EXPLORATION ON APPLICATION HEALTH MONITORING AND MARKETPLACE

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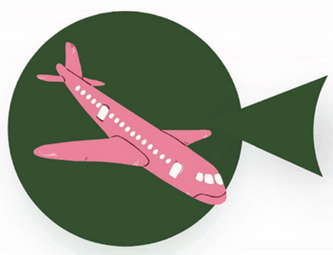
Introduction

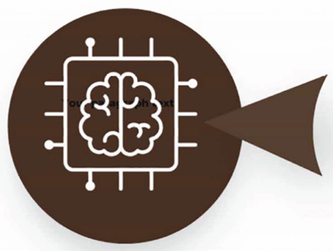
- System engineers face the challenge of sifting through vast log data to identify and resolve issues.
- As IT systems grow more complex, manually inspecting logs is time-consuming, error-prone, and physically taxing.
- AI can quickly analyse log data, improving the speed and accuracy of troubleshooting, and ultimately enhancing system performance and efficiency to solve the problem.

Methods & Materials



easyTravel Demo App (By Dynatrace)

A demonstration of a working website with logs updates which can be used for analysis of errors and many more.



ChatGPT & OpenAI

ChatGPT is used here for its ability to analyse information and provide troubleshooting solutions for the log errors provided by the user.

Procedure

Filter to find only error logs

Use results to solve the problem

Use AI to help analyse and troubleshoot

Literature Review

Modern IT Enterprises deal with **2TB** of log data daily.
AI-based systems can process and make sense of this data in real time, enabling actionable insights.

$2,000,000

Amount saved by companies by using AI-enabled system to help reduce the time spent troubleshooting and optimising resource allocation for IT teams.

Organisations using AI-powered monitoring tools have reported a

70%

decrease in system downtime

OBSERVATIONS

- AI Efficiency: AI tools like GPT can analyse logs, detect anomalies, and suggest solutions, reducing manual workload.
- System Messages: Using specific system messages and prompts ensure AI responses are concise and relevant.
- AI Parameters: Adjusting variables such as Temperature, Max Tokens and Top-P, tailors AI output for cost-efficiency and accuracy.
- Workload Reduction: Filtering reduced logs from 8670 lines to 232 lines, boosting efficiency.

FUTURE USE

- Severity-based sorting: The AI could prioritise error messages by their severity, allowing engineers to focus on the most critical issues first, improving system uptime and operational efficiency.

CONCLUSION

- AI is powerful and can be used to help with many manual tasks.
- Using AI helps increase efficiency while maintaining accuracy, reducing workload.
- With technology, we can work smarter not harder.