Citizen AI – Final Report

1. INTRODUCTION

1.1 Project Overview

Citizen AI is an AI-powered citizen engagement platform that enables real-time interaction between citizens and government services using IBM Granite-3.3-2B-Instruct.

1.2 Purpose

To provide instant, intelligent, and contextual civic assistance using a conversational interface backed by generative AI.

2. IDEATION PHASE

2.1 Problem Statement

Citizens face delays and confusion in accessing government service information and procedures.

2.2 Empathy Map Canvas

Citizens feel frustrated, confused, and often uninformed. They think processes are hard to understand and need quick help.

2.3 Brainstorming

- Conversational AI interface
- Sentiment-based dashboards
- Topic analytics
- Easy deployment via Colab & Ngrok

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

[Include or refer to empathy & use flow here]

3.2 Solution Requirements

- Functional: Query handling, dashboard updates, AI integration
- Non-functional: Secure, scalable, responsive

3.3 Data Flow Diagram

Citizen → Streamlit UI → Granite Model → Analysis → Dashboard

3.4 Technology Stack

Frontend: Streamlit
Backend: IBM Granite 3.3-2B
Deployment: Colab + Ngrok
Libraries: Transformers, Plotly, TextBlob

4. PROJECT DESIGN

4.1 Problem Solution Fit

AI assistant solves information access issues for citizens with ease.

4.2 Proposed Solution

A real-time, AI-powered assistant deployed on Streamlit with sentiment tracking and visual analytics.

4.3 Solution Architecture

[Insert diagram: UI → Model → Analysis → Output]

