# Test Scenarios for Dia Chat.

* Functional Test Cases:
  + User Input Validation:
    - Test with valid inputs (e.g., greetings, questions, commands).
    - Test with invalid inputs (e.g., gibberish, special characters, emojis).
  + Response Verification:
    - Verify that the chatbot responds appropriately to user inputs.
    - Check for correct grammar, spelling, and tone in responses.
  + Intent Recognition:
    - Test if the chatbot correctly identifies user intents and responds accordingly.
    - Verify handling of multiple intents in a single message.
  + Entity Extraction:
    - Test entity recognition by providing inputs with entities (e.g., dates, locations, numbers).
    - Verify that the chatbot extracts and uses entities correctly in responses.
  + Multi-turn Conversations:
    - Test multi-turn conversations by chaining related messages and verifying context retention.
    - Check if the chatbot remembers previous interactions and responds contextually.
  + Fallback Responses:
    - Test fallback responses for handling unknown or unrecognizable inputs.
    - Verify that fallback responses guide users or ask clarifying questions.
  + Integration with External Systems:
    - Test integrations with external systems (e.g., APIs, databases) for fetching data or performing actions.
    - Verify data retrieval, updates, and error handling in integrations.
* User Experience Test Cases:
  + Usability:
    - Test ease of use by simulating interactions for common tasks (e.g., ordering, scheduling, FAQs).
    - Verify intuitive navigation and clear instructions.
  + Personalization:
    - Test personalization features (e.g., remembering user preferences, history).
    - Verify that the chatbot adapts responses based on user context and history.
  + Error Handling:
    - Test error messages and handling for incorrect inputs or system failures.
    - Verify that error messages are informative and guide users to correct their inputs.
  + Performance:
    - Test chatbot response time under different load conditions (e.g., concurrent users, message frequency).
    - Verify scalability and responsiveness of the chatbot platform.
* Integration Test Cases:
  + Channel Integration:
    - Test chatbot behavior on different messaging platforms (e.g., Slack, Facebook Messenger, website chat).
    - Verify consistency in responses across different channels.
  + Device Compatibility:
    - Test chatbot interactions on various devices (e.g., desktop, mobile, tablets).
    - Verify responsive design and functionality across different screen sizes.
  + Security:
    - Test security measures (e.g., authentication, data encryption) in chatbot interactions.
    - Verify protection against common security threats (e.g., SQL injection, cross-site scripting).
* Regression Test Cases:
  + Backward Compatibility:
    - Test backward compatibility with older versions of the chatbot platform or APIs.
    - Verify that new updates or changes do not break existing functionalities.
  + Integration Regression:
    - Test regression scenarios for integrations with external systems after updates or changes.
    - Verify data consistency and compatibility with updated APIs or databases.