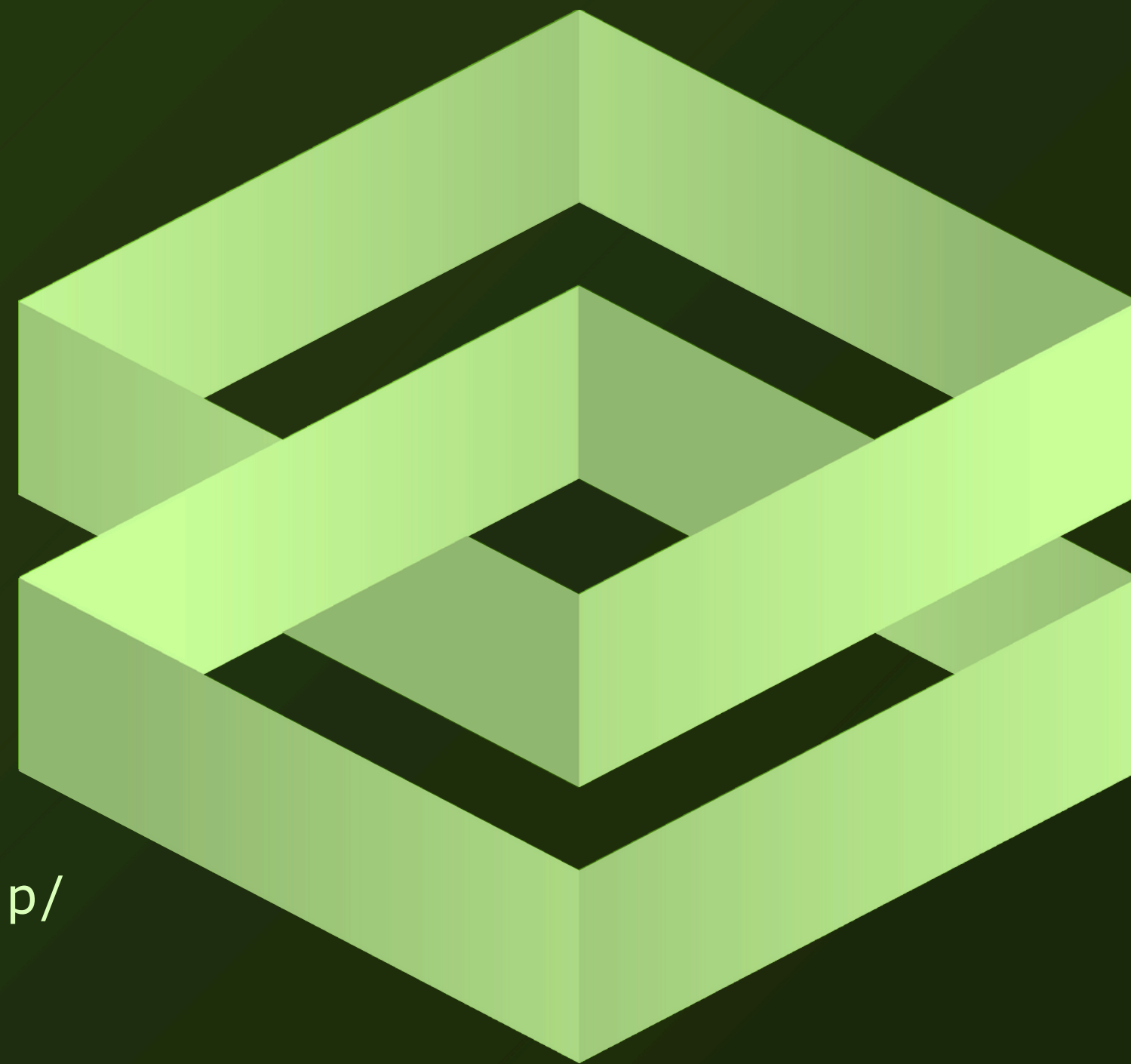




# AVINYA INNOVATE 2026

HackVerse

Deployment link: <https://swachhprahari.vercel.app/>





# PROBLEM STATEMENT

*Delhi's Cleanliness Crisis Needs Community-Powered Action*

## THE GROUND REALITY

- India generates 1.6 lakh+ tonnes waste daily; only ~60% processed. (CPCB)
- Delhi produces 11,000+ TPD, landfills near saturation. (MCD)
- Many garbage complaints remain unresolved. (TOI/NCR reports)
- No real-time civic coordination or transparent tracking system.

