**HealthAI: Intelligent Healthcare Assistant Using IBM Granite**

|  |  |
| --- | --- |
| Date | 28June 2025 |
| Team ID | LTVIP2025TMID34448 |
| Project Name | HealthAI: Intelligent Healthcare Assistant Using IBM Granite |
| Maximum Marks | 4 Marks |

## ****Data Flow Diagrams (DFD)****

**Data Flow Diagram (DFD):**  
A **Data Flow Diagram** (DFD) visually represents the flow of data in a system. For **HealthAI**, this shows how users (patients, doctors, admins) interact with the system, how data is processed (e.g., symptom analysis, AI suggestions), and where it’s stored (e.g., EHR, feedback).

### ****Example: Level 0 DFD for HealthAI****

**Processes:**

* **1.0 User Registration/Login**
* **2.0 Symptom Input & Analysis**
* **3.0 AI Recommendation Engine (IBM Granite)**
* **4.0 Appointment Scheduling**
* **5.0 Feedback Collection**

**Entities:**

* **Patient (Mobile/Web)**
* **Doctor**
* **Administrator**

**Data Stores:**

* **D1: User Profile Data**
* **D2: Medical History Records**
* **D3: AI Diagnosis & Suggestions**
* **D4: Appointment Logs**
* **D5: Feedback Logs**

## ****User Stories for HealthAI****

| **User Type** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Acceptance Criteria** | **Priority** | **Release** |
| --- | --- | --- | --- | --- | --- | --- |
| Patient (Mobile/Web) | Registration | USN-1 | As a patient, I can register using email and password. | Able to access dashboard after registering. | High | Sprint-1 |
|  |  | USN-2 | As a patient, I receive a confirmation email after registering. | Email with confirmation link is received and functional. | High | Sprint-1 |
|  |  | USN-3 | As a patient, I can register using Facebook. | Able to log in with Facebook credentials. | Low | Sprint-2 |
|  |  | USN-4 | As a patient, I can register using Gmail. | Able to log in with Gmail account. | Medium | Sprint-1 |
|  | Login | USN-5 | As a patient, I can log in using email and password. | Successful redirection to the dashboard. | High | Sprint-1 |
|  | Symptom Input | USN-6 | As a patient, I can input symptoms using text or voice. | System recognizes symptoms and proceeds with analysis. | High | Sprint-2 |
|  | AI Suggestions | USN-7 | As a patient, I receive AI-based health suggestions. | Recommendations shown based on input symptoms. | High | Sprint-2 |
|  | Appointments | USN-8 | As a patient, I can schedule an appointment with a doctor. | Appointment details saved and confirmation shown. | Medium | Sprint-3 |
| Doctor | Review Patient Data | USN-9 | As a doctor, I can view patient symptom data and history. | Patient records loaded correctly on doctor’s dashboard. | High | Sprint-2 |
|  | Feedback | USN-10 | As a doctor, I can provide feedback on AI recommendations. | Feedback is saved and used for system improvements. | Medium | Sprint-3 |
| Administrator | User Management | USN-11 | As an admin, I can manage user accounts and roles. | Admin can create, update, deactivate accounts. | High | Sprint-1 |
|  | System Monitoring | USN-12 | As an admin, I can monitor system performance and logs. | Access to real-time system analytics. | Medium | Sprint-3 |