



AI INCIDENT MANAGEMENT PLATFORM

A Retrieval-Augmented Generation (RAG) Solution

Backbenchers Team 2.0

CHALLENGES



FRAGMENTED TOOLS
(TICKETING, KBS, MONITORING)



HIGH MEAN TIME TO
RESOLUTION



REDUCED PRODUCTIVITY DUE
TO REPETITIVE TASKS

RAG-POWERED INCIDENT SUPPORT SYSTEM



What it does:

Unified console for incident resolution
AI chatbot for contextual support
Automated recommendations based on past incidents

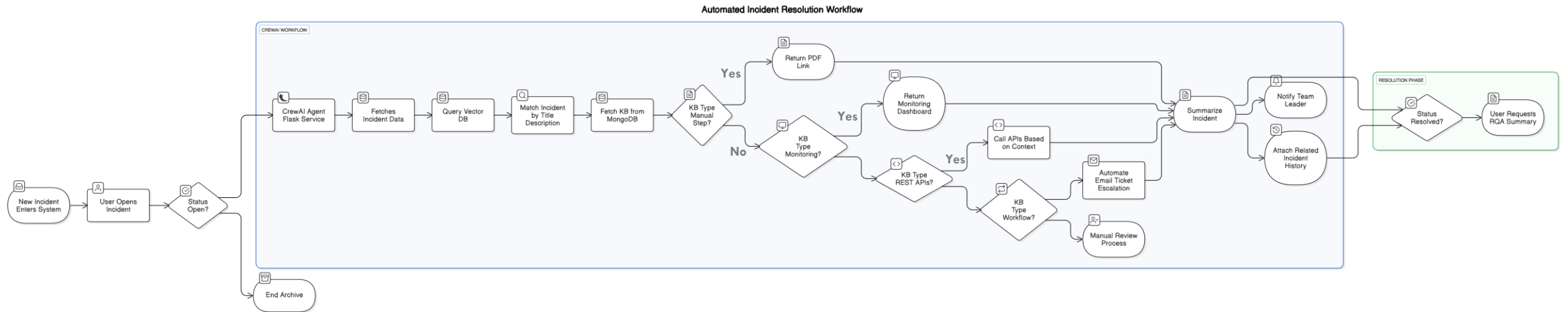


Key features:

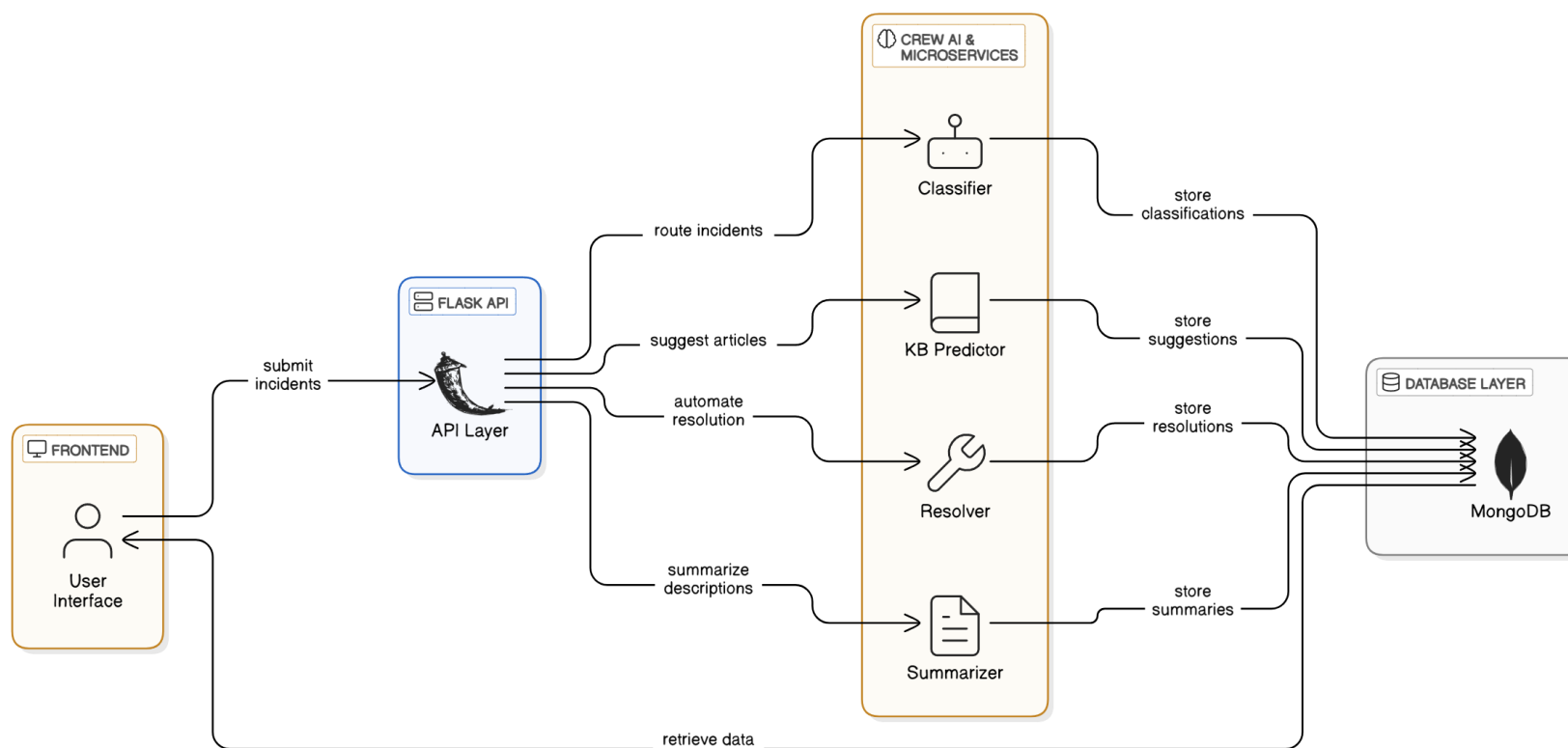
Supports solution with varying actions such as

- . script trigger
- . workflows
- . escalation mail trigger

INCIDENT JOURNEY



ARCHITECTURE



TECH STACK

Vector DB:



MongoDB:



AI Layer:



Microservices:



Frontend:



DEMO

Open a sample incident

- Fetches data dynamically
- Show metrics
- Show KB article

Automated Workflow

- Fetch telemetry
- Invokes Jenkins script
- Send mail

Chat

- Ask about any incident
- Retains context
- Summarizes incident

DEMO (CONTD..)

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SCALABILITY



AI

- CrewAI can scale to any number of agents based on use cases



Vector DB

- Used Pinecone vector DB for demo.
- For Production, we propose Weaviate vector DB for its
 - Scalability
 - Hybrid word match vector embedding similarity search



Incident and Knowledgebase DB

- MongoDB
 - Scalable, flexible data model
 - Supports KB structure that can help achieve extensible automation



Script Automation

- Jenkins for triggering automation scripts

CHALLENGES

Cost:

- Good AI models are expensive over time. Calls can incur higher costs
- Cost benefit analysis of LLMs to be done
- Better models to be used for highly sensitive tasks and to be used judiciously

Risk:

- If agent goals are not articulated properly, may lead to unintended results from the chain
- Complete automation with out human intervention for critical incidents may lead to oversight

Regulatory:

- Agents should be used only in scenarios which are approved as per regulations

API Support:

- For activities related to monitoring or automated workflows/actions, in-house or third-party APIs may not be available readily

Q & A

