Citizen AI - Intelligent Citizen Engagement Platform

Overview

Citizen AI is an intelligent platform designed to modernize how governments interact with citizens. By combining Flask, IBM Watson, and IBM Granite models, it facilitates real-time, AI-driven communication. It enhances citizen satisfaction, government transparency, and operational efficiency through natural conversations, sentiment analysis, and actionable insights.

Core Technologies

- Framework: Flask (Python)
- AI Models: IBM Granite foundation models
- AI Services: IBM Watson (for NLP, STT, sentiment)
- Visualization: Dynamic web dashboard (likely using JS libraries like Chart.js or D3.js)
- Architecture: Modular, scalable (microservice-compatible)

Scenario 1: Real-Time Conversational AI Assistant

Functionality:

- Enables 24/7 natural-language interaction with government services.
- Citizens type questions or issues.
- Input is processed in real-time by IBM Granite, which returns human-like responses.
- Interface provides instant, contextually relevant replies.

Impact:

- Reduces wait times and manual processing.
- Improves accessibility of public information.
- Enables issue reporting and service navigation seamlessly.

Scenario 2: Citizen Sentiment Analysis

Functionality:

- Analyzes submitted text feedback using AI (e.g., analyse_sentiment function).
- Classifies feedback as Positive, Neutral, or Negative.

Impact:

- Helps identify satisfaction trends or public concerns.
- Aggregates insights into dashboards for quick government response.
- Enables better service delivery and responsiveness.

Scenario 3: Dynamic Dashboard

Functionality:

- Visualizes citizen sentiment and service feedback using real-time data.
- Tracks activity trends and issue frequency over time.
- Provides clear metrics and charts.

Impact:

- Empowers departments with actionable insights.
- Enhances decision-making for public services.
- Promotes transparency and data-driven governance.

Scenario 4: Personalized & Contextual Response System

Functionality:

- Utilizes IBM Granite's advanced NLU for query understanding.
- Offers contextual, tailored answers based on individual queries.

Impact:

- Delivers relevant and specific responses.
- Enhances user satisfaction with personalized interaction.
- Reduces confusion by interpreting nuanced citizen requests.