Conversational & Contextual Observability

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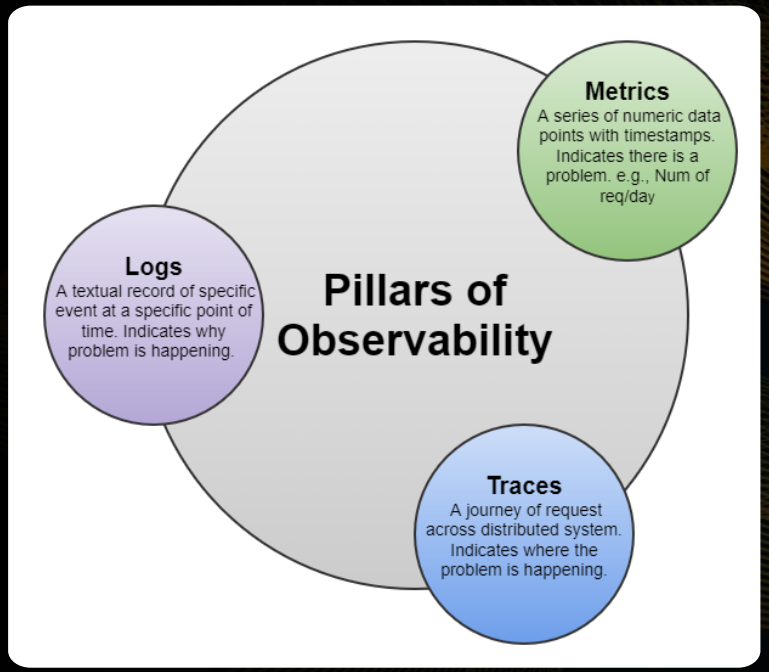
We are part of Engineer's Platform & Integrated Experience (EPiX). Primarily focused on the Observability of every stage of the Software Development Lifecycle (SDLC). Our goal is to help engineers detect issues early and proactively with automated troubleshooting recommendations.

Observability



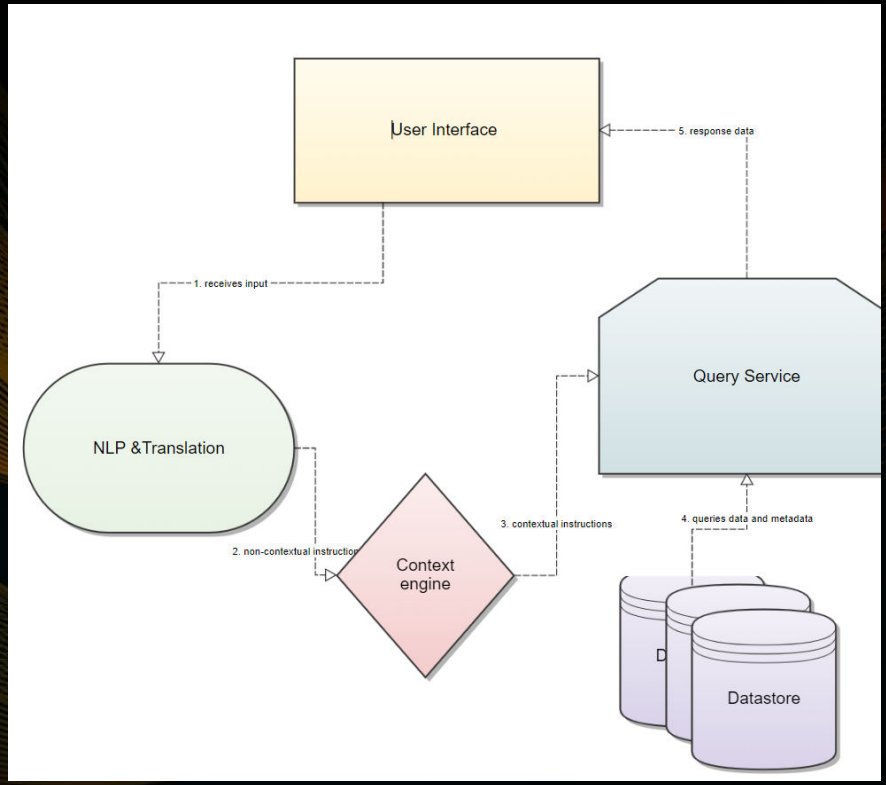
- Collect, correlate, aggregate, and analyze telemetry in your network, infrastructure, and applications.
- These insights help you detect, investigate, and remediate problems faster.
- Artificial intelligence and machine learning can help proactively react, predict, and prevent problems.
- Allows analysts to explain the unexpected and address the underlying causes more quickly and more accurately.

