# Planning Logic – HealthAI

Date: 25 JUNE 2025

Team ID: LTVIP2025TMID34578

Project Name: HealthAI

Maximum Marks: 5

## Agile Definitions Recap:

* Sprint: A fixed-duration cycle for implementing features (6 days in HealthAI).
* Epic: A large functionality grouping multiple related user stories (e.g., Conversational AI, Health Analytics).
* User Story: A task framed from the user’s point of view, describing a desired feature.
* Story Point: An effort estimate (relative complexity, risk, and size) for a user story, typically using the Fibonacci series.

## Sprint Planning Summary:

This section provides a detailed breakdown of tasks, story points, and epics for each sprint, focusing on the iterative delivery of HealthAI features.

### Sprint 1 – UI & Core Chat (6 Days)

Epic: Conversational AI & Patient Profile Management

|  |  |
| --- | --- |
| Task | Story Points |
| Streamlit UI for Patient Chat tab | 2 |
| Patient Profile Sidebar (Name, Age, Gender) | 2 |
| Integrate Google Gemini API for Chatbot Q&A | 3 |
| Initial Chatbot functionality testing | 1 |

Total: 8 Story Points

### Sprint 2 – Prediction & Treatment (6 Days)

Epic: Intelligent Health Guidance

|  |  |
| --- | --- |
| Task | Story Points |
| Streamlit UI for Disease Prediction tab | 2 |
| Implement symptom input & prediction logic (Gemini API) | 3 |
| Streamlit UI for Treatment Plans tab | 2 |
| Implement treatment plan generation logic (Gemini API) | 3 |

Total: 10 Story Points

### Sprint 3 – Health Analytics & Session Handling (6 Days)

Epic: Data Visualization & User Experience

|  |  |
| --- | --- |
| Task | Story Points |
| Streamlit UI for Health Analytics Dashboard | 3 |
| Generate sample health data (Heart Rate, BP, Glucose, Symptoms) | 2 |
| Implement Plotly charts for health trends & symptom frequency | 3 |
| Develop AI-generated health insights (Gemini API) | 2 |
| Implement robust Streamlit session state management for all tabs | 2 |

Total: 12 Story Points

### Sprint 4 – Refinement & Initial Deployment (6 Days)

Epic: Project Completion & Future Readiness

|  |  |
| --- | --- |
| Task | Story Points |
| Comprehensive Functional Testing (UAT scenarios) | 3 |
| Performance Testing (AI response times, dashboard load) | 2 |
| Prepare requirements.txt and .env for deployment | 1 |
| Initial deployment to Streamlit Cloud (PoC) | 2 |
| Final Project Documentation & Review | 2 |

Total: 10 Story Points

## Velocity Calculation:

Total Points (Planned): 8+10+12+10=40 Story Points

Sprints (Planned): 4

Project Velocity (Estimated): 40/4=10 Story Points per Sprint

## Notes:

* Fibonacci estimates were used for effort estimation to reflect relative complexity.
* High-priority user stories, focusing on core AI functionalities and UI, were frontloaded into earlier sprints.
* The final sprint is dedicated to ensuring overall quality, performance optimization, documentation, and preparing the application for deployment.
* The current AI model integration uses Google Gemini API for rapid prototyping and demonstration. A future phase will involve direct integration with IBM Granite-13B-instruct-v2.