



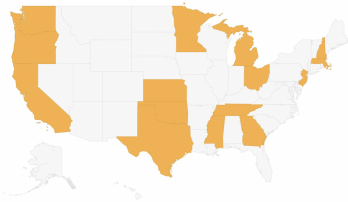
TeamBirth: Leveraging LLMs to Enhance US Maternal Health and Improve Safety, Communication, and Dignity in Childbirth

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What is TeamBirth?

Over the past generation, the reliability of childbirth in America has diminished. The implementation of *TeamBirth* in pilot trial hospitals proved acceptable, feasible, and safe for both patients and clinicians. *TeamBirth* is establishing a new industry standard for safe and dignified childbirth while offering the necessary tools for its implementation. By the end of 2023, *TeamBirth* is expected to have affected around 500,000 lives.



130+ Hospitals/Birth Centers
15 States
2 Implementing Statewide*
2 Countries

Main Contributions

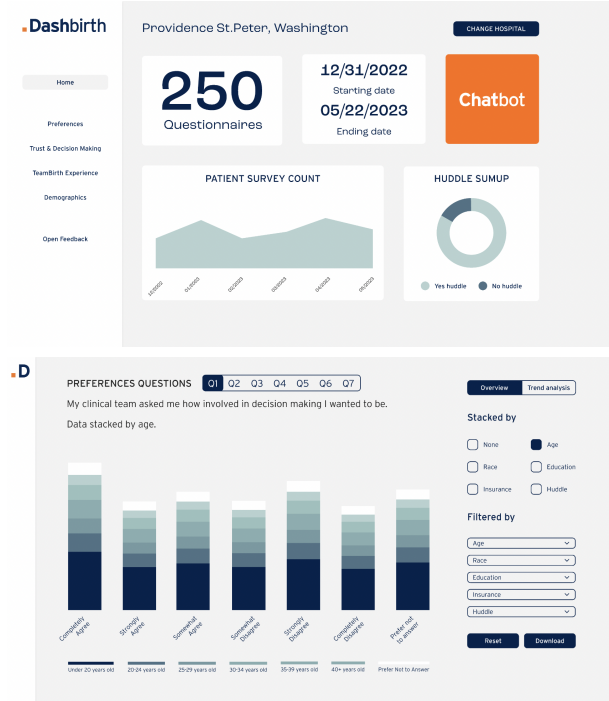
- **Dashboard Website:** An interactive dashboard designed for *TeamBirth* to visualize and share data with hospitals.
- **Chatbot for Postpartum Surveys:** A fully-functioning end-to-end chatbot, enabling users to interact with their data.

Maternal Survey

Postpartum survey dataset: contained information such as preferences, experience, demographics, and open feedback.

DashBirth Website

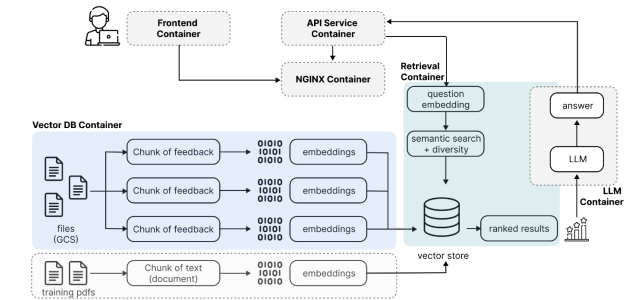
Dashboard for visualizing and interacting with the survey.



Chatbot user interface designed for clients to ask questions about the open feedback.

LangChain Framework

We containerized each component in the diagram, with each container acting as an isolated instance that encapsulates software, dependencies, and its environment. Together, these containers interact seamlessly to provide a responsive and secure user experience, demonstrating our commitment to cutting-edge software architecture.



- **Frontend Container:** Manages the user interface, handling requests and displaying client components.
- **API Service Container:** Bridges communication between frontend and core services.
- **VectorDB Container:** Handles data preprocessing and sets up the vector database.
- **Retrieval Container:** Processes user queries and retrieves the most relevant information.
- **LLM Container:** Deploys a Llama-7b-chat [1] on GCP VM using LangChain framework.

Acknowledgements

We extend our sincere appreciation to our mentor, Prof. Pavlos Protopapas. Furthermore, we express our profound gratitude to Chris Gumb for the unwavering support and invaluable mentorship.

References

1. Touvron, H., Martin, L., Stone, K., Albert, P., Almahairi, A., Babaei, Y., Bashlykov, N., Batra, S., Bhargava, P., Bhosale, S., ... & Scialom, T. (2023). Llama 2: Open Foundation and Fine-Tuned Chat Models. arXiv preprint arXiv:2307.09288.