Questions and Questions

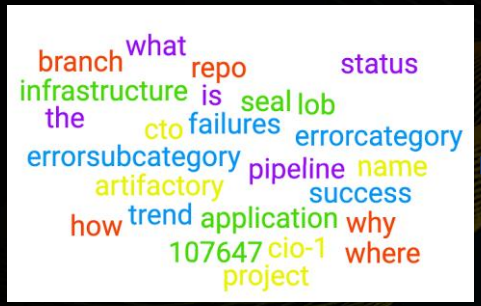
How to simplify Self Service of Contextual and Meaningful data from JET Observability ?

- ✓ 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

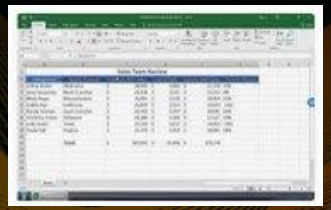


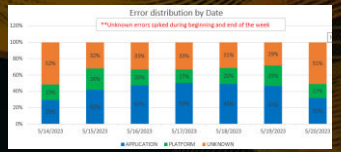
Conversational learning system



NLP

Intent t o Actio n





User Query

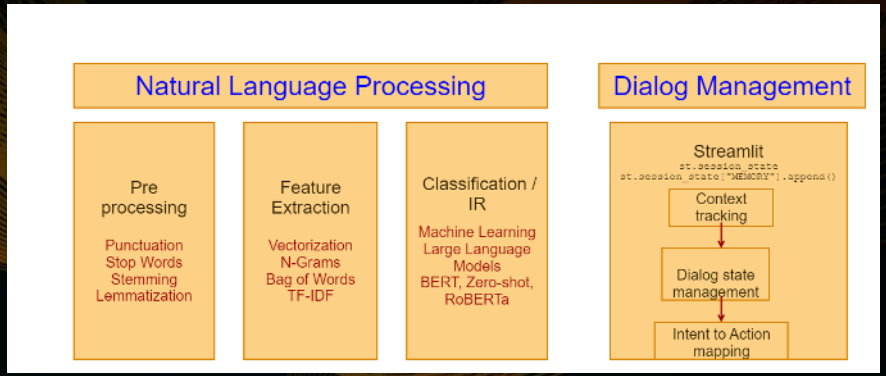
AI/ML Models

Response

User Feedback

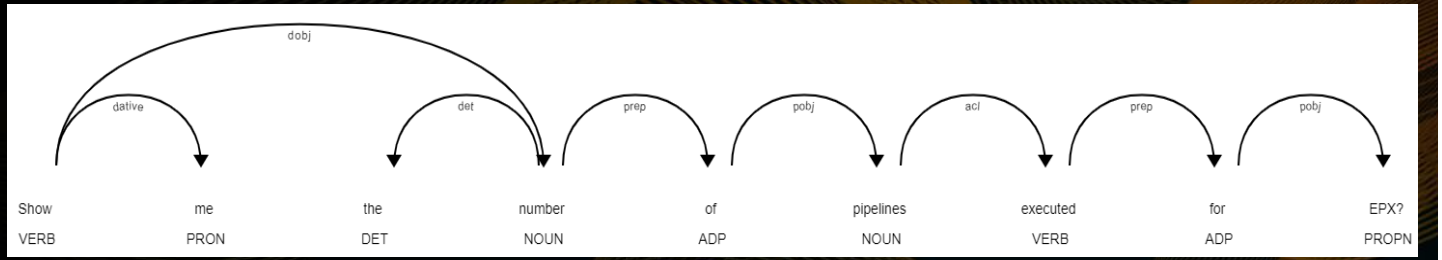
Continuous Learning

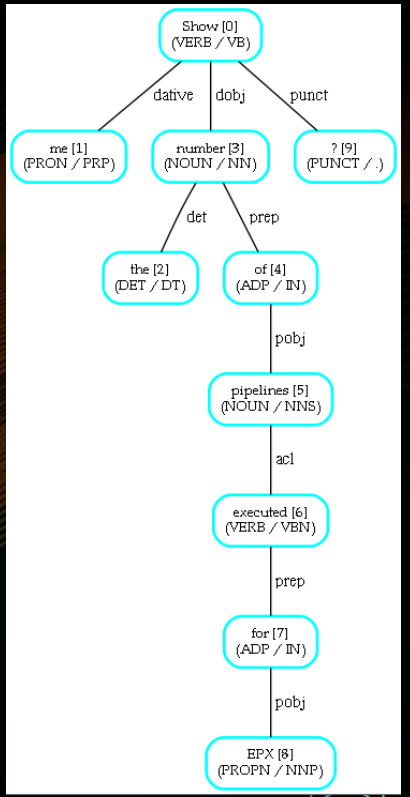
NLP components



Preprocessing

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



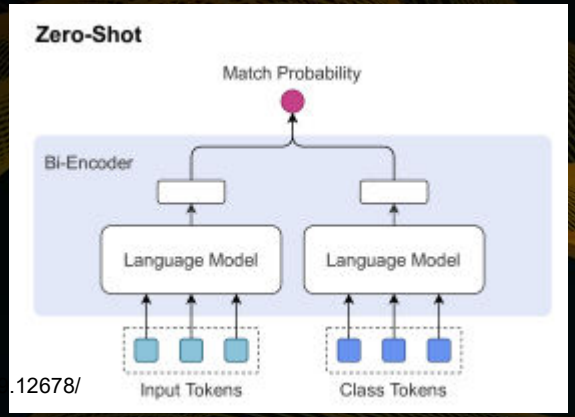


Large Language models

- Custom Entity linking (EL model)

