We maintain a MongoDB database that logs user interactions with a Generative AI (GenAI) chatbot. The stored data includes user questions, chatbot responses, user IDs, and conversation IDs for each message.

**Objective:**

The primary goals of this task are as follows:

1. **Set Up Data Access and Integration:**
   * Configure and load the shared data files into the system.
   * Establish a connection to the MongoDB instance and inspect the data structure to understand the schema and relevant fields.
   * Convert the MongoDB structure to any required data representation as needed.
2. **Data Analysis and Interpretation:**
   * **Question Classification:** Categorize user questions into various types based on their content and intent (e.g., informational, transactional, conversational, etc.). Scope can include the following kinds of ML Based utilities to build a Personalization based Toolkit.
     1. Query Sentiment Analysis
     2. User Intent/Profile/Audience Segmentation
     3. Topic Modeling
     4. Next Best Question for diff users
     5. Ranking of Knowledge Elements acc to personlised usage of the system.
   * **Answer Relevance Evaluation:** Analyze the corresponding chatbot responses to assess their relevance to the associated questions.
   * **Success-Failure Analysis:** Determine the success-to-failure ratio of the chatbot interactions based on predefined success criteria (e.g., relevance, completeness, or user feedback).