

Project Design Phase

Problem – Solution Fit Template

Date	06 June 2025
Team ID	LTVIP2025TMID33353
Project Name	HealthAI: Intelligent Healthcare Assistant Using IBM Granite
Maximum Marks	2 Marks

Problem – Solution Fit Overview

The Problem–Solution Fit demonstrates how our proposed solution directly addresses a real-world challenge experienced by our target users. This alignment is essential to ensure the HealthAI platform solves relevant issues in a meaningful, effective, and user-centric manner.

Purpose of the Problem–Solution Fit

- ✓ Solve complex healthcare access issues in a way that matches the digital behavior and limitations of rural/semi-urban populations.
- ✓ Speed up development and adoption by using common channels like smartphones, local languages, and chat-based tools.
- ✓ Improve communication strategies using emotional triggers like fear, uncertainty, and trust gaps in healthcare.
- ✓ Build strong user engagement by solving frequent issues like minor illness management, symptom confusion, and lack of nearby doctors.

Problem-Solution fit canvas 2.0							
Define CS, fit into CC	1. CUSTOMER SEGMENT(S) (CS) Who is your customer? <ul style="list-style-type: none">Rural and semi-urban individuals, college students, and working professionals who have limited or no access to reliable, affordable, and timely healthcare.They typically use smartphones, depend on mobile data, and prefer quick, easy-to-use health solutions without visiting hospitals.	CS	6. CUSTOMER CONSTRAINTS What prevents them from taking action? <ul style="list-style-type: none">Poor internet connectivityNo budget for consultationsLow digital literacyLack of trust in online medical adviceNo access to reliable local healthcare	CC	5. AVAILABLE SOLUTIONS What are they currently using (if anything)? <ul style="list-style-type: none">Google/YouTube for symptom searchAsking friends or family for adviceSome use Apollo 24x7 or Practo appsPros: Free, accessibleCons: Misinformation, not personalized, lack of trust, too generic	AS	Explore AS, differentiate
Focus on J&P, tap into BE, understand RC	2. JOBS-TO-BE-DONE / PROBLEMS What job are they trying to get done? <ul style="list-style-type: none">Get fast, accurate, and affordable health adviceCheck symptoms and know whether they need to visit a doctorAccess basic treatment plans for common illnesses	J&P	9. PROBLEM ROOT CAUSE Why does this problem exist? Lack of medical infrastructure in rural/semi-urban India Overloaded hospitals in nearby cities High consultation fees Widespread misinformation online Absence of health education or awareness at the community level	RC	7. BEHAVIOUR What does your customer do to address the problem and get the job done? i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)What do customers do now to solve the problem? Search online for home remedies Ask local elders or unqualified local chemists Avoid going to hospital until it becomes urgent Share symptoms in family WhatsApp groups	BE	Focus on J&P, tap into BE, understand RC
Identify strong TR & EM	3. TRIGGERS What triggers the need for your solution? Health symptoms appear suddenly (e.g., fever, headache) Seeing a friend/family use a health app Reading about AI in healthcare or watching awareness videos Lack of local doctors or long waiting times at hospitals	TR	10. YOUR SOLUTION What are you building to solve the problem? <ul style="list-style-type: none">A virtual AI health assistant that includes:<ul style="list-style-type: none">Symptom checkerChatbot for health Q&ATreatment suggestionsLocal language supportData storage with login system (MySQL)Optional offline access and health trackingThis platform will be built using Python, Flask(frontend), MySQL (backend), and IBM Watson/ML models.	SL	8. CHANNELS of BEHAVIOUR 8.1 ONLINE Search symptoms on Google Watch health-related YouTube videos Use mobile health apps (only a few) Access social media or WhatsApp forwards for tips 8.2 OFFLINE <ul style="list-style-type: none">Visit local clinic (if available)Ask neighbors, relatives, or chemistsTake local herbal remediesDelay consulting a professional due to travel or cost	CH	Extract online & offline CH of BE
	4. EMOTIONS: BEFORE / AFTER Before: Confused, anxious, helpless, frustrated due to no access or clarity After: Confident, relieved, informed, in control of their health decisions	EM					