- Zero-shot models

```
(model="facebook/bart-large-mnli")
```



- Sentence transformers – cosine similarity

```
(model="all-MiniLM-L6-v2")
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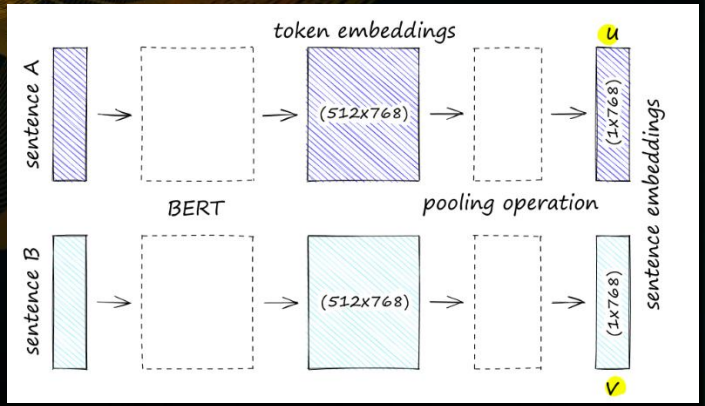
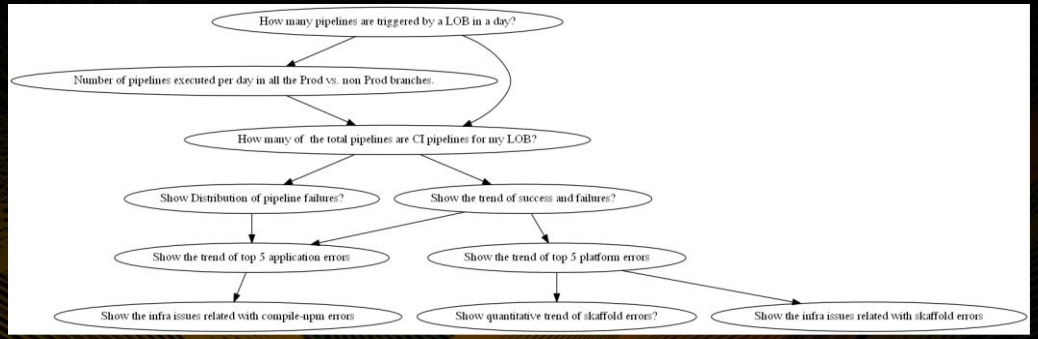


Suggested Questions based on similarity

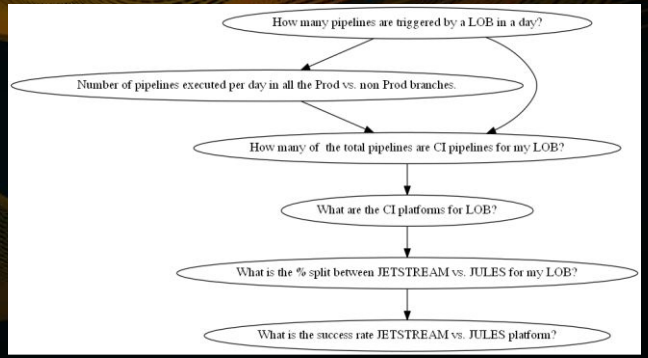
