

Team Vercel

AI Powered

Citizen Grievance Redressal System

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OurTeam



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Full Stack Dev.



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Backend Dev.



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ML Engg.



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UI Dev.

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Problem



- 1.2M civic complaints unresolved each year
- Manual systems slow down response
- No tracking or user updates
- People feel unheard, especially in small towns
- Lack of trust weakens civic engagement
- Solution must be digital, scalable, and fair

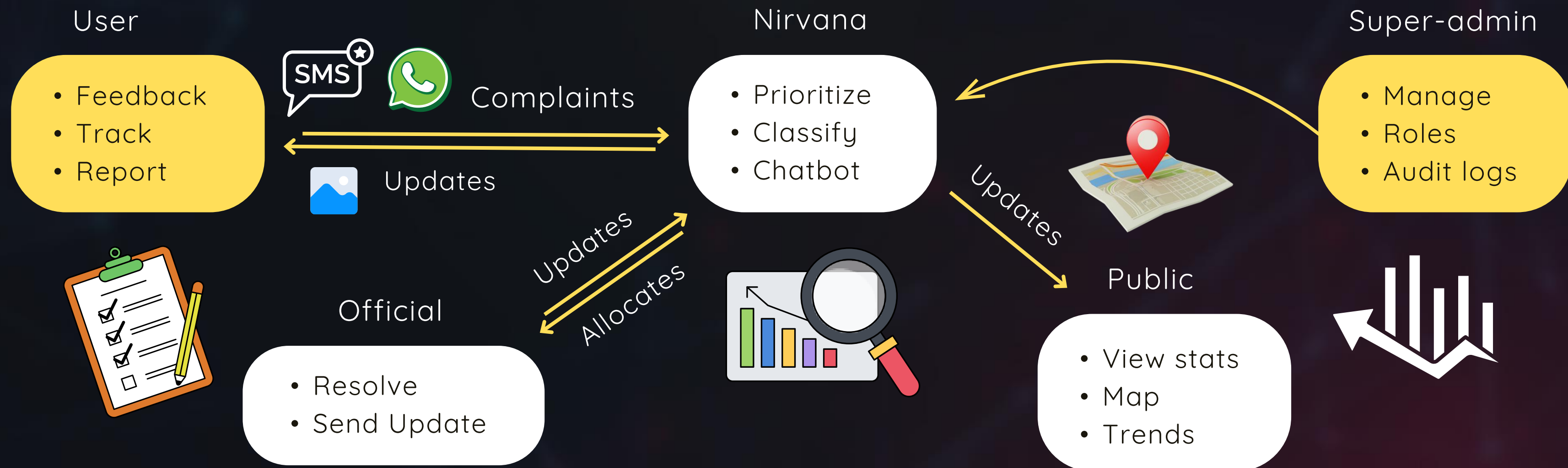
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Solution



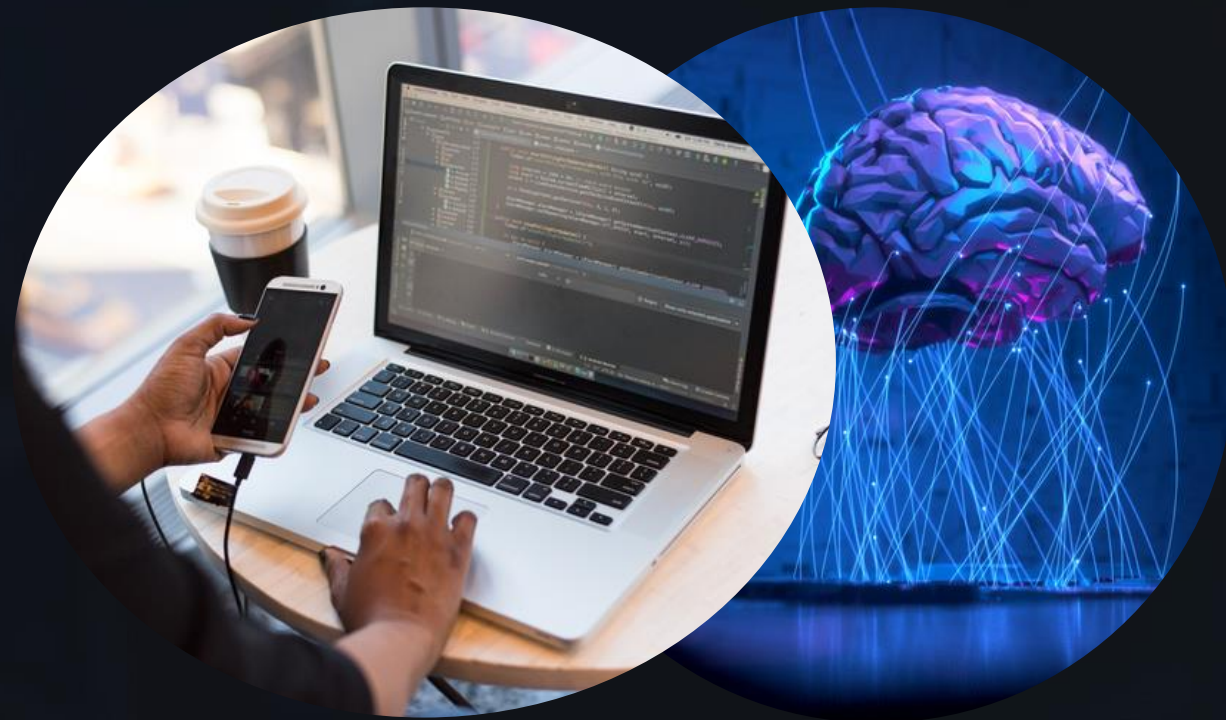
- Smart complaint categorization (text/image)
- Auto-priority using sentiment analysis
- Geo-tagged photos on a live map
- Real-time dashboards for officials
- WhatsApp-based reporting and updates
- Role-based secure access

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Key Innovation

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- Text classification via BERT
- Image tagging with CNN (ResNet)
- Sentiment scoring to assign priority
- Heatmaps generated from geo data
- Future: LLM-based auto replies
- Enhances fairness and response speed

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FutureScope



- Voice input & IVR complaint logging
- Predictive alerts for hotspot areas
- Smart city dashboard integration
- Auto-responses from fine-tuned LLMs
- Reward system for active citizens
- Multilingual analytics for governance

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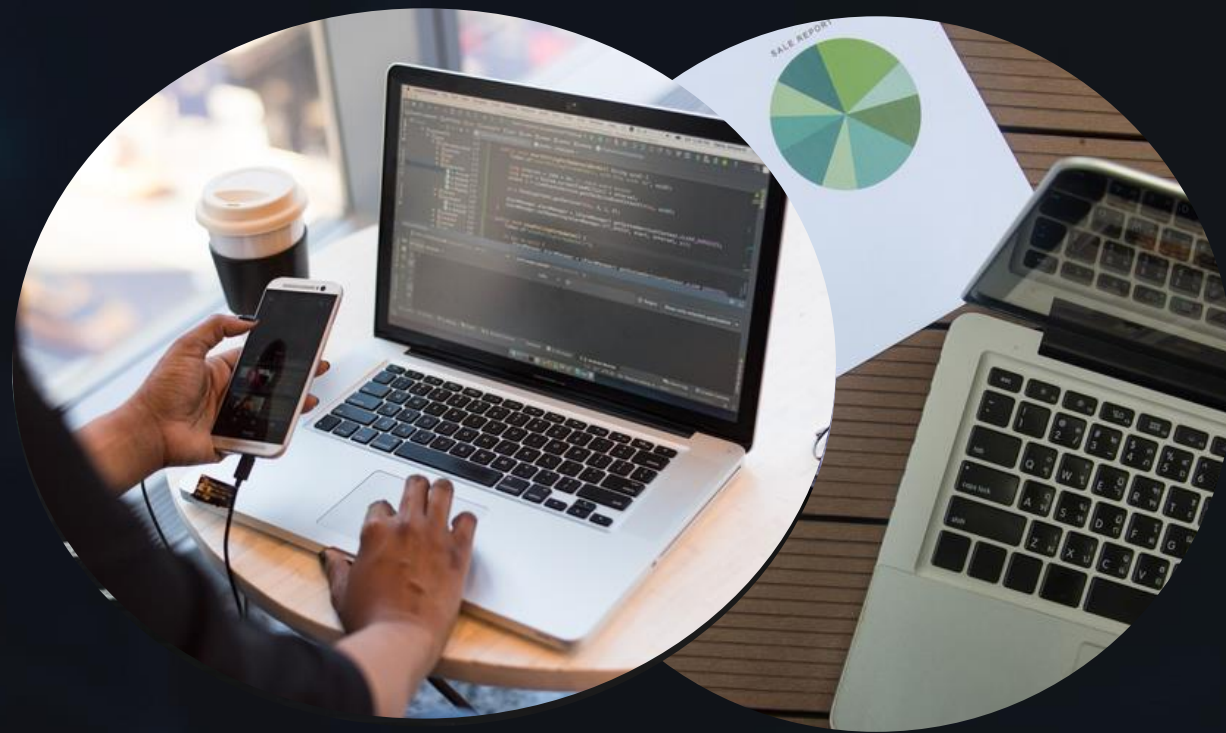
Revenue