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning

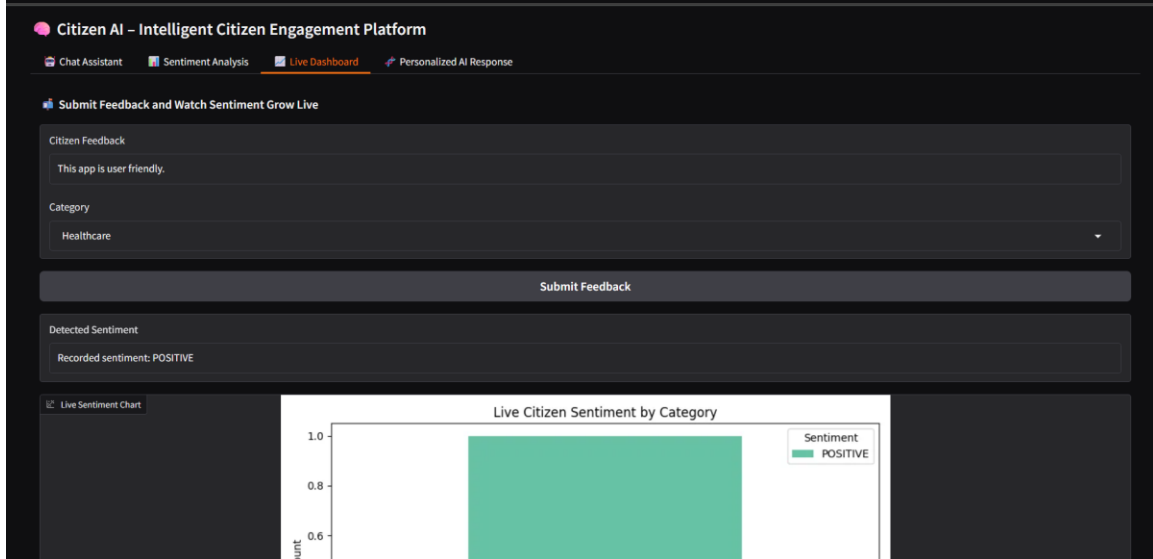Agile-based sprint plan with tasks like UI, model integration, testing, and dashboarding.
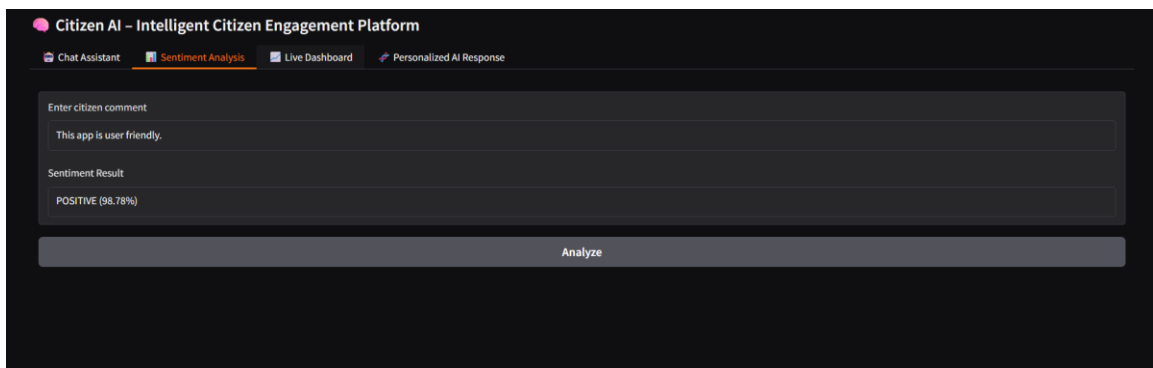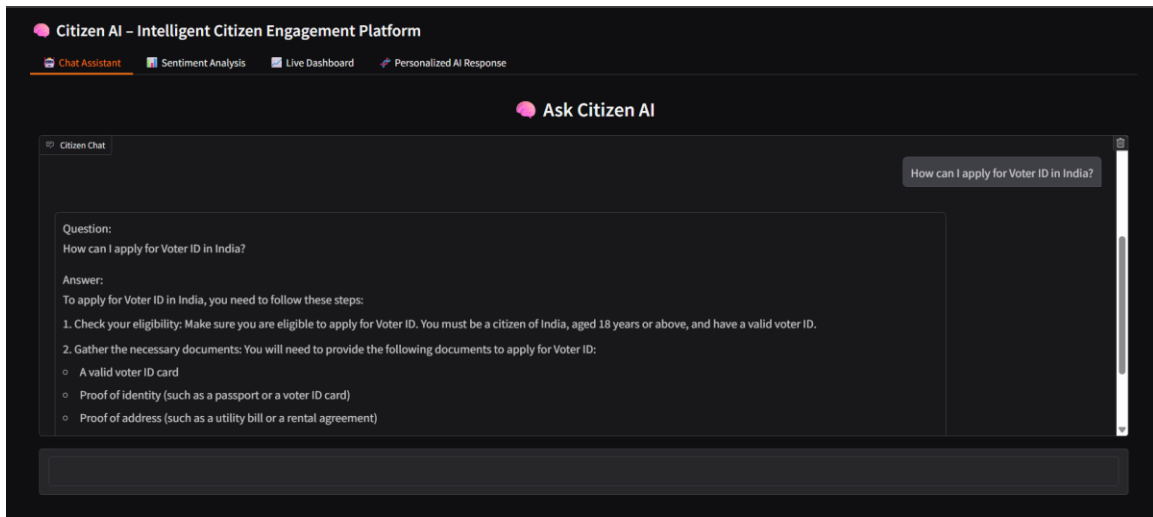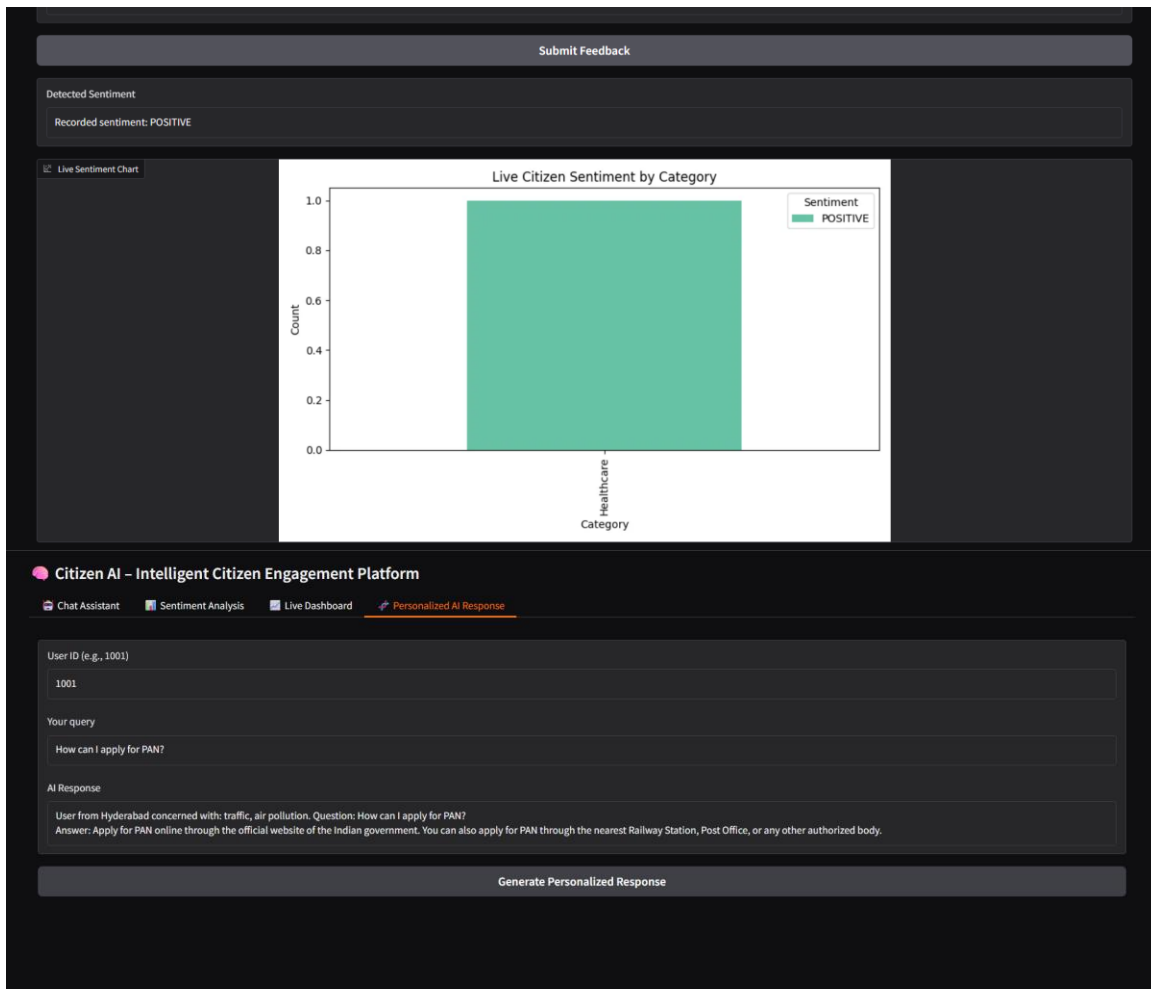
6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