Do you also want to know about?



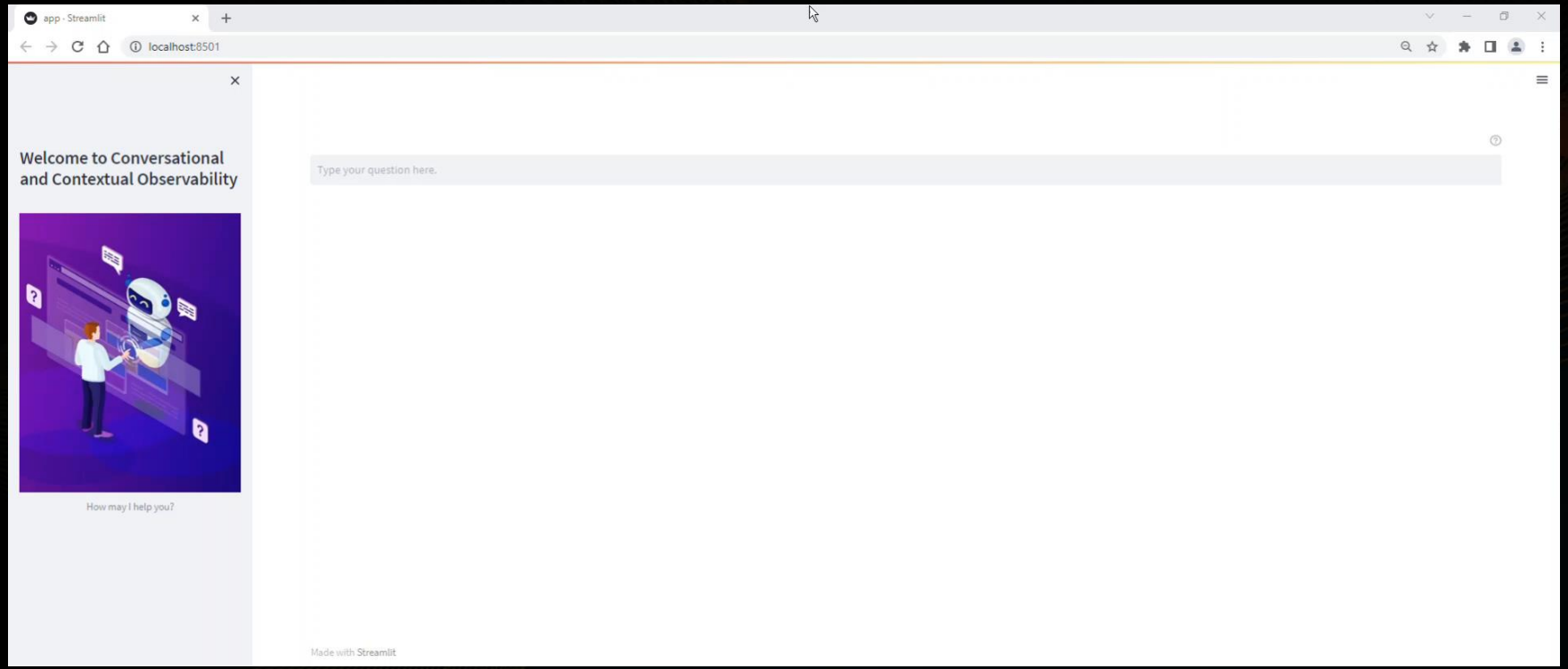
Users have also asked for

```
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
```



Demo


app · Streamlit
localhost:8501
Welcome to Conversational and Contextual Observability
How may I help you?
Type your question here.
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Q & A