



Real-time Incremental Dialogue System Using Retrieval-Augmented Generation

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Introduction

Objective: To develop an advanced Generative AI Chatbot, integrating comprehensive information from Colby College's database.

Purpose:

- Address the need for a centralized support resource in colleges.
- Assist students, staff, professors, and parents with relevant information and guidance.

Independent Variables (IVs):

- Depth of information integration from the Colby College website.
- Real-time voice interaction capabilities.

Dependent Variables (DVs):

- User engagement and ease of access (predicted).
- Accuracy and relevance of information provided (predicted).

Predictions:

- Enhanced accessibility and support for college community members, especially new applicants and first-year students.
- Improved navigation and transition into college life.

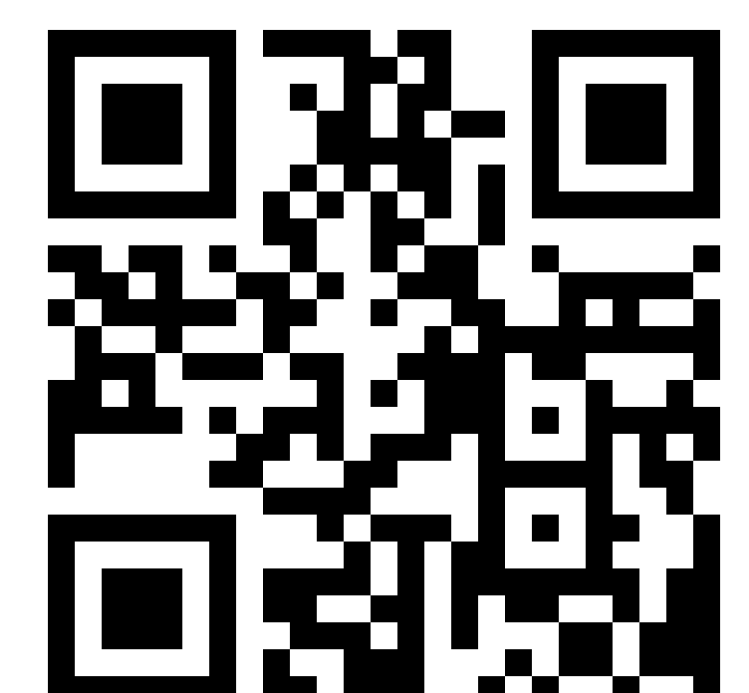
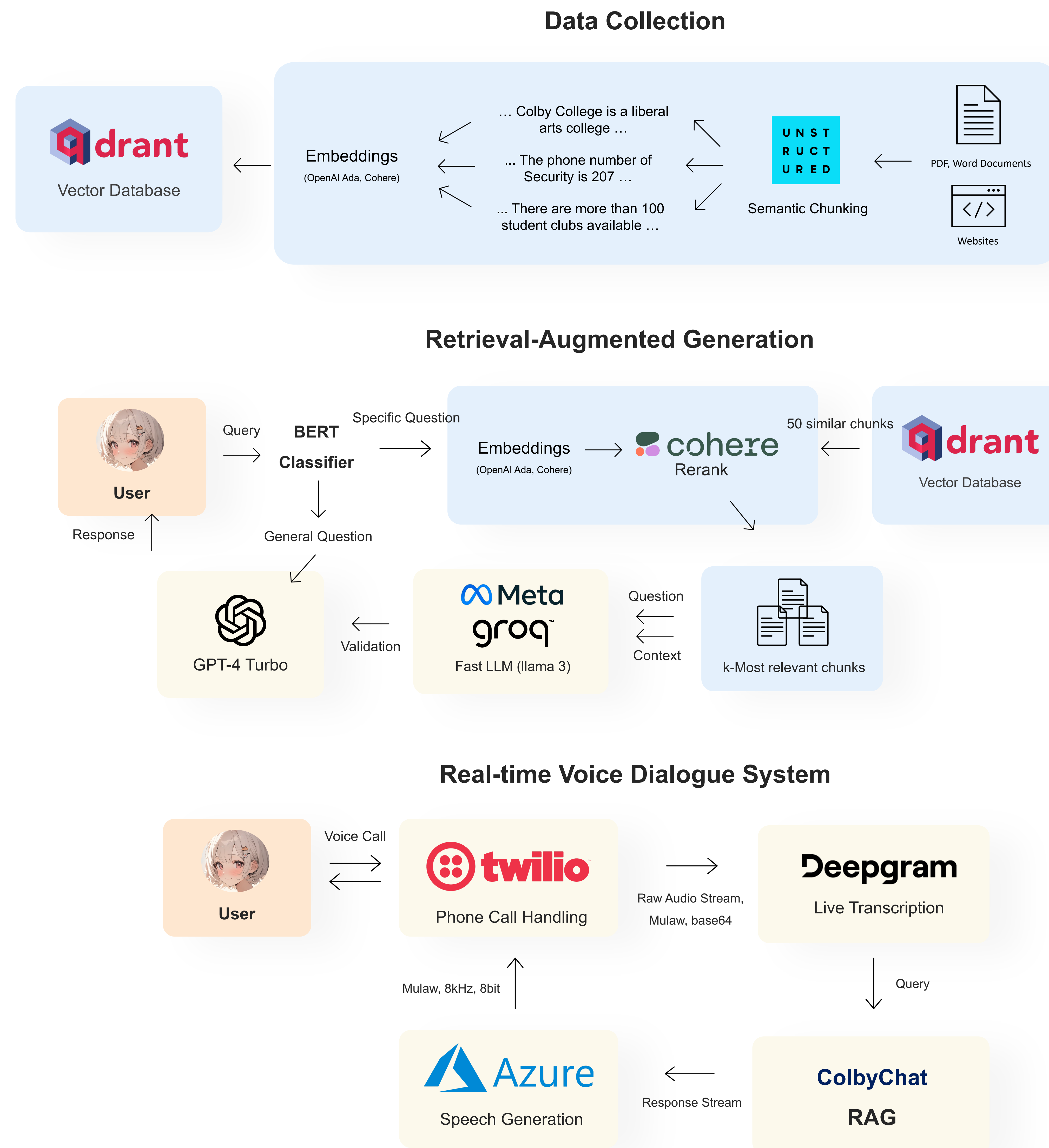
Research Questions:

- How effectively does the Retrieval Augmented Generation approach aid in providing accurate and relevant responses in real-time?
- What is the impact of a voice-based, real-time dialogue system on user engagement and satisfaction in a college support setting?

ColbyChat

As a part of our ongoing research project, ColbyChat is designed to be Colby's 24/7 digital assistant, providing guidance and information about everything at Colby College.

Currently trained on over 800 pages of Colby's website, the Chatbot can answer most questions about academics, admissions, financial aid, student life, and more. We're working hard to expand ColbyChat's knowledge base, and we're excited to hear your feedback on how we can improve.



Check it out!

Acknowledgements

Thank you to Dr. Amanda Stent for being my research advisor and helping make ColbyChat a reality!

Research Preview is available at colbychat.com

or call (207) 707-1369