Citizen AI – Intelligent Citizen Engagement Platform

1.Introduction

Project Title: Citizen AI-Intelligent Citizen Engagement Platform
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2. Project Overview

The purpose of Citizen AI – Intelligent Citizen Engagement Platform is to empower citizens and city officials to engage more effectively, provide feedback, and access important city services through AI-driven solutions. The platform integrates natural language processing, document summarization, predictive analytics, and citizen feedback mechanisms to create a more connected and responsive urban experience.

3. Key Features

- Conversational Interface – Natural language interaction for citizens and officials.
- Policy Summarization – Converts lengthy government documents into easy summaries.
- Resource Forecasting – Predicts future energy, water, and waste usage.
- Eco-Tip Generator – Provides sustainability tips based on user behavior.
- Citizen Feedback Loop – Collects and analyzes citizen feedback for city planning.
- KPI Forecasting – Helps track progress of city performance indicators.
- Anomaly Detection – Flags unusual data trends for quick intervention.
- Multimodal Input Support – Allows uploading text, PDFs, and CSV files.
- User-Friendly UI – Built with Streamlit for dashboards, chat, and reports.

4. System Architecture

The project consists of a Streamlit-based frontend, a FastAPI backend, and IBM Watsonx Granite LLM integration. Pinecone is used for vector search, and ML models are built with Scikit-learn for forecasting and anomaly detection.

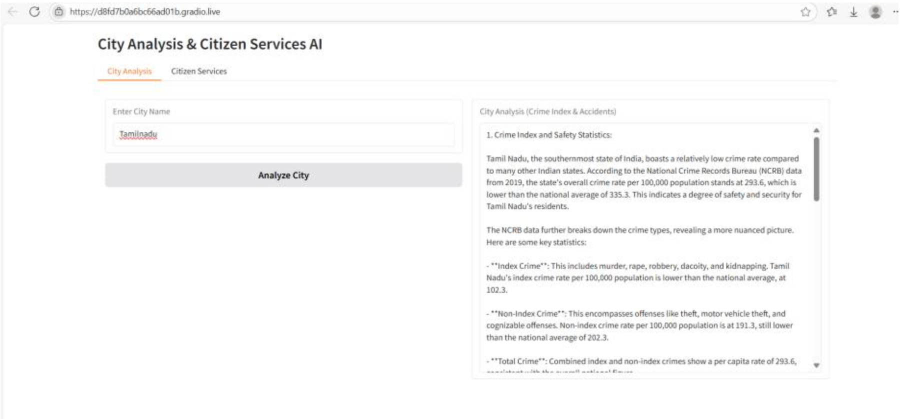
5. Setup Instructions

1. Install Python 3.9 or later and required libraries using requirements.txt
2. Configure API keys for IBM Watsonx and Pinecone in a .env file
3. Start the FastAPI backend server
4. Run the Streamlit dashboard to access the web interface
5. Upload documents and interact with chat, forecasting, and report modules.

6. Testing & Future Enhancements

Testing includes unit testing, API testing via Swagger UI, and manual testing for file uploads, chat interactions, and forecasts. Future enhancements include secure authentication (OAuth2/JWT), session history tracking, and improved ML models for better prediction accuracy.

7.Screen Shots


https://d8fd7b0a6bc66ad01b.gradio.live
City Analysis & Citizen Services AI
City Analysis
Citizen Services
Analyze City

Enter City Name: Tamilnadu

City Analysis (Crime Index & Accidents)

1. Crime Index and Safety Statistics:

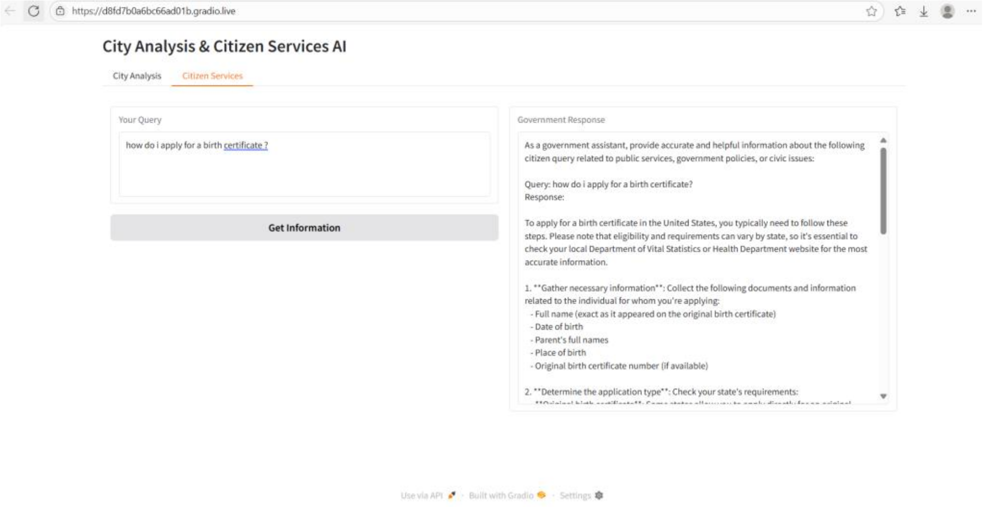
Tamil Nadu, the southernmost state of India, boasts a relatively low crime rate compared to many other Indian states. According to the National Crime Records Bureau (NCRB) data from 2019, the state's overall crime rate per 100,000 population stands at 293.6, which is lower than the national average of 335.3. This indicates a degree of safety and security for Tamil Nadu's residents.

The NCRB data further breaks down the crime types, revealing a more nuanced picture. Here are some key statistics:

- **Index Crime**: This includes murder, rape, robbery, dacoity, and kidnapping. Tamil Nadu's index crime rate per 100,000 population is lower than the national average, at 102.3.

- **Non-Index Crime**: This encompasses offenses like theft, motor vehicle theft, and cognizable offenses. Non-index crime rate per 100,000 population is at 191.3, still lower than the national average of 202.3.

- **Total Crime**: Combined index and non-index crimes show a per capita rate of 293.6,



Your Query: how do i apply for a birth certificate ?

Government Response

As a government assistant, provide accurate and helpful information about the following citizen query related to public services, government policies, or civic issues:

Query: how do i apply for a birth certificate?
Response:

To apply for a birth certificate in the United States, you typically need to follow these steps. Please note that eligibility and requirements can vary by state, so it's essential to check your local Department of Vital Statistics or Health Department website for the most accurate information.

1. **Gather necessary information**: Collect the following documents and information related to the individual for whom you're applying:
   - Full name (exact as it appeared on the original birth certificate)
   - Date of birth
   - Parent's full names
   - Place of birth
   - Original birth certificate number (if available)

2. **Determine the application type**: Check your state's requirements: