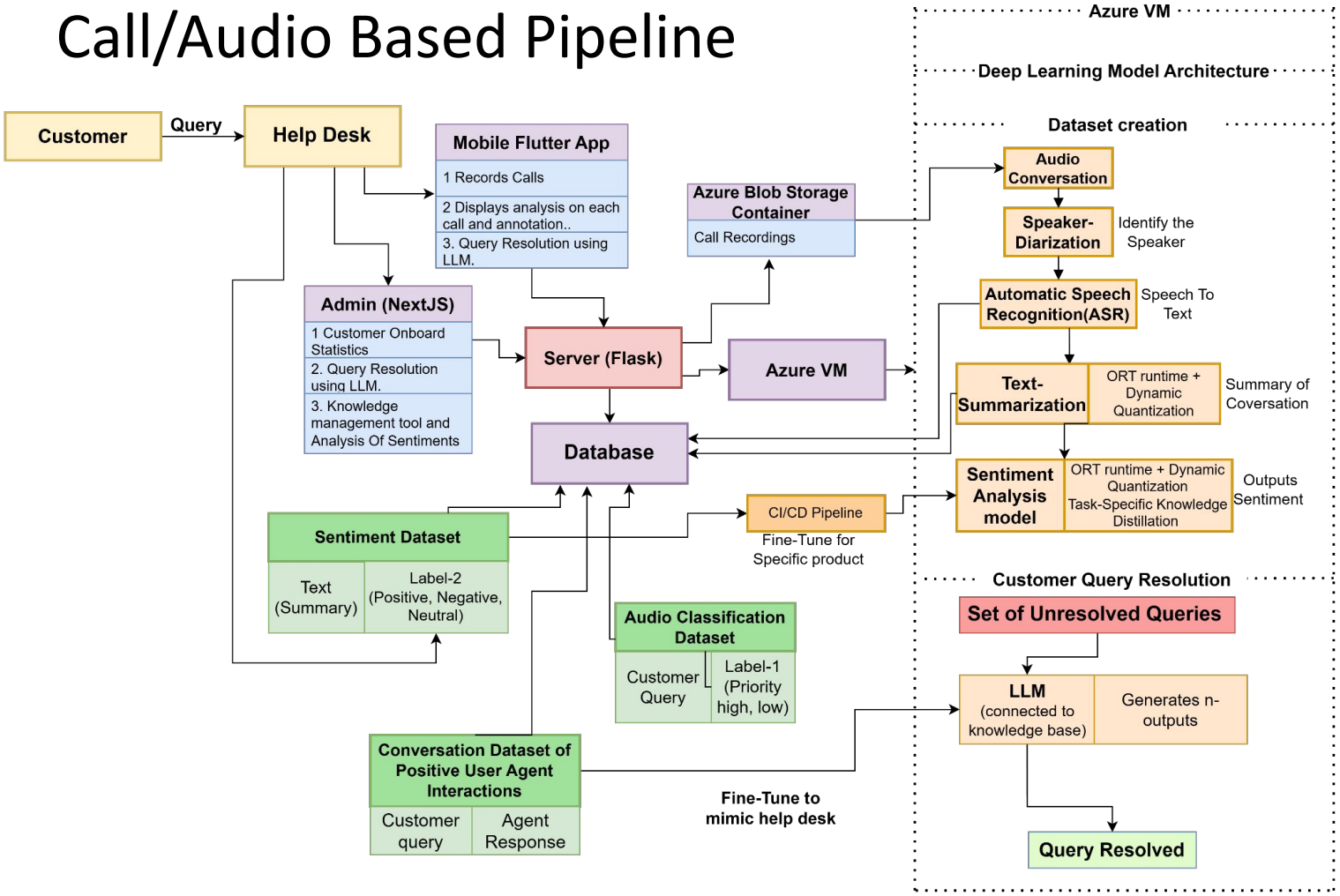
Call/Audio Based Pipeline



Reference Architecture Overview

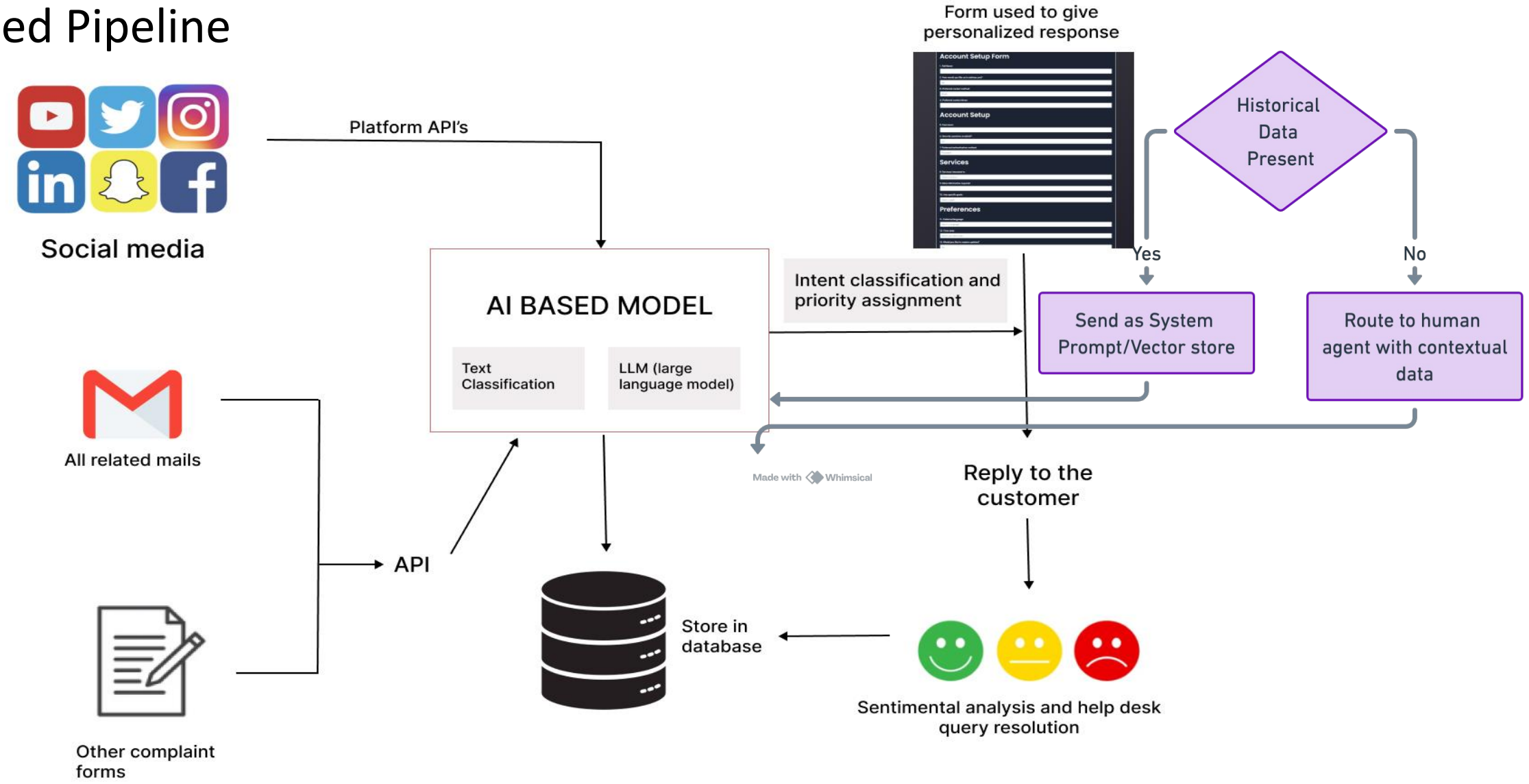
The solution leverages Azure's cloud services to build a robust customer service platform powered by AI and machine learning. The architecture integrates **Azure Blob Storage** for secure call recordings, **Azure Virtual Machines** for scalable compute resources, and **Flask-based Middleware** to handle communication between components.

Evaluation Criteria Check

- **Operational Excellence**: Continuous monitoring and feedback loops via the admin panel and real-time sentiment analysis.
- **Security**: Secure storage on Azure Blob Storage, with strict data governance to meet regulatory compliance.
- **Reliability**: The architecture leverages Azure VM and Flask server for reliable processing and storage.
- **Performance Efficiency**: Use of dynamic quantization and ORT runtime ensures the models are lightweight and efficient.
- **Cost Optimization**: The model's reduced size and efficient cloud usage help in minimizing operational costs.

Other Use Cases Of Sentiment Analysis and LLM Helpdesk with Knowledge

Text Based Pipeline



Why This Solution is Ideal for Bank Of Baroda

1. Enhanced Customer Experience
- Consistency Across Channels: Uniform service across online, phone, and in-person interactions.
- Faster Issue Resolution: Quick solutions through self-service and streamlined operations.

