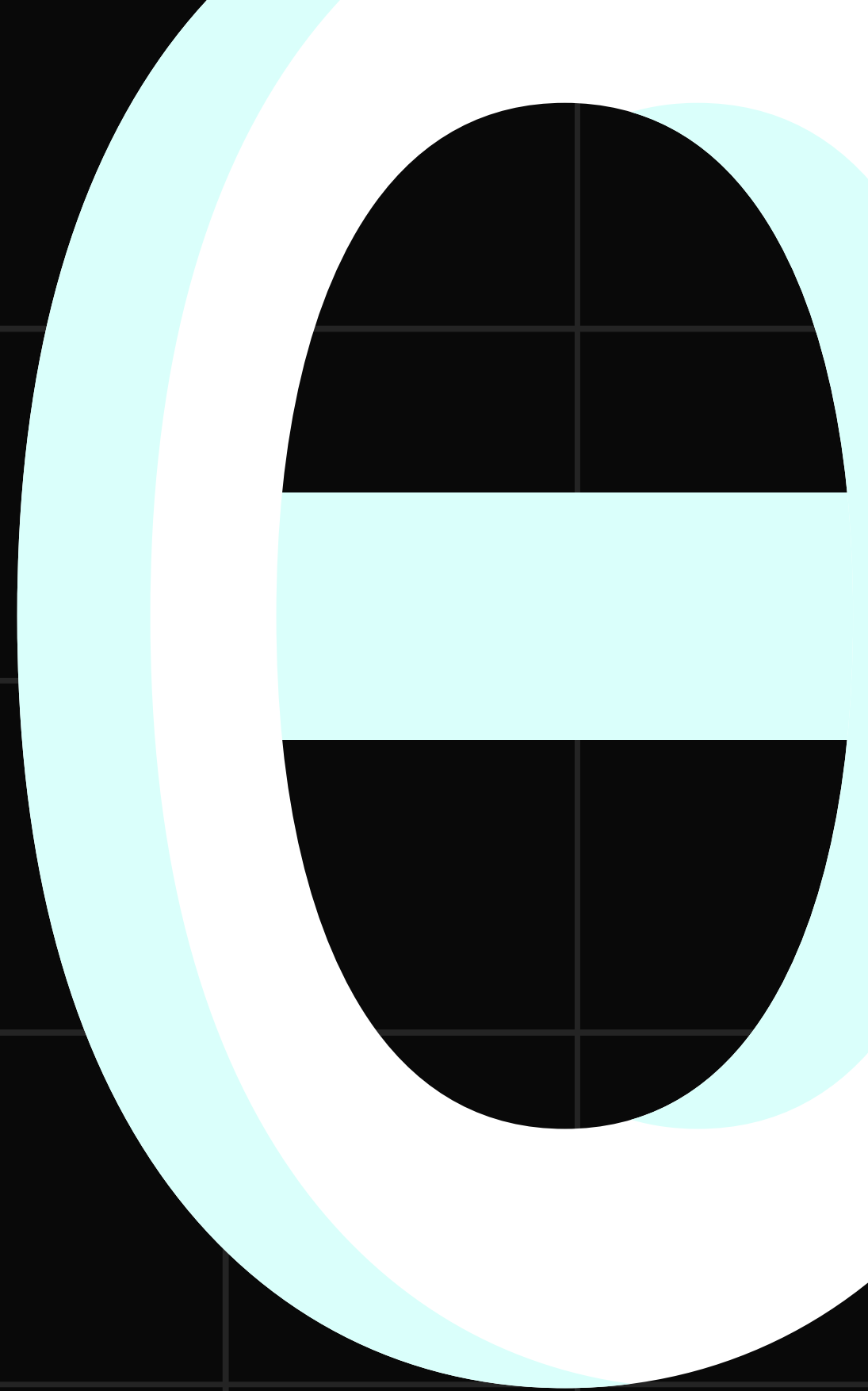What is....

DiGi Complaint

Project by **Sine_Theta**

Problem Statement

Citizen Centric Governance :
Redefining Public Service in the Digital Era

Imagine a world where government services are not just efficient but anticipatory, responding to citizen needs before they even arise. How can we use technology to create a government that feels more like a trusted partner than a distant authority? Think of GenAI-driven solutions that predict public service demands, or decentralized systems that allow citizens to co-create policies in real-time. Wouldn't it be soooo... cool useful?

Need of the hour

With the growing era of **DIGITALIZATION**, still a whole lot of tedious tasks are left unheeded, which can be handled using latest technologies like AI. One such task is **"Catering to public requests and handling them efficiently"** at authoritative level such as Municipal Corporations/Councils.

Still people are bound to write letters and directly contact the respective authority to lodge their complaints, which mostly are left unattended due to the efforts it take to read each one of them manually and analyze them and then reporting it to the higher authorities.

That's why the authorities are unable to get a better overview of Indian public's requests due to their shear magnitude and thus left unheard.

Solution!

Our solution aims to revolutionize the traditional complaint submission process by creating a **"Digital forum where citizens can easily channel issues they want addressed by higher authorities"**.

By allowing users to upvote each other's complaints, we enable the most pressing concerns to rise to the top, ensuring that **"The most impactful issues receive the attention they deserve"**.

