Data Flow Diagram & User Stories

Date:06 July 2025

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Project Name: HealthAI: Intelligent Healthcare Assistant

Maximum Marks: 2 Marks

# Data Flow Diagrams:

## Level 0 DFD:

The user interacts with the HealthAI system through a web-based single-page application (SPA) built with HTML/CSS/JavaScript. User inputs (such as symptoms, health metrics, or questions) are sent to the FastAPI backend. The AI service layer (IBM Watson ML – Granite 13B) processes the data and generates responses or predictions. Results are displayed back to the user via the frontend. Temporary session data is stored locally.

## Level 1 DFD:

Each feature—Patient Chat, Disease Prediction, Treatment Plan, and Health Analytics—has a data flow pipeline where input is sent to the AI model, structured output is received, and the user interface updates dynamically to reflect the result.

# User Stories

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| --- | --- | --- | --- | --- | --- |
| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance Criteria | Priority / Release |
| Patient | Chat with HealthAI | USN-1 | As a user, I can ask health-related questions via chat. | AI responds with relevant, empathetic medical information. | High / Sprint-1 |
| Patient | Disease Prediction | USN-2 | As a user, I can enter symptoms and get potential disease predictions. | System returns top 3 likely conditions with suggestions. | High / Sprint-1 |
| Patient | Treatment Plan | USN-3 | As a user, I can receive a treatment plan for a given condition. | System gives medication, lifestyle, and testing guidance. | High / Sprint-2 |
| Patient | Health Analytics | USN-4 | As a user, I can view visualizations of my vital signs over time. | Charts and summary insights are displayed clearly. | Medium / Sprint-2 |