2. Increased Efficiency & Cost Savings
- Lower Operational Costs: Automation and self-service reduce the need for human intervention.
- Better Resource Allocation: Focus on complex issues, improving overall efficiency.

3. Improved Data Utilization
- Actionable Insights: Use sentiment analysis to understand customer satisfaction and needs.
- Informed Decision-Making: Leverage data to tailor services and strategies.

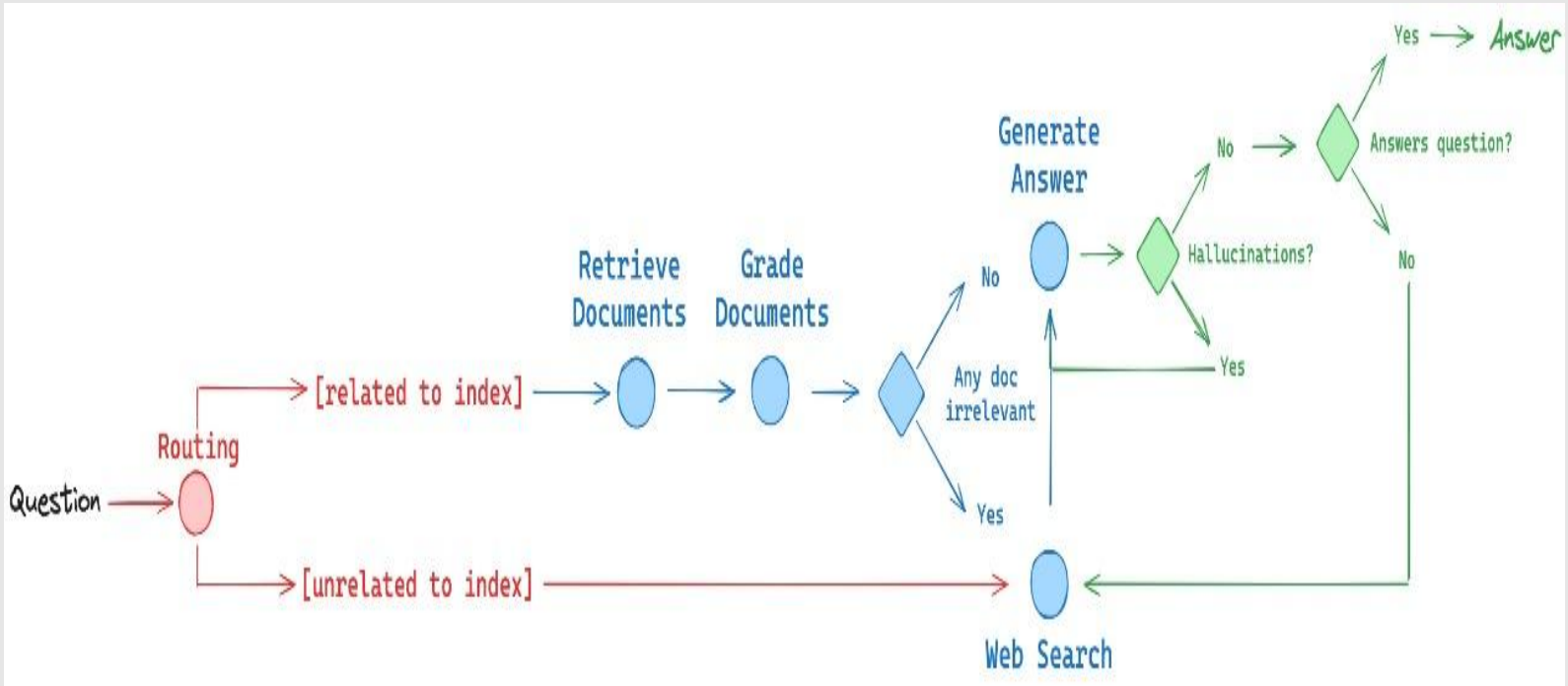
4. Scalability & Flexibility
- Adapt to Changing Expectations: Quickly scale and adapt services to meet customer demands.
- Support Remote Work: Enable remote teams to maintain high service standards.

5. Competitive Advantage
- Stand Out in the Market: Offer superior service to attract and retain customers.
- Stay Ahead of Trends: Implement cutting-edge technology for a modern banking experience.

6. Compliance & Security
- Data Privacy: Maintain strict security standards to protect customer information.
- Regulatory Compliance: Ensure all processes meet industry regulations.

