

CDP Support Chatbot

Technical Documentation

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1. Project Overview

The CDP Support Chatbot is a sophisticated Streamlit-based application designed to provide comprehensive and nuanced answers to complex how-to questions about Customer Data Platforms (CDPs). The system leverages advanced similarity matching and multi-CDP documentation integration to deliver accurate and relevant responses.

Key Supported Platforms:

- Segment
- mParticle
- Lytics
- Zeotap

2. Core Features

- Advanced Question Processing with multi-part query support

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3. Technical Architecture

Core Components

Question Handler

Advanced query analysis and preprocessing

Document Processor

Enhanced similarity matching and response generation

Comparison Engine

Cross-platform feature comparison and analysis

UI Layer

Streamlit-based interactive interface with real-time feedback

4. Implementation Details

Question Analysis

- **Advanced tokenization and preprocessing**
- **Intent classification**
- **Complexity assessment**
- **Multi-part question breakdown**

Similarity Matching

- **TF-IDF vectorization**
- **BM25 ranking**
- **Hybrid scoring system**
- **Context-aware response selection**

Platform Comparison

- **Cross-platform feature analysis**
- **Key difference extraction**
- **Term-based comparison**
- **Structured comparison output**

5. User Interface

- Clean and intuitive chat interface

6. Advanced Features

- Cross-Platform Comparison Engine

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7. Future Enhancements

- Advanced visual comparison guides