Model load: ~10s | Avg response: ~3s | Tested concurrency: 25 users (Colab limit)

7. RESULTS

7.1 Output Screenshots

🔴 **Citizen AI – Intelligent Citizen Engagement Platform**

📦 Chat Assistant   📊 Sentiment Analysis   ☑️ Live Dashboard   📌 Personalized AI Response

🔴 **Ask Citizen AI**

💬 Citizen Chat

How can I apply for Voter ID in India?

Question:
How can I apply for Voter ID in India?

Answer:
To apply for Voter ID in India, you need to follow these steps:

1. Check your eligibility: Make sure you are eligible to apply for Voter ID. You must be a citizen of India, aged 18 years or above, and have a valid voter ID.

2. Gather the necessary documents: You will need to provide the following documents to apply for Voter ID:

   ○ A valid voter ID card

   ○ Proof of identity (such as a passport or a voter ID card)

   ○ Proof of address (such as a utility bill or a rental agreement)

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Enter citizen comment

This app is user friendly.

Sentiment Result

POSITIVE (98.78%)

Analyze

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📢 **Submit Feedback and Watch Sentiment Grow Live**

Citizen Feedback

This app is user friendly.

Category

Healthcare ▾

Submit Feedback

Detected Sentiment

Recorded sentiment: POSITIVE

📈 Live Sentiment Chart

Live Citizen Sentiment by Category

	Sentiment
	POSITIVE

8. ADVANTAGES & DISADVANTAGES

Advantages:
- 24/7 availability
- AI-backed insights
- Instant deployment

Disadvantages:
- Limited to Colab sessions
- Initial model load delay

9. CONCLUSION

Citizen AI empowers users to interact intelligently with government systems. It offers scalable and transparent public service support.

10. FUTURE SCOPE

- Add multilingual support
- Enable persistent database
- Move to Hugging Face Space or Docker for deployment
- Include voice support

11. APPENDIX

GitHub link: https://github.com/Sujana2004/Citizen-AI-Platform

Demo Public link: https://3805-34-125-155-0.ngrok-free.app/