TEAM INNOVATEX: GenAI for Government Access:

The government launches numerous schemes and services for the benefit of its citizens. That sounds great — but then, what's the problem?

Chapter 1: Problem

What is the problem?

- Those who need the schemes most often can't use them
- Important government services like Aadhaar correction, ID creation (PAN, voter ID), job applications (MGNREGA), and welfare updates (pension, ration cards) are often not availed by the people who need them most
- misunderstanding about existing government schemes, leading many people to miss out or misuse them
- People often fail to get their problems resolved, like issues with government infrastructure, denial of public services, or violations of their rights.

Why the problem exists?

- Platforms are too complex with long, confusing steps
- Services are mostly in English/Hindi, not local languages
- Many users can't use smartphones or digital tools
- No easy way to know which schemes you're eligible for
- Rural areas lack Seva Kendras; people depend on agents
- Complaint systems are confusing; most people give up

Current Solutions and Their Limitations:

i. Some platforms already try to help:

- DigiLocker, UMANG, MyGov for schemes and documents
- CSCs and Seva Kendras for offline help
- State portals like eDistrict, TNeGA, etc.
- CPGRAMS for complaints

ii.But the gaps are clear:

- Not centralized people have to jump across multiple platforms
- Hard to use especially for new or elderly users
- Mostly in English/Hindi not in local languages
- No personal guidance users don't know what they're eligible for
- Not voice-based hard for low-literacy users
- No clear updates after applying or complaining

References:

Reference 1 Reference 2 reference 3

Chapter 2: Solution

An AI-powered personal assistant that speaks your language, guides you through government services, and learns from others to help you better, all in one simple app.

1. What Is the use of Gen AI?

GenAI acts like a smart guide that understands what a person wants, even if they don't say it perfectly. It reads long, confusing scheme info and explains it simply in the user's own language. It can fill out forms by listening to voice, write clear complaints, and guide people step-by-step, just like a helpful human, but powered by AI. It learns from other users' problems too, so it gives better help each time. All of this happens in one app, using GenAI behind the scenes to make things easy, personal, and fast.

Solution Framework: <u>Drive_link</u>

2. Execution:

- We use LLMs to process user inputs and dynamically generate simplified scheme explanations and complaint drafts.
- Scheme data is sourced from public datasets such as data.gov.in, the Indian Government Schemes Dataset on Kaggle, and official ministry portals. The data is cleaned, tagged with metadata (e.g., eligibility, state, benefits), and stored in a structured database.
- A vector database stores anonymized past user interactions. Using RAG (Retrieval Augmented Generation), relevant past experiences are fetched to personalize responses.
- Basic onboarding data is stored securely and used to pre-fill forms via backend logic.
- Voice input is converted using speech-to-text APIs; responses are read out using text-to-speech.
- All interactions are logged and tracked to offer status updates, ensuring continuity and support across sessions.

API REQUIRED:

- **OpenAI GPT-4/GPT-4o** Used for generating simplified scheme explanations and drafting complaints.
- **Google Web Speech API** For speech-to-text and text-to-speech capabilities.
- **Bhashini Translator API** (India's official multilingual translator) for Indian language support.

3. Scalability And Impact:

As more people use the app, it learns from their experiences and gets better at helping others. It can suggest more accurate schemes, give smarter advice, and share helpful stories from similar users. Over time, the assistant becomes more useful and personalized for everyone. This makes it easy to scale across different areas and help more citizens in a meaningful way.