## CURRENT SYSTEM GAPS

### Citizens →

- No easy way to organize cleanups.
- Individual efforts feel useless.



### Authorities →

- Limited manpower
- Delayed reporting
- No community mobilization



*What if every citizen could become an active cleanup force — coordinated by AI?*



# SOLUTION



## CLEANCONNECT DELHI – AI POWERED COMMUNITY CLEANUP PLATFORM

**A platform that uses AI to identify dirty areas, mobilize nearby volunteers, and verify cleanup impact in real time.**



### Smart Issue Detection

#### FIRST MILESTONE

- Citizens upload images of dirty areas.
- AI analyzes waste density and estimates cleanup effort.



### Intelligent Volunteer Mobilization

#### SECOND MILESTONE

- Nearby users are automatically notified.
- Volunteers form cleanup groups with optimized manpower.



### Verified Action + Rewards

#### THIRD MILESTONE

- After cleanup, AI verifies improvement using before-after images.
- Contributors earn Green Credits and impact recognition.

Upload Area

AI Analysis

Volunteer Match

Cleanup

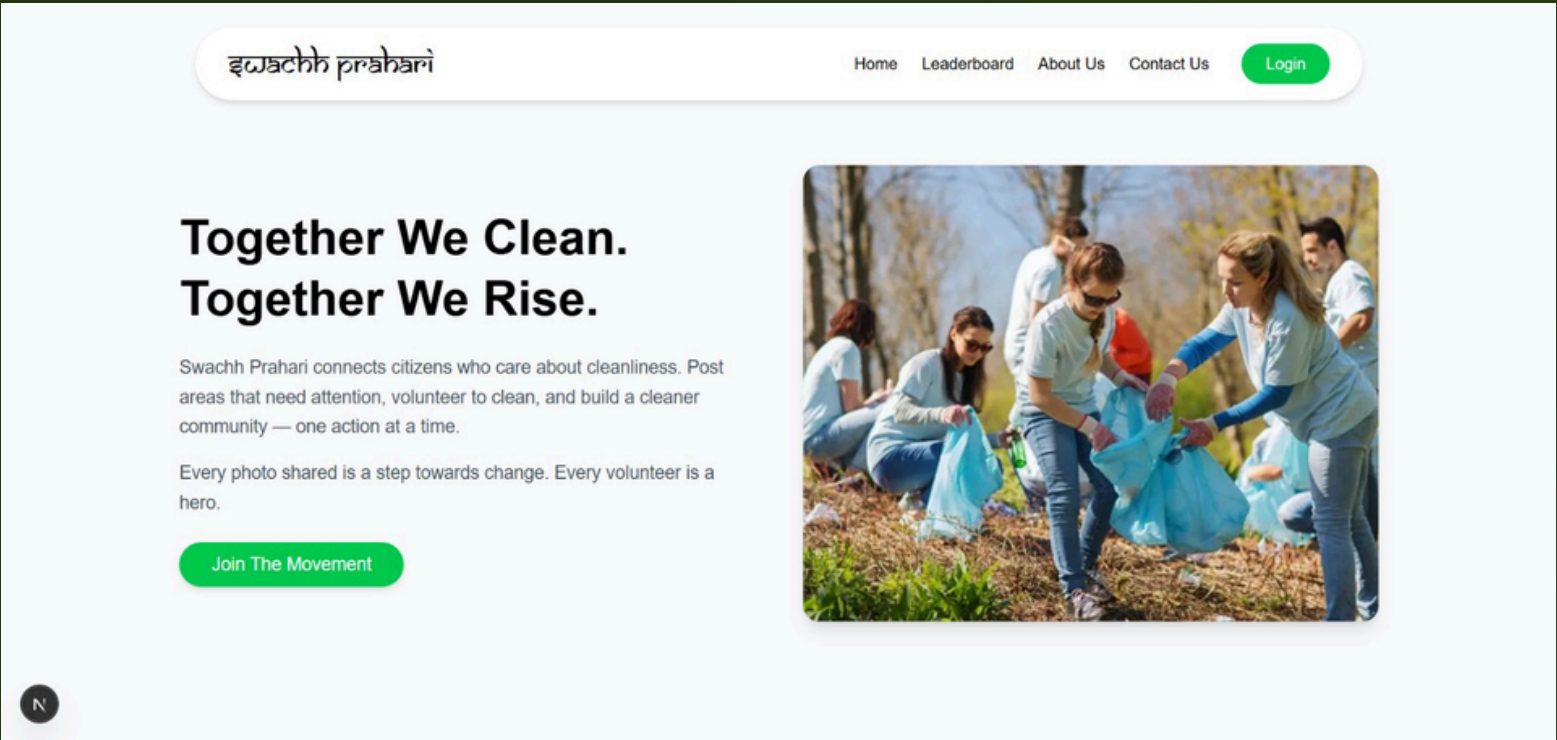
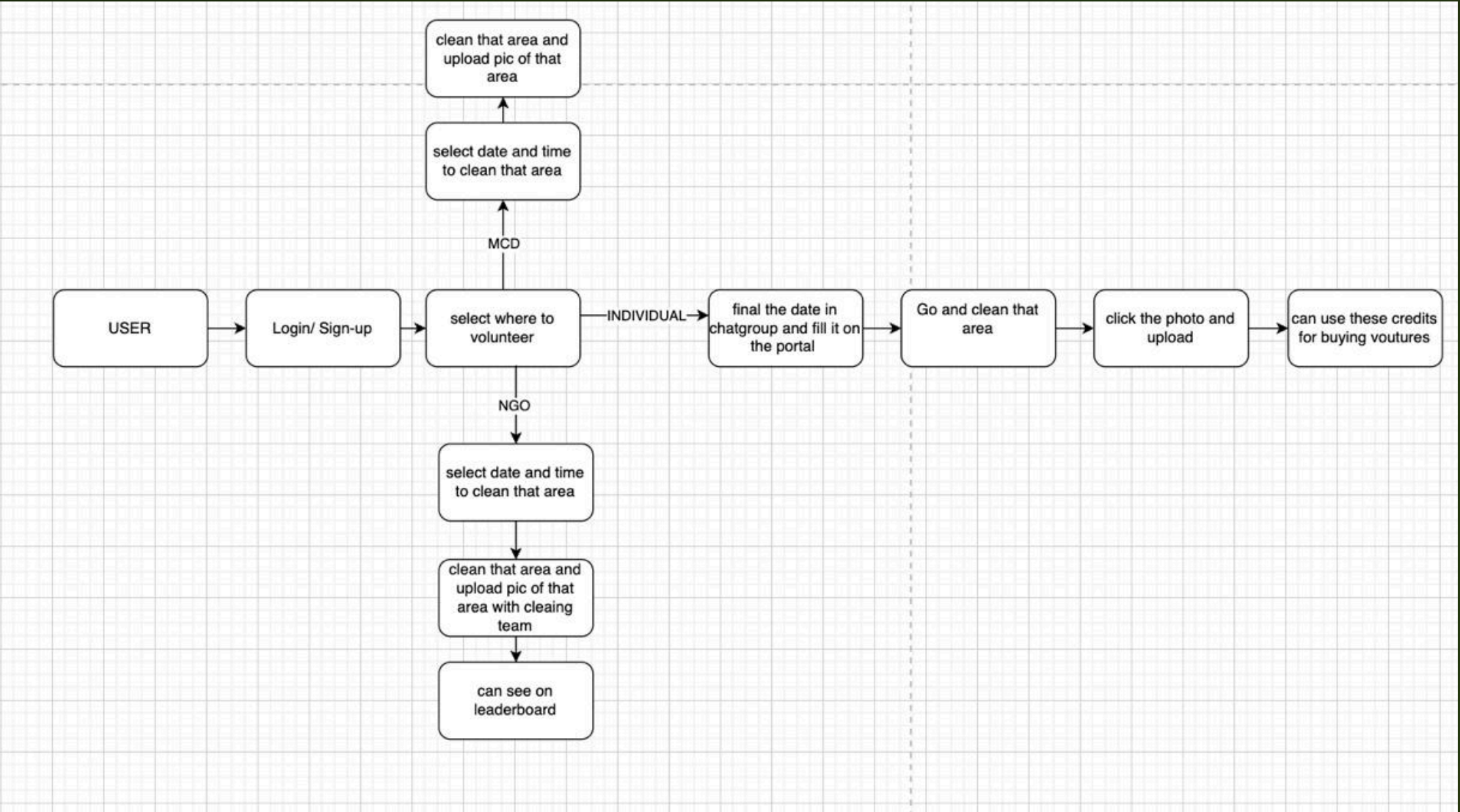
AI Verification

Rewards + Impact

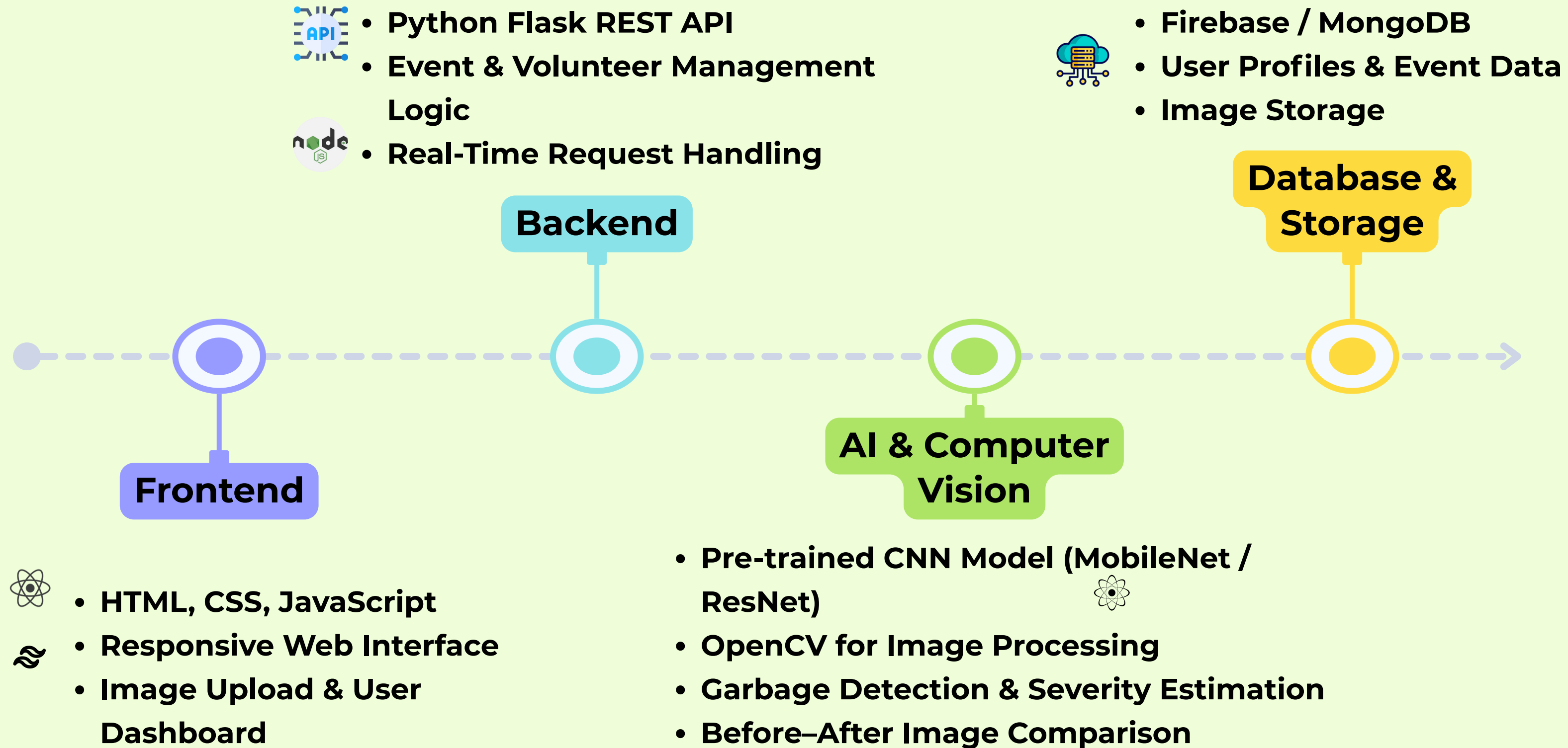




# ARCHITECTURE



# TECHNOLOGY USED



# FEATURE/USP



## Issue Upload System

Users upload dirty area images with location tagging.

## Real-Time Community Mobilization

Nearby volunteers receive instant cleanup notifications.

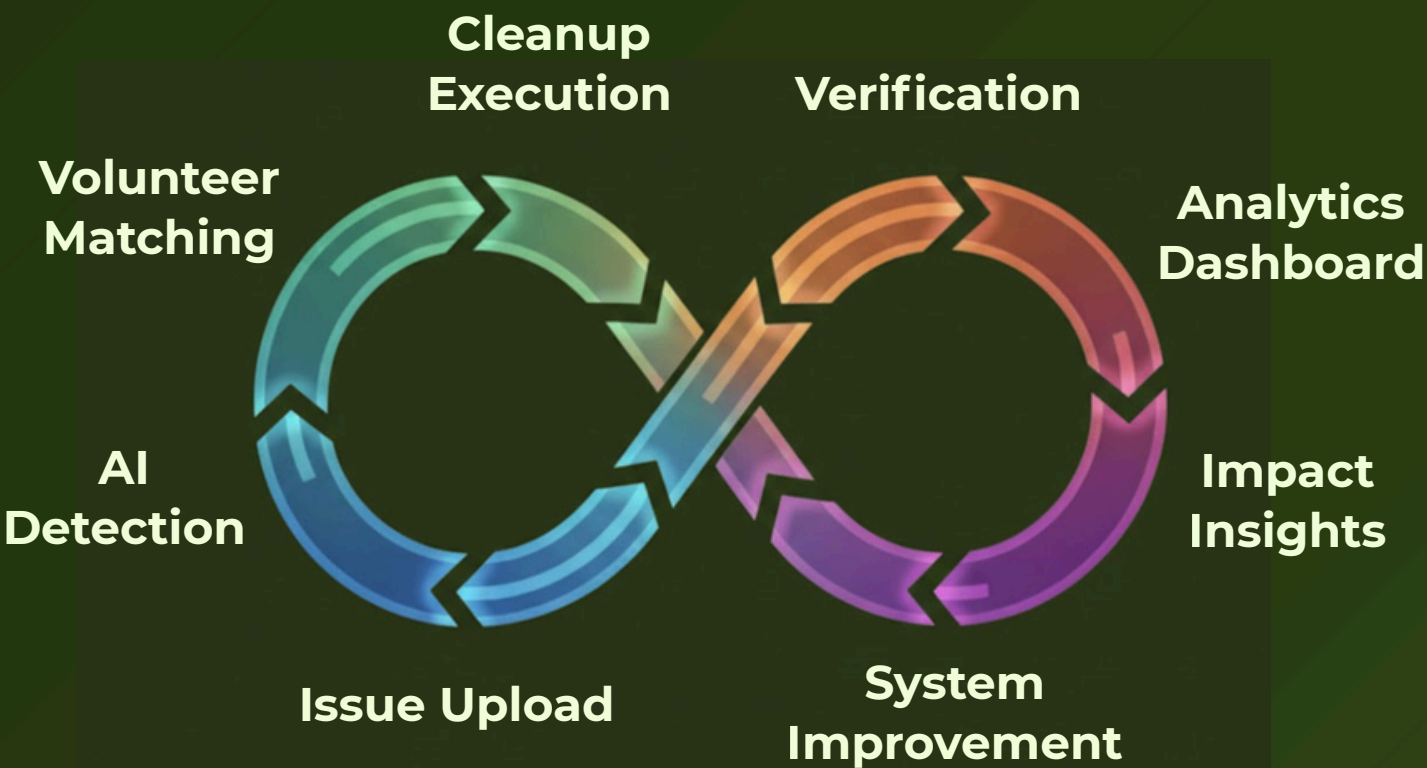
## Gamified Green Credits

Reward points motivate consistent citizen participation.

## Live Impact Dashboard

Displays cleanups completed, volunteers involved, and environmental impact.

## SEEMLESS OPERATIONS + CONTINUOUS INTELLIGENCE



## KEY DIFFERENTIATORS (USP)

### AI-Powered Cleanup Detection



Automatically detects garbage severity and predicts required manpower.

### Smart Volunteer Capacity Control



AI auto-locks registrations when optimal volunteer count is reached.

### Verified Action System



Before-after image verification ensures only real cleanups are rewarded.



# FEASIBILITY IN REAL LIFE



## Deployment Ready

- Web-based platform — no hardware required
- Works on existing smartphones
- Can be piloted in campuses, parks, and local communities
- Minimal setup and onboarding effort



## Technically Practical

- Uses pre-trained AI models
- Lightweight backend architecture
- Low compute and hosting cost
- Reliable open-source tools



## Scalable & Sustainable

- City-independent design
- Modular feature expansion
- Supports large user base
- Data-driven system improvement

## WHY PEOPLE WILL JOIN & STAY

### Social Recognition

- Leaderboards
- Public profile credibility
- Digital contribution badges



### Rewards & Incentives

- Voucher-based Green Coin system
- Redeemable benefits and perks



### Community Impact

- Visible environmental contribution
- Real-world change participation



### Brand Visibility for Partners

- NGO branding during cleanup drives
- CSR exposure for sponsoring organizations



THANK YOU