

## **Seva Setu – Your AI Bridge to Government Services**

### **Problem Statement:**

Millions of Indian citizens—especially in rural or low-literacy areas—struggle to access government services due to complex official language, bureaucratic jargon, and lack of localized guidance. Although schemes like Pradhan Mantri Jan Dhan Yojana (PMJDY) promise financial inclusion, many still don't understand how to open or use these accounts. The lack of simple, personalized assistance creates friction, dependency on intermediaries, and missed benefits. "Seva Setu" addresses this gap by acting as a voice-first AI agent that simplifies government interactions in regional languages, turning confusion into confidence—starting with PMJDY, the gateway to many other welfare schemes.

### **Target Audience & Context:**

Our primary users are low-literate, rural Indian citizens who often lack access to digital tools or personalized guidance. These users rely on word-of-mouth or bank agents to understand schemes, making them vulnerable to misinformation or missed opportunities. They commonly use basic smartphones but are uncomfortable with text-heavy apps or government websites. Seva Setu is built with this audience in mind—offering a voice-first, intuitive interface in Hindi and English, and simplifying access to the financial system through personalized guidance for PMJDY.

### **Use of Gen-AI:**

Seva Setu leverages **Generative AI** (e.g., GPT or Gemini) to deliver dynamically **personalized, conversational guidance**. Unlike rule-based chatbots or static FAQs, our LLM-powered agent understands natural voice/text input, extracts user intent, and generates simplified explanations tailored to the user's context—such as listing required documents or walking them through how to open a PMJDY account. Using tools like **LangChain**, **LlamaIndex**, and a curated knowledge base, it provides real-time, relevant responses—even for vague or incomplete queries. The AI also generates step-by-step walkthroughs, dynamic clarifications, and multilingual outputs using **Bhashini APIs** for ASR/TTS. Gen-AI isn't just an enhancement—it's core to making government schemes understandable and accessible to underserved population.

### **Solution Framework :**

#### **Core Idea:**

"Seva Setu" is a **multimodal Gen-AI assistant** that simplifies access to government schemes, starting with PMJDY.

#### **Workflow:**

1. **User Input:** Users speak or type queries using an ultra-minimal GUI with a single prompt and voice button.
2. **Speech-to-Text:** Voice input is transcribed using **Bhashini ASR**.
3. **Intent Recognition:** Input is parsed using **LangChain** to identify intent (e.g., "how to open account", "what documents needed").
4. **Data Retrieval:** AI queries a structured PMJDY knowledge base (FAQs, rules, benefits).

5. **Content Generation:** Generative AI creates a personalized, simplified response based on retrieved info and user context.
6. **Voice Response:** Reply is converted back into speech using **Bhashini TTS**, and displayed as text for accessibility.

#### **Architecture:**

- Frontend: Minimal GUI with voice/text support.
- Backend: Flask/FastAPI, LangChain, OpenAI/Gemini APIs.
- Language: Hindi/English, with future regional expansion.
- Data: Lightweight JSON knowledge base.
- Hosting: Google Cloud Functions / Cloud Run.

The **hackathon version** focuses solely on PMJDY to ensure depth over breadth and demonstrate a **Minimum Lovable Product** that can later expand to other schemes like Ujjwala Yojana, Ayushman bharat.

#### **Feasibility & Execution:**

This idea is **practically implementable in a hackathon timeframe** due to its focused scope and modular architecture. We use lightweight tools like **Flask, Bhashini APIs**, and a preloaded **text-based knowledge base**, avoiding heavy databases or training cycles. Cloud-based platforms (like Google Cloud Functions or Render) enable rapid deployment. Existing LLMs handle content generation, while LangChain simplifies context-aware Q&A. Voice and text integration are handled via Bhashini, making regional accessibility a reality. The solution is technically feasible, requires minimal compute, and can be built and demoed within 36–48 hours.

#### **Scalability & Impact :**

Seva Setu's **modular architecture** allows quick expansion to other government schemes like LPG subsidy (Ujjwala), health insurance (Ayushman Bharat), or pension (Atal Yojana). By adding data to the existing knowledge base, the AI assistant can guide users across a wide policy spectrum. Regional language support via Bhashini makes it scalable across India. With over **500 million rural citizens**, this platform can bridge the gap between citizens and governance—promoting **financial inclusion, digital literacy, and trust in public systems**. It's not just scalable—it's essential.

#### **Conclusion & Bonus MLP:**

Seva Setu is a **Minimum Lovable Product** designed to demystify PMJDY using a voice-first Gen-AI assistant. Its simplicity, regional focus, and real-world use case make it instantly valuable. As a business, it can scale to offer AI-powered civic engagement platforms to banks, NGOs, and government agencies. It's more than tech—it's a **human-centric bridge to digital India**.