

Financial Chatbot Documentation

Introduction

The financial chatbot is designed to provide users with insightful and interactive responses to financial queries. It enables users to retrieve company-specific or general financial data, calculate year-over-year (YoY) changes, and visualize trends upon request. By applying key AI chatbot development principles, it ensures accurate, user-friendly, and efficient communication of financial insights.

1. Principles of AI Chatbot Development

- Rule-Based Logic: The chatbot uses predefined responses mapped to financial data points, ensuring consistency and accuracy in its answers.
- State Management: It retains user preferences such as the selected company and year, allowing for a more personalized experience.
- Error Handling: The chatbot gracefully handles unrecognized queries by providing guidance and alternative suggestions.

2. Financial Data Integration

- Data Structuring: Financial data is stored in a structured format (CSV/DataFrame) for seamless access.
- Retrieval Methods: The chatbot efficiently fetches relevant data based on user queries.
- Company-Specific & General Queries: Users receive data for all companies unless they specify a particular company in their query.

3. Communicating Financial Insights

- Simplification & Summarization: Financial insights are presented in clear, user-friendly language.
- Interactive Dialogue: The chatbot engages users by suggesting related queries and follow-ups.
- Visual Aids: Users can request visual representations such as charts to better understand financial trends.

By integrating these principles, the financial chatbot ensures a seamless and insightful experience, helping users navigate complex financial data with ease.