Appendix

[Demo Videos]
[Elaborate Presentation]



Classification of User Queries over 27 Intent classes.

RE-VISITING THE CHALLENGE

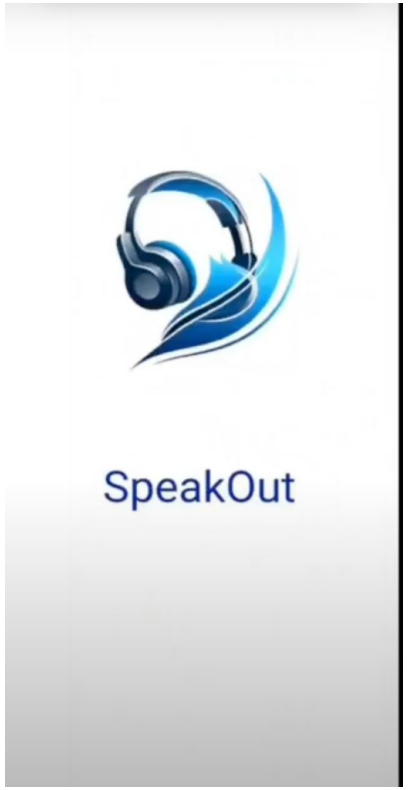
The challenge is to automate customer inquiries, providing real-time, accurate responses, and personalized recommendations while ensuring seamless integration with existing platforms and maintaining stringent security and privacy standards.

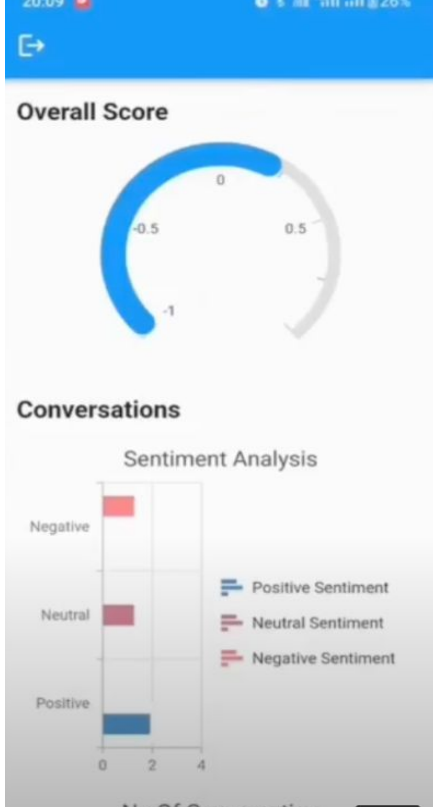
MAPPING SOLUTION FITMENT TO CHALLENGE

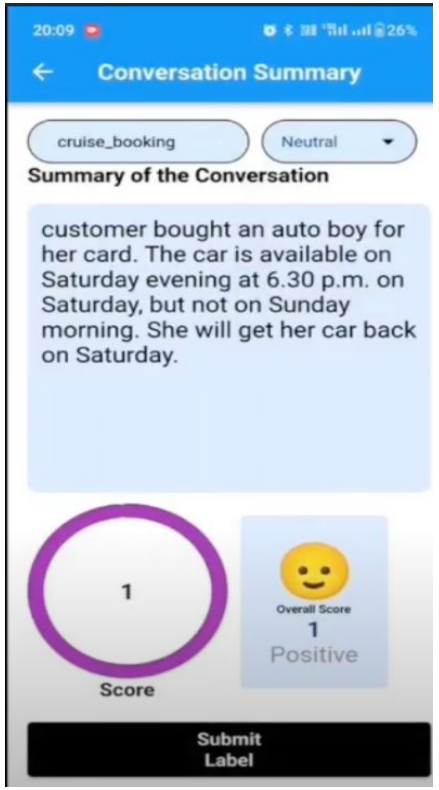
The solution addresses these challenges by using AI-driven sentiment analysis and LLMs to provide real-time, personalized support. It integrates smoothly with existing customer service platforms, offering accurate, proactive responses based on customer interaction history, all while adhering to high security and privacy standards.

NEXT STEPS

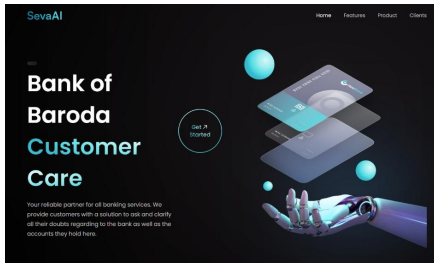
Focus on scalability, optimize for higher volumes, and refine model accuracy. Continue monitoring and iterating to ensure effectiveness as customer interactions increase. Expand AI capabilities for enhanced service.

