**Project Design Phase**

**Proposed Solution**

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| Date | 25 June 2025 |
| Team ID | LTVIP2025TMID59371 |
| Project Name | HealthAI-Intelligent-Healthcare-Assistant-Using-IBM-Granite |
| Maximum Marks | 2 Marks |

**Proposed Solution:**

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| **S.No.** | **Parameter** | **Description** |
| **1** | **Problem Statement (Problem to be solved)** | Millions of individuals struggle with access to timely, reliable, and personalized healthcare advice. Current systems are either expensive, time-consuming, or lack contextual understanding of patient history and health metrics. There’s a need for a virtual solution that offers real-time support, predictive diagnosis, and intelligent recommendations. |
| **2** | **Idea / Solution Description** | HealthAI is a Streamlit-based web application powered by IBM Watson's Granite 13B and Gemini AI. It offers a virtual patient assistant that enables symptom-based diagnosis, treatment plan generation, health data visualization, and AI-powered health insights. It integrates patient interaction, data tracking, and predictive modeling into one seamless platform. |
| **3** | **Novelty / Uniqueness** | Unlike static symptom-checkers or general-purpose chatbots, HealthAI combines real-time LLM intelligence with personalized health metric analytics. Its hybrid AI integration (IBM Watson + Gemini) enhances diagnostic accuracy, while its modular dashboard delivers actionable insights tailored to the user’s unique profile. |
| **4** | **Social Impact / Customer Satisfaction** | HealthAI empowers patients with knowledge, reducing anxiety and over-dependence on self-diagnosis through unreliable sources. It increases awareness, promotes preventive care, and supports users in underserved or rural areas. The interface is designed for inclusivity, boosting user satisfaction through clarity, interactivity, and accessibility. |
| **5** | **Business Model (Revenue Model)** | - Freemium model: Basic features free for all users, premium subscription unlocks advanced analytics and AI reports- B2B licensing to clinics and telehealth platforms- Ad-free experience as part of premium tier- Optional integration with wearable device data (e.g., Fitbit, Apple Health) via API plans |
| **6** | **Scalability of the Solution** | The solution is designed for horizontal scalability using modular microservices. AI APIs and patient data services can be containerized and deployed on cloud platforms. The frontend supports easy localization and theming, allowing the app to be adapted for new regions or medical use cases without major overhaul. |