

Project Design Phase Problem – Solution Fit Template

Date	27 June 2025
Team ID	LTVIP2025TMID31892
Project Name	Citizen AI – Intelligent Citizen Engagement Platform
Maximum Marks	2 Marks

◇ 1. Problem Recap

Summarize the core issues being addressed:

Citizens across India face challenges in effectively communicating with government departments due to language barriers, limited digital access, delayed grievance redressal, lack of transparency, and absence of intelligent, personalized support systems.

◇ 2. Vision Statement

To build an AI-powered citizen engagement platform that empowers every Indian citizen to communicate with the government easily, in their own language, through intelligent, inclusive, and accessible technology.

◇ 3. Proposed Solution

Aspect	Description
Solution Name	Citizen AI
What It Does	Provides an AI-powered interface for citizens to submit queries, track status, and receive updates via text, voice, or chatbot in multiple Indian languages.

Aspect	Description
Platform	Web App, Mobile App, WhatsApp Bot, Voice Bot, Admin Dashboard
Scope	
Key Modules	NLP Chatbot, Voice Assistant, Ticketing System, Sentiment Analysis, Feedback Engine
Backend Layer	AI Natural Language Processing (multilingual), Entity Recognition, Sentiment Detection
Integration	Government databases, e-Governance APIs, UIDAI, DigiLocker, SMS/Email services
User Roles	Citizens, Government Officers, Administrators

◇ 4. Key Features

Feature	Purpose
Multilingual Chatbot	Enables real-time communication in regional languages
Voice Input Support	Allows less literate citizens to interact easily
Ticketing System	Tracks issue submissions and updates citizens on progress
Feedback and Survey Module	Captures citizen satisfaction and suggestions
Analytics Dashboard	Gives government officials a sentiment- and priority-based view of issues
AI Routing & Prioritization	Auto-assigns grievances based on urgency, topic, or location

◇ 5. Benefits

Stakeholder	Benefits
Citizens	Faster redressal, transparency, ease of access, inclusion

Stakeholder Benefits

Govt. Officials Reduced workload through automation, better insights, improved service

Policy Makers Data-driven decision-making based on real-time citizen feedback

◇ 6. Alignment with National Goals

- **Digital India:** Promotes digital-first citizen interfaces
- **Smart Cities Mission:** Enables smart, responsive governance
- **Language Inclusion:** Supports all major Indian languages
- **AI for Good:** Uses responsible AI for public benefit

◇ 7. Technology Overview

Layer Tools/Tech

Frontend React, Flutter, Tailwind CSS

Backend Node.js / FastAPI, PostgreSQL, MongoDB

AI/NLP Hugging Face Transformers, IndicBERT, LangChain

DevOps Docker, Kubernetes, GitHub Actions

Security OAuth 2.0, HTTPS, AES Encryption

◇ 8. Future Extensions

- Integration with **India Stack** (e.g., DigiLocker, UPI)
- Offline voice bot for areas with low internet
- Custom citizen service score based on participation
- Predictive analytics for resource planning

◇ 9. Proposed Solution Output

- Functional Specification Document
- High-level Wireframes & System Architecture
- Defined Modules and APIs for Development
- Initial Prototype or MVP Design

☑ Conclusion

Citizen AI offers a scalable, intelligent, and inclusive approach to transforming the way citizens interact with their government. It blends cutting-edge AI with a deep understanding of India's linguistic, cultural, and administrative diversity.