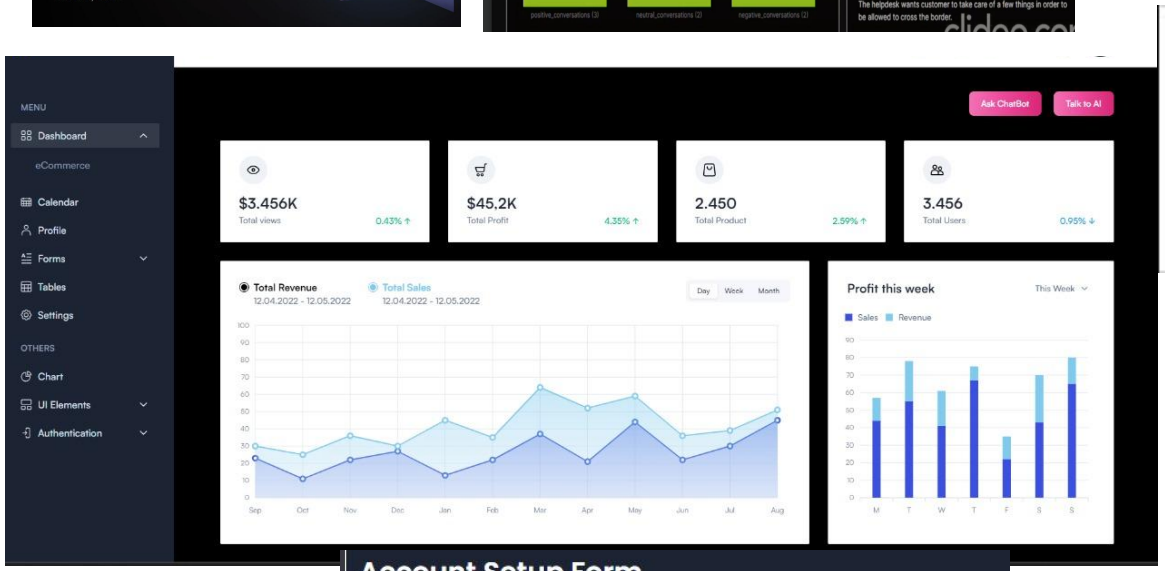


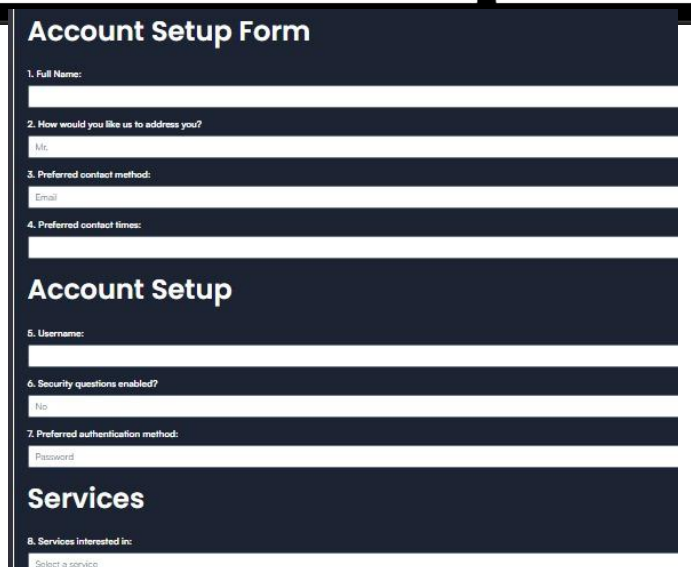




FeedBack







1. CI/CD Pipeline Enhancement:
   - Integrating a CI/CD pipeline to enhance the AI pipeline.
   - Utilizing Azure Blob Storage for efficient data storage and retrieval.
   - Incorporating MLFlow for tracking and managing machine learning models.

2. Mobile Application Development (Flutter):
   - Building a mobile application in Flutter aimed at serving customers and customer care executives.
   - Providing multiple communication channels: call, text, and chatbot for better customer support.

3. REST APIs and WebSockets Development:
   - Developing REST APIs and WebSockets to handle:
     - Background jobs.
     - AI-driven sentiment analysis.