Conversational & Contextual Observability

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We are part of Engineer's Platform & Integrated Experience (EPiX). Primarily focused on the Observability of every stage of the Software Development Lifecycle (SDLC). Our goal is to help engineers detect issues early and proactively with automated troubleshooting recommendations.
Observability

- Collect, correlate, aggregate, and analyze telemetry in your network, infrastructure, and applications.

- These insights help you detect, investigate, and remediate problems faster.

- Artificial intelligence and machine learning can help proactively react, predict, and prevent problems.

- Allows analysts to explain the unexpected and address the underlying causes more quickly and more accurately.
Questions and Questions

How many deploys in CIB last week?

Spinnaker Vs Jules?

Where are the dashboards?

What is the average Scan duration in my Project?

How many Zelle transactions happened last month?

How many people defaulted on Personal Loans product?

What is the pass percent of AWMs pipelines?

Why Builds are failing consistently?

How many new Clients were on boarded to Asset Wealth Management?

What was vendor discount rate for WePay transactions?

Give me the raw data of Tests?

What is the 90% of build duration?

Why GKP deploy is failing?

Maven Vs Gradle
How to simplify Self Service of Contextual and Meaningful data from JET Observability?

✓ Various areas of Interest: Platform performance, application stability, CICD insights, recommendations etc.

✓ Diverse requirements: logs, metrics, traces, trends, stats, raw data and more

✓ Multiple Personas: developer, project and product managers, CIOs-1, CIOs, Customer Success and more

✓ Dashboards everywhere for everything

✓ Limited human resources

✓ Increase market value
  • time savings
  • cost reduction
System Design
Conversational learning system

User Query

AI/ML Models

Response

User Feedback

Continuous Learning
NLP components

**Natural Language Processing**
- Preprocessing
  - Punctuation
  - Stop Words
  - Stemming
  - Lemmatization
- Feature Extraction
  - Vectorization
  - N-Grams
  - Bag of Words
  - TF-IDF
- Classification / IR
  - Machine Learning
  - Large Language Models
  - BERT, Zero-shot, RoBERTa

**Dialog Management**
- Streamlit
  - Context tracking
- Dialog state management
- Intent to Action mapping
Preprocessing

- Question: Show me the number of pipelines executed for EPX?
- Keywords = ['Show', 'number', 'pipelines', 'executed', 'LOB']
Large Language models

- Custom Entity linking (EL model)
  - Text → Token → NER components → Generate candidates → Entity mapping
  - Zero-shot models
    - (model="facebook/bart-large-mnli")
  - Sentence transformers – cosine similarity
    - (model="all-MiniLM-L6-v2")

[Links]
- https://www.pinecone.io/learn/sentence-embeddings/
Suggested Questions based on similarity

Do you also want to know about?

Users have also asked for

Question similarity pairs:

How many pipelines are triggered by a LOB in a day?
- Number of pipelines executed per day in all the Prod vs. non Prod branches. 0.6713
- Show me the number of pipelines executed for EPX 0.5873
- How is the eventstatus for pipeline trending in 107647 0.5834

How many of the total pipelines are CI pipelines for my LOB?
- Number of pipelines executed per day in all the Prod vs. non Prod branches. 0.6713
- Show me the number of pipelines executed for EPX 0.5873
- How is the eventstatus for pipeline trending in 107647 0.5834
Welcome to Conversational and Contextual Observability