- SaaS subscription for municipalities
- White-label for private agencies
- Analytics dashboard: paid premium features
- API access for third-party civic apps
- Sponsored civic awareness campaigns

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Deployments



- Frontend: React hosted on Vercel
- Backend: Python FastAPI on Render
- Supabase: Auth, DB, storage
- ML served via scalable APIs
- WhatsApp API for direct user interface
- Plug & play model for municipalities



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Costs / Benefits



- Effort Estimate: MVP in 6-7 weeks
- Subscriptions: Supabase, WhatsApp API
- Dependencies: Hosting, open-source models
- ROI: Faster resolutions, more trust, reduced overhead
- Low infra cost: \$100–\$500/month
- High civic impact: Transparent, inclusive, scalable

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CoreDemo

Complaints

Users

Analytics

Settings

Admin Dashboard

Manage incoming complaints and track progress.

1,520

Total Complaints

+12% last month

85

Pending Assignments

-5% last week

1,050

Complaints Resolved

+15% last month

3.5 days

Avg. Resolution Time

+0.2 days

New Complaints

View All →

Pothole on Main Street

New • 2023-11-15

High

Graffiti near Central Park

New • 2023-11-15

Medium

Streetlight out on Oak Ave

New • 2023-11-14

Excessive noise complaint

New • 2023-11-14

Illegal parking blocking driveway

New • 2023-11-13

Complaints In Progress

View All

Water Leak near

Model XZ-2000

Complaint Details

Assigned to: Jane Doe

Activity Timeline

Comments & Activity

Status

Assignment

Quick Actions

E-Governance CMS

Citizen DashboardAdmin DashboardPublic Dashboard

Report New Complaint

Please fill out the form below to submit your complaint. Providing details

Form Progress

Complaint Details

Provide a title and detailed description of your complaint.

Complaint Title

e.g., Pothole on Main Street

Detailed Description

Describe the issue in detail, including when it occurred and any relevant background information.

Complaint Type

Select a type

Location Information

Specify where the complaint is located.

Location Category

Select category

Specific Location / Address

e.g., Near 123 Main Street, or within Central Park

Map Placeholder (integration with mapping service would go here)

Attach Evidence (Optional)

Upload photos or documents that support your complaint (e.g., photos of damage, scanned documents).

Select File(s)

No files selected.

Submit Complaint

E-Governance CMS

Citizen DashboardAdmin DashboardPublic Dashboard

Admin Dashboard

Total Complaints

16

All complaints received to date

Pending Complaints

5

Require immediate attention

Resolved Complaints

5

Successfully addressed

Complaints by Status

In Progress

Pending

Resolved

Closed

Complaints by Category

Complaints Submitted Over Time

Search complaints...

All Statuses

ID	Title	Status	Category	Submitted By	Assigned To	Date
CMPO01	Potholes on Main Street	In Progress	Roads & Infrastructure	Alice Smith	Dept. Public Works	2023-10-28
CMPO02	Illegal Dumping at Park	Pending	Sanitation	Bob Johnson	Unassigned	2023-10-27
CMPO03	Broken Streetlight	Resolved	Public Utilities	Charlie Davis	Utility Company	2023-10-25
CMPO04	Noise Complaint - Construction	In Progress	Public Safety	Diana Miller	Code Enforcement	2023-10-28
CMPO05	Blocked Storm Drain	Pending	Water & Drainage	Ethan Wilson	Unassigned	2023-10-29