Azure Migration Assistant

INTRO/ABSTRACT:

Migrating to the Azure cloud poses unique cost-assessment and planning challenges. Our project introduces a user-friendly, Al-driven tool to simplify this process by providing real-time cost predictions and personalized migration strategies. Built with a React frontend and a Flask-based Python backend, this tool integrates Azure Pricing APIs to ensure accurate data. Future improvements include adding alerts, custom fine-tuned model, CI/CD, multi-cloud support, and a discovery agent for enhanced functionality.

METHODS:

We created a responsive chatbot that integrates user interaction with Azure pricing insights using real-time APIs for cost assessments. The React frontend offers an interactive experience, while the Flask backend manages APIs. The Ollama API analyzes queries, and the Azure Pricing API provides real-time estimations with MySQL for data storage.

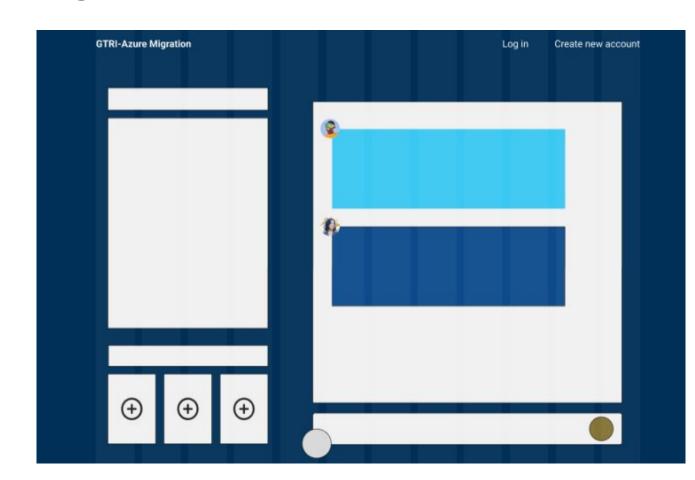


Fig.1 Intial webpage prototype for the Migration Assistant

RESULTS:

Our deployment-ready application offers accurate Azure migration cost analyses with fast responses. Key features include AI-driven cost estimation, an interactive chatbot for refining user input, and detailed reporting on costs and recommendations. Future plans involve integrating alerts, CI/CD pipelines, multi-cloud support, and a discovery agent.

Azure Migration Cost Calculator with Embedded Al

