

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	25 june 2025
Team ID	Team ID: LTVIP2025TMID31494
Project Name	Health AI:Intelligent healthcare assistant
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template:

Great! Let's walk through the Brainstorming and Idea Development phase based on your IBM Granite-based Health Assistant code.

Project Idea:

Build an AI-powered Intelligent Healthcare Assistant that uses IBM Granite LLM to analyze patient symptoms and suggest possible health conditions.

Problem Statement:

Patients, especially in remote areas or during off-hours, often lack access to immediate medical guidance. There's a need for an intelligent assistant that can:

Collect symptoms

Analyze them with AI

Offer non-diagnostic, suggestive health insights

 Brainstormed Features:

Feature Idea Why It's Useful

- ◆ Symptom Input Interface To allow users to describe issues easily via natural language
- ◆ AI Analysis via IBM Granite Uses a powerful LLM to generate suggestive conditions from symptoms
- ◆ Timestamp Logging Useful for tracking or auditing conversations
- ◆ Friendly Conversational Output Makes interaction simple and human-like
- ◆ Warning About Non-Diagnosis Ensures ethical use (not replacing a real doctor)

 Brainstorm Enhancements:

Idea Impact

Add voice input using speech_recognition More accessible and hands-free

Connect to EMR or wearable data Gives more accurate suggestions

Add emergency contact alert feature Safety feature for critical cases

Build chatbot UI with Flask/Streamlit Move from CLI to web/mobile access

Include multi-language support Wider user base (non-English users)

 Technologies Considered (during brainstorming):

LLM: IBM Granite (chosen), GPT-4 (alternative)

Frontend: CLI (current), Flask or Streamlit (planned)

Storage: SQLite or file logging (optional extension)

APIs: Integration with MedlinePlus or Mayo Clinic APIs (for verified info)

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Reference: <https://www.mural.co/templates/brainstorm-and-idea-prioritization>



Step 1: Team Gathering, Collaboration & Select the Problem Statement

Description:

The first step in building the Intelligent Healthcare Assistant involves assembling a multidisciplinary team, fostering collaboration, and selecting a meaningful healthcare challenge to solve.

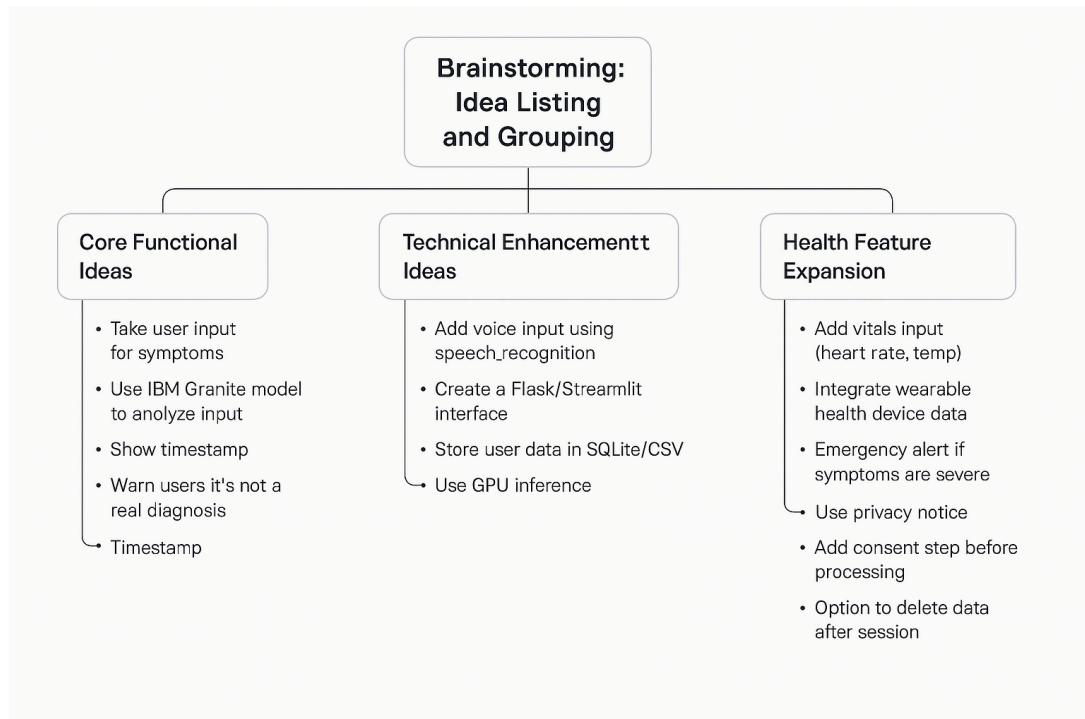
Activities Involved:

- Formed a team with diverse skillsets: AI/ML developers, frontend/backend coders, and a healthcare domain researcher.
- Conducted initial brainstorming meetings (in person or online) to share ideas and expectations
- Explored real-world healthcare problem such as:
 - Delayed access to doctors
 - Lack of symptom awareness
 - Absence of early screening tools
- Voted and finalized the problem statement:
 - "Build an AI-powered assistant that helps analyze symptoms and understand potential health conditions using natural language prompts."

Outcome:

Team is aligned with a shared vision to build a responsible, AI-powered healthcare assistant leveraging IRM Granite

Step-2: Brainstorm, Idea Listing and Grouping



Step-3: Idea Prioritization

Idea Prioritization

Idea	Impact	Effort	Priority
Symptom input via text	High	Low	✓ Must Have
IBM Granite AI symptom analysis	High	Medium	✓ Must Have
Show timestamp	Low	Low	🟡 Should Have
Diagnosis disclaimer	Medium	Medium	🟠 Could Have
Voice input (speech recognition)	Medium	Medium	🔵 Could Have
GUI with Flask/Streamlit	High	High	🟡 Could Have
Store data in SQLite/CSV	High	High	🔴 Won't Have (now)
Integrate wearable device data	High	High	🔴 Won't Have (now)
Multi-language support	Medium	High	🔴 Won't Have (now)
Emergency alert system	High	Wont have	🔴 Won't Have (now)