FinOps Dashboard Project Report

Project Title: FinOps Dashboard for Cloud Cost Visibility (Offline Version)

Introduction:

In modern DevOps and cloud management, tracking and visualizing cloud service costs is essential for managing budget and resource efficiency. This project demonstrates a simplified version of a FinOps dashboard using Python, SQLite, and Grafana without relying on cloud infrastructure.

Abstract:

This project simulates daily usage data for different cloud services and stores it in a local SQLite database. The stored data is then visualized using Grafana. This solution replicates a real-world cost tracking system in a cloud-free environment using mock data.

Tools Used:

- Python 3
- SQLite (embedded in Python)
- Grafana (lightweight open-source dashboard tool)

Steps Involved:

1. A Python script was written to simulate usage data for services like Compute Engine, Cloud Storage, and Cloud Functions.
2. The data was inserted into a SQLite database called usage.db.
3. Grafana was installed and connected to the SQLite database.
4. Dashboards were created in Grafana to display total daily usage costs.

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Conclusion:

This project successfully demonstrates cost tracking and dashboarding using offline tools. It is a great foundation for real FinOps systems that connect to APIs like GCP Billing or AWS Cost Explorer in production environments.