SrustiMind – Testing Report

Developer: Srusti
Project Name: SrustiMind – AI Assistant
Framework: PyTorch
Testing Period: June 21–22, 2025

Overview

This report outlines the testing outcomes for *SrustiMind*, a multifunctional AI assistant built using PyTorch. The assistant was evaluated for its ability to process factual queries, generate creative content, summarize information, and interact with users via a feedback mechanism. The evaluation was conducted through a web-based interface and included both frontend UI components and backend data-handling capabilities.

Functional Areas Tested

1. Factual Question Answering

- **Test Prompt:** "Who is the Prime Minister of India?"
- **Expected Behavior:** Provide a concise, up-to-date answer.
- **Observed Output:** “Narendra Modi”
- **Evaluation:** Accurate and context-appropriate. Displayed near-instantaneous response time.

2. Text Summarization

- **Test Prompt:** A multi-paragraph input on Artificial Intelligence covering types, applications, benefits, and ethical concerns.
- **Expected Behavior:** Provide a coherent, concise 3–4 line summary.
- **Observed Output:** Captured essential points clearly, covering narrow vs. general AI, applications in industries, ethical considerations, and the role of XAI.
- **Evaluation:** Well-balanced summarization with accurate content abstraction.

3. Creative Content Generation

- **Subtasks & Prompts:**
    - *Poetry:* "Write a poem about moonlight"
    - *Storytelling:* "Create a story like Akbar-Birbal"
    - *Songwriting:* "Compose lyrics about family"
- **Expected Behavior:** Deliver engaging, original, and grammatically sound content.

- **Evaluation:**
    - *Poem:* Visually evocative with a calming tone and use of metaphor.
    - *Story:* Matched the Akbar-Birbal tone—witty, moral-driven, and culturally resonant.
    - *Lyrics:* Emotional and relatable with a well-structured chorus.

UI Functionality & Feedback Workflow

4. Feedback Collection

- **UI Element:** "Was this response helpful?" prompt displayed after responses.
- **User Input Handling:** User ratings and optional comments captured successfully.
- **Backend Integration:** Feedback stored as structured JSON entries in feedback_data.json.
- **Validation:** Manual inspection confirmed data integrity and correct association with prompts.
- **Evaluation:** Robust mechanism enabling future improvements based on user interaction.

Additional Observations

- **Performance:** Prompt response times, even with multiline inputs or content generation tasks.
- **Stability:** No crashes or UI freezes observed across all test cases.
- **Content Accuracy:** Consistently relevant and context-aware outputs across knowledge and creative domains.
- **Language Model Behavior:** Demonstrated logical coherence, natural phrasing, and minimal redundancy.

Recommendations

- Include a toggle for verbosity level (brief vs. detailed responses).
- Add thematic filters in creative mode (e.g., humor, motivation, folklore).
- Offer feedback insights dashboard for the developer to track trends in user interaction.

Final Verdict

The *SrustiMind* AI assistant demonstrates a well-rounded suite of functionalities, combining factual precision, creative expression, and user engagement. The successful integration of NLP and UI components reflects strong prompt engineering and practical design.

Project Status: *Functionally Complete*

Ready for: User Testing, and Feature Expansion