This system simplifies the complaint catering process for authorities by **"Providing them with a clear and concise overview of public voices by using NLP to analyse the public responses"**. This collaborative approach fosters a transparent and efficient relationship between citizens and the Municipal Corporation.

Role of AI
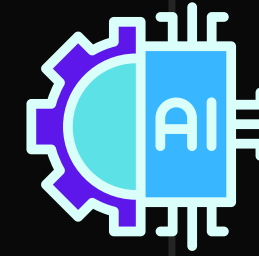
Filtering of Complaint Duplications Using AI

An AI-powered system which can automatically categorize complaints based on their content, urgency, and relevance (e.g., road maintenance, garbage disposal, water supply).

Large amount of data studied faster using NLP

NLP models can be used to melt down mountain worths of public responses into concise guidelines for authorities to prioritize onto. It will utilize the language used, number of upvotes and date

Automated Complaint Analysis & Prioritization

AI can gauge the sentiment behind each complaint, distinguishing between mild concerns and urgent grievances. The system can identify recurring issues and help authorities allocate resources more effectively.

Project Flow: Part 1

User Roles

- Citizen: Lodge complaints, upvote existing issues, comment, and track issue progress.
- Ward Representative: Review complaints, analyze issues, resolve or escalate to mayor.
- Mayor: Oversee city-wide issues, review ward reports, and provide directives.

Login & Interact

- User logs in → Role (Citizen, Ward Representative, Mayor) is identified.
- The user can make issues or upvote previously defined issues that are suggested dynamically based on the text inputted.
- The user can add tags to their issues, that can be used to segregate category wise the respective authority

Citizens' Portal

- Homepage (Slack-style threads): Display ward-wise issues; citizen's own ward issues appear on the homepage.
- Lodge Complaint: Input issue, add tags (e.g., electricity, water supply, road and transport) and remarks remarks.
- AI-powered search suggests similar issues to avoid creation of duplicates.
- Upvote Issues: Upvote complaints to prioritize them.
- Track Issue Status: View issue status (e.g., "Completed" tag for resolved issues).
- Comments: Comment on existing issues to provide additional input.

# Project Flow: Part 2

Ward Councillors' Portal

- Top Upvoted Issues: View top famous complaints for their ward.
- NLP Report Generation: Analyze issues threads using NLP for summary insights.
- Issue Management: Mark issues as "Complete" if resolved.
- Escalate to Mayor: Tag relevant issues, generate a report based on AI Insights, and forward them to the Mayor.

Mayor's Portal

- Review Ward Requests: Receive and analyze reports from Ward Representatives.
- City-Wide NLP Analysis: Get NLP-generated insights on city-wide concerns based on ward-level reports.
- Directives: Respond to ward issues, make decisions or do actions or provide resources.
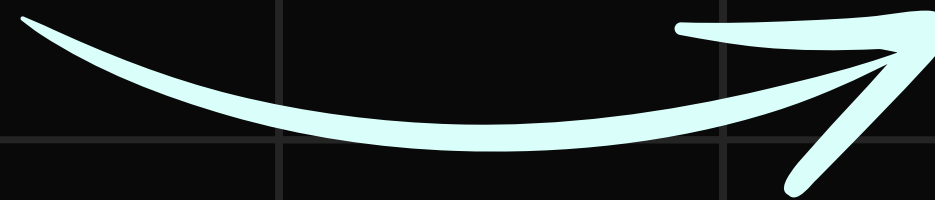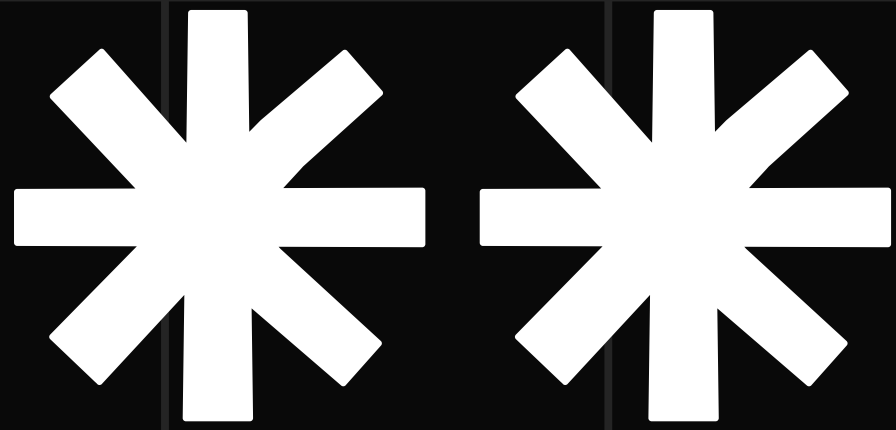
Tech Stack
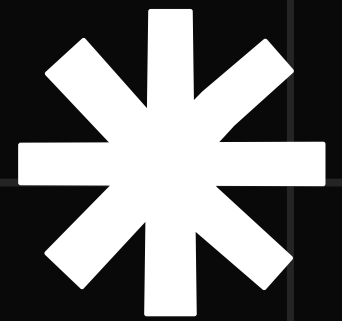
Backend API

Express.js

Frontend Server

React.js +Vite +Bootstrap

AI Ops

Groq API + llama-3.1-70b-versatile

✳ ✳

Thankyou

Sine_Theta θ

-Kunal   -Deenank   -Sourav