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SPARTA GLOBAL

Exploratory Testing of Financial Chatbot for Financial Chat BOT v1.0

Purpose:  
To explore the functionality and conversational flow of the financial chatbot to identify gaps, unexpected behaviour, and opportunities for improvement beyond the defined test cases. This session aims to evaluate how well the chatbot provides financial advice, manages user interactions, and handles a variety of input scenarios that are not covered by scripted testing.

Scope:  
The exploratory testing will cover the following areas:

1. **Chatbot Functionality**
   * Assess how the chatbot responds to complex or ambiguous financial queries.
   * Check how accurately the chatbot provides information on various financial products such as loans, savings accounts, and credit cards.
   * Validate the chatbot's handling of user questions that involve multi-step advice or product comparisons.
2. **Chatbot Conversational Flow**
   * Explore the chatbot’s ability to maintain context over multiple interactions.
   * Test chatbot's responses to incomplete, unclear, or conflicting user inputs.
   * Evaluate the effectiveness of follow-up questions to clarify user intent.
3. **User Interface and Navigation**
   * Verify ease of use for different types of users, including users with limited financial knowledge.
4. **Data Accuracy and Compliance**
   * Verify the correctness and up-to-date nature of the financial information provided.
   * Ensure that chatbot responses comply with data protection regulations and that no sensitive user information is being stored or mishandled.
   * Verify chatbot correctly avoids making personalized recommendations.
5. **Error and Unexpected Inputs:**
   * Verify questions with a typo’s, e.g., "Whatt is a savngs account?" and see how the chatbot handles it.

Test Objectives:

1. Identify any gaps in functionality where the chatbot does not handle user queries effectively.
2. Find defects related to conversational flow, such as incorrect responses, misinterpretation of user intent, or failure to handle edge cases.
3. Evaluate whether the chatbot is providing accurate financial information.
4. Discover usability or accessibility issues in the chatbot interface.

Test Approach:  
The session will involve unscripted testing using different types of input queries:

* **Scenario-Based Inputs**: Test scenarios where a user asks for financial advice that involves multiple aspects (e.g., comparing loan types while considering credit scores and existing savings).
* **Boundary Testing**: Use queries with different input lengths, special characters, or unusual phrasing to evaluate how well the chatbot handles diverse input.
* **Exploratory Flows**: Navigate through different conversational paths without predefined steps, focusing on user interaction and response relevance.

Focus Areas:

* Response accuracy and validity
* Handling of ambiguous or complex queries
* User experience and interaction flow
* Compliance with data protection policies

Resources Required:

* Access to the chatbot’s testing environment.
* Chatbot backend logs and metrics to review conversations.
* Tools for capturing and documenting defects (Trello).

Testers Involved:  
Tester(s) familiar with financial products and chatbot testing. Preferably someone with a basic understanding of financial regulations to identify potential oversteps in advice provided.

Time Allocation:  
Allocate 1-2 hours for exploratory testing. Begin with common user flows, then expand to edge cases and less likely scenarios.

Data & Metrics to Capture:

1. **Response Relevance Score (1-5):** Rate how relevant and accurate each response is based on the question asked.
2. **Context Handling Success Rate (%):** Measure the percentage of interactions where the chatbot successfully retains context across multiple turns.
3. **Error Response Analysis:** Document responses to boundary cases and unexpected inputs to identify areas for improvement.
4. **User Experience Feedback:** Note observations on language clarity, tone, and how easy it is for a user to understand and follow the advice given.

Notes/Documentation:  
Capture and document responses that seem ambiguous, out-of-scope, or inappropriate for financial guidance. Include observations and recommendations for refinement based on findings.

Exit Criteria:  
The exploratory testing session will conclude when:

* No new critical or high-severity defects are found in the last 30 minutes.
* All identified defects have been documented and categorized.
* The chatbot demonstrates stable behaviour across diverse interaction scenarios.

Expected Outcomes:

* A list of new defects or gaps in chatbot behaviour.
* A better understanding of potential improvements in the chatbot’s conversational flow.
* Feedback on areas where additional scripted test cases may be necessary.