Project Title

Project Documentation

1. Introduction

Project title: Citizen Al

Leader: Shalini R

Team member: Padmavathy P

Team member: Princy A

Team member: Rishvana A

2. Project Overview

Purpose:

Citizen AI is designed to enhance the interaction between governments, communities, and

individuals by enabling transparent, accessible, and intelligent citizen services. It uses Artificial

Intelligence to help citizens easily access government information, provide feedback, and receive

real-time guidance on civic issues. For officials, it supports decision-making, policy analysis, and

public engagement.

Features:

• Conversational Interface: Natural citizen-government interaction. Citizens can ask questions,

access government services, and receive responses in plain language.

• Policy Summarization: Simplified understanding of policies. Converts lengthy documents into

easy-to-understand summaries.

• Feedback Collection: Community voice integration. Gathers public opinions and suggestions

for better governance.

• Resource Guidance: Citizen assistance. Provides information about local facilities, emergency

contacts, and welfare schemes.

• Transparency Dashboard: Accountability in governance. Displays real-time updates on

projects, budgets, and development activities.

3. Architecture

Frontend (Web/App): User-friendly interface for citizens to interact, submit feedback, and access services.

Backend (API Services): Provides Al-driven features such as policy summarization, feedback analysis, and chatbot interaction.

Al Models: Used for natural language understanding, summarization, and sentiment analysis.

Database: Stores citizen queries, feedback, government documents, and analytics data.

4. Setup Instructions

Prerequisites:

Python 3.9+, Virtual environment tools, API keys for AI models, Internet access for cloud services

Installation Process:

- Clone the repository
- Install dependencies from requirements.txt
- Configure .env file with credentials
- Run backend server (FastAPI/Django/Flask)
- Launch frontend (React/Streamlit)

5. Folder Structure

App/ - Backend logic and APIs

Ui/ - Frontend interface

Models / - AI models and scripts

Data/ - Documents, citizen feedback, policy records

Dashboard.py - Entry point for the main dashboard

6. Running the Application

- ➤ Start backend API server
- ➤ Launch frontend UI
- > Citizens can log in, ask queries, submit feedback
- Officials can view reports, analytics, and citizen insights

7. API Documentation

- POST /ask Citizen queries answered by Al
- POST /upload-policy Upload and summarize government policies
- GET /feedback Retrieve citizen feedback reports
- GET /dashboard Transparency data on ongoing projects

8. Authentication

Token-based authentication (JWT)

Role-based access (citizen, official, admin)

G. User Interface

Chatbot window for citizen interaction

Dashboard with service updates

Feedback forms

Policy summaries view

Report download option

10. Testing

Unit Testing: For Al responses and summarization

API Testing: With Postman/Swagger

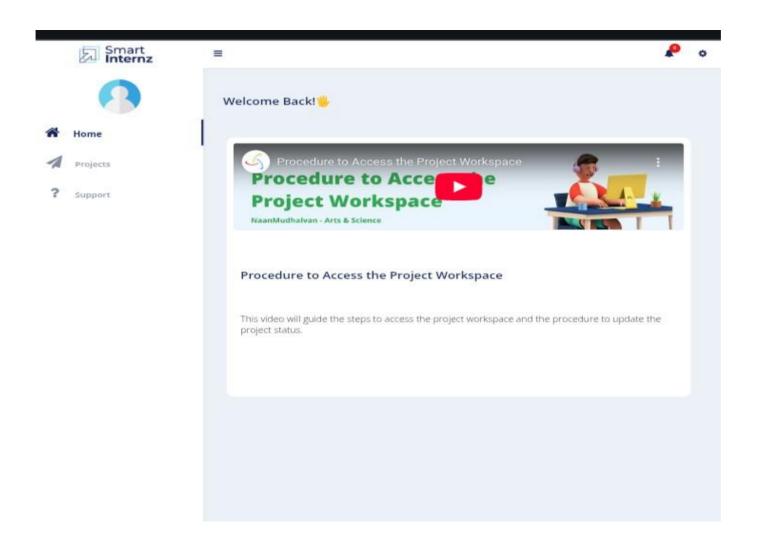
Manual Testing: For UI workflows

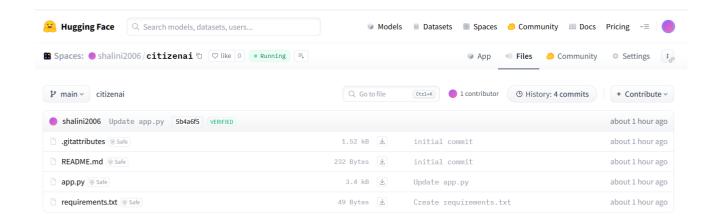
Edge Case Handling: Large documents, incomplete inputs

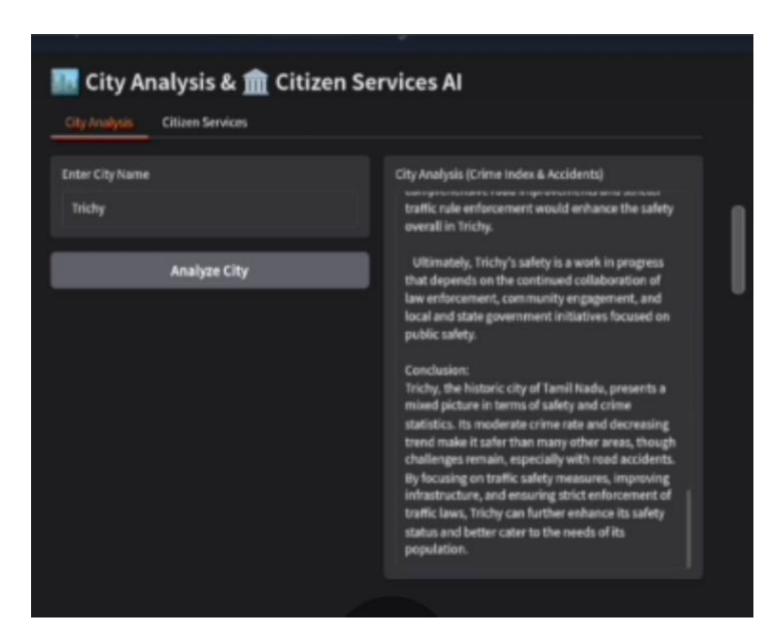
11. Future Enhancements

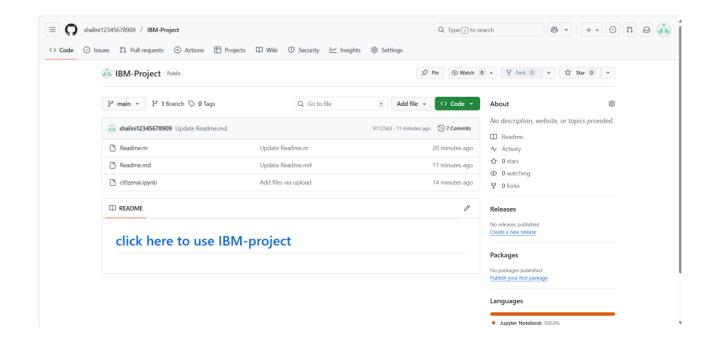
- Voice-enabled citizen queries
- Regional language support
- Integration with local government portals
- Predictive analysis for urban planning

12. Screenshots









13. Known issues

- **1. Limited Language Support** The system currently works only in English, which restricts accessibility for citizens who prefer regional languages.
- **2. Data Privacy Concerns** Handling citizen queries and feedback may involve sensitive information, requiring stronger encryption and compliance with privacy regulations