**Project Design Phase**

**Proposed Solution Template**

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| Date | 27 june 2025 |
| Team ID | LTVIP2025TMID31456 |
| Project Name | Health ai: Intelligent healthcare assistant using ibm granite |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in the proposed solution template.

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | Access to timely, accurate, and personalized healthcare information remains a challenge, particularly in regions with limited medical infrastructure or awareness. Patients often struggle to interpret symptoms, understand diagnoses, and make informed health decisions, leading to delayed care and anxiety. There is a pressing need for a reliable, intelligent assistant that can bridge the gap between users and healthcare services. |
|  | Idea / Solution description | The proposed solution is a Health AI Intelligent Assistant powered by IBM Granite foundation models. This assistant will utilize natural language understanding, medical knowledge graphs, and patient data (with consent) to provide: |
|  | Novelty / Uniqueness | Powered by IBM Granite’s domain-specific LLMs with explainability and trust layers  Real-time health conversation interface using multi-modal input (voice/text/images)  Privacy-first architecture with Federated Learning for patient data protection |
|  | Social Impact / Customer Satisfaction | Empowers individuals to make informed health decisions  Reduces strain on primary healthcare systems by filtering non-critical cases  Enhances health literacy across underserved communities |
|  | Business Model (Revenue Model) | Freemium Model: Basic symptom checker and health info free; advanced features (teleconsultation integration, EHR syncing, premium analytics) behind a subscription  B2B Licensing: Licensing to hospitals, insurance providers, and telehealth platforms |
|  | Scalability of the Solution |  **Cloud-native architecture** allows deployment at scale across regions   **Modular design** supports expansion to new languages, conditions, and specialties   Easily adaptable to partner with clinics, NGOs, and governments |