**User Acceptance Testing (UAT)**

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| Date | 25 June 2025 |
| Team ID | LTVIP2025TMID30393 |
| Project Name | HealthAI: Intelligent Healthcare Assistant Using IBM Granite |
| Maximum Marks |  |

**Project Overview:**

Project Name: HealthAI: Intelligent Healthcare Assistant Using IBM Granite

Project Description: HealthAI is an AI-powered healthcare assistant that leverages IBM Granite LLM to provide intelligent responses to user health queries. It uses a user-friendly Streamlit interface and integrates with the Hugging Face API to deliver natural language processing services for improved healthcare interaction.

Project Version: v1.0.0

Testing Period: June 25, 2025 – June 26, 2025

**Testing Scope:**

**Features and Functionalities to be Tested:**

* User Input and Query Submission
* API Integration with IBM Granite via Hugging Face
* Response Accuracy and Relevance
* Streamlit UI Elements (buttons, textboxes, layout)
* Error Handling (Invalid Inputs, API Failures)
* Performance (Response time)
* Data Privacy (no data leakage)

**User Stories or Requirements to be Tested:**

* As a user, I want to ask health-related questions and get accurate AI responses.
* As a user, I want the app to handle invalid inputs gracefully.
* As a user, I want a clean, responsive interface.
* As a developer, I want to ensure the app works with Hugging Face API tokens securely.

**Testing Environment:**

**URL/Location:**  
<https://nagbzyrtcvw6qzm9cb6faj.streamlit.app>

**Credentials (if required):**  
Not required (public access)

**Test Cases:**

| **Test Case ID** | **Test Scenario** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| --- | --- | --- | --- | --- | --- |
| **TC-001** | Submit valid health query | 1. Open app 2. Enter "What are symptoms of diabetes?" 3. Click Submit | AI responds with accurate and relevant information | Response received in under 5s, relevant text | Pass |
| **TC-002** | Submit empty input | 1. Open app 2. Leave input blank 3. Click Submit | Error message or prompt shown | Proper prompt: "Please enter a valid query." | Pass |
| **TC-003** | Hugging Face token invalid or missing | 1. Remove or change API key in .env 2. Submit query | Error message explaining API failure | API failure message shown | Pass |
| **TC-004** | Layout responsiveness | 1. Open app on different devices (desktop, tablet) | Layout adapts without UI breaks | UI responsive on tested devices | Pass |
| **TC-005** | Long health question | 1. Enter long, complex query 2. Submit | System handles it without crashing, gives response | Response correctly received | Pass |
| **TC-006** | Multiple consecutive queries | 1. Ask several questions in a row without refresh | Responses received for each without error | All handled gracefully | Pass |
| **TC-007** | Streamlit re-run doesn't reset session | 1. Click “Rerun” or refresh browser | App remains usable and stable | Works as expected | Pass |

**Bug Tracking:**

| **Bug ID** | **Bug Description** | **Steps to Reproduce** | **Severity** | **Status** | **Additional Feedback** |
| --- | --- | --- | --- | --- | --- |
| BG-001 | Output overlaps on mobile devices | 1. Open app on small screen 2. Submit query | Medium | In Progress | Consider adding responsive CSS or Streamlit tweaks |
| BG-002 | Model delay during API timeout | 1. Simulate low network 2. Submit query | Medium | Open | Add user-friendly loading spinner or retry mechanism |
| BG-003 | Blank screen when .env file is misconfigured | 1. Remove .env or corrupt it 2. Run app | High | Closed | Handled with exception and printed debug message |

**Sign-off:**

Tester Name: Sumanth Sorakayala

Date: June 25 2025

Signature: [Sumanth S.]