**📌 Executive Summary**

**Trilytx** is a domain-specific chatbot designed to make triathlon performance data accessible through natural language. Built with Streamlit and powered by OpenAI’s GPT models, it translates user questions into BigQuery SQL queries, executes them, and returns easy-to-understand summaries.

**🚀 Key Features**

* **Natural Language Interface**: Ask questions like “Who won Kona in 2023?” or “How did Lionel Sanders rank in bike segments this year?”
* **BigQuery Backend**: Fast, scalable analytics over athlete-level triathlon data.
* **GPT-Powered Querying**: Modular prompt templates guide the LLM in generating domain-specific SQL.
* **Heroku Deployment**: Hosted as a multi-page Streamlit app with auto-scaling and CI/CD support.
* **Robust UX**: Follow-up handling, sidebar filters, and structured conversation memory.
* **Feedback & Logging**: All interactions are logged in BigQuery for quality control and iteration.

**🧪 Future Enhancements**

* **Retrieval-Augmented Generation (RAG)** for grounding responses with metadata and semantic search.
* **Embedding Memory** to track athlete trends and conversational flow.
* **Enterprise UX**: Auth, role-based access, and BI export options.