

Sidhik Thorat
sidhikthorato8@gmail.com

Swed Lengare
swed.lengare25@gmail.com

About Us:

We are Sidhik Thorat and Swed Lengare, final year students of Electronics and Computer Science at Vivekananda Education Society's Institute of Technology. Our passion lies in leveraging AI and technology to solve real-world societal problems. With hands-on experience in full-stack development, data analytics, and machine learning, we aim to create a meaningful and scalable solution for environmental sustainability.

We joined KakushIN_9 because we believe tech-powered community initiatives can create long-term impact—and this platform is the perfect opportunity to demonstrate that belief.

Brief Understanding of the problem statement:

The challenge focuses on creating an AI-powered platform that revolutionizes the way beach clean-up events are managed and participated in, especially in a city like Mumbai. Currently, organizers like Anjali face issues with volunteer coordination, equipment tracking, content creation, and lack of impactful reporting. Meanwhile, volunteers like Rohan struggle with legitimacy, lack of reminders, poor onboarding, and zero clarity on their contribution.

The core need is a centralized platform that improves trust, engagement, and operational efficiency—while using AI to provide personalized experiences, storytelling, and educational resources.

Proposed Solution:

- We propose **Kaisui**, an AI-powered, cross-platform platform that bridges the gap between environmental NGOs and volunteers. The platform transforms the beach clean-up ecosystem with real-time event management, smart mapping, personalized participation, and automated impact reporting.

◆ NGO Admin Features

1. Event Creation & Real-Time Updates

- Name, description, number of volunteers, location
- Google Map integrated event management

2. Volunteer Mapping & Attendance

- Smart QR Code based Check-in and Check-out
- Smart event specific volunteer mapping avoiding abundance or lack of volunteers

3. AI Automation

- Auto-generation of posts from videos/photos and auto-posting to social media via APIs
- Auto-generated reports (text + visual charts) using GPT + Chart.js
- Certificate generation (with badges, impact stats)

4. Garbage Data Handling

- Upload photos/videos of waste
- AI-based garbage volume detection (using Python & TensorFlow.js)

◆ Volunteer Features

1. Simple Signup & Dashboard

- View verified NGO events (with government logos, approval letters and others Feedback)
- Register to event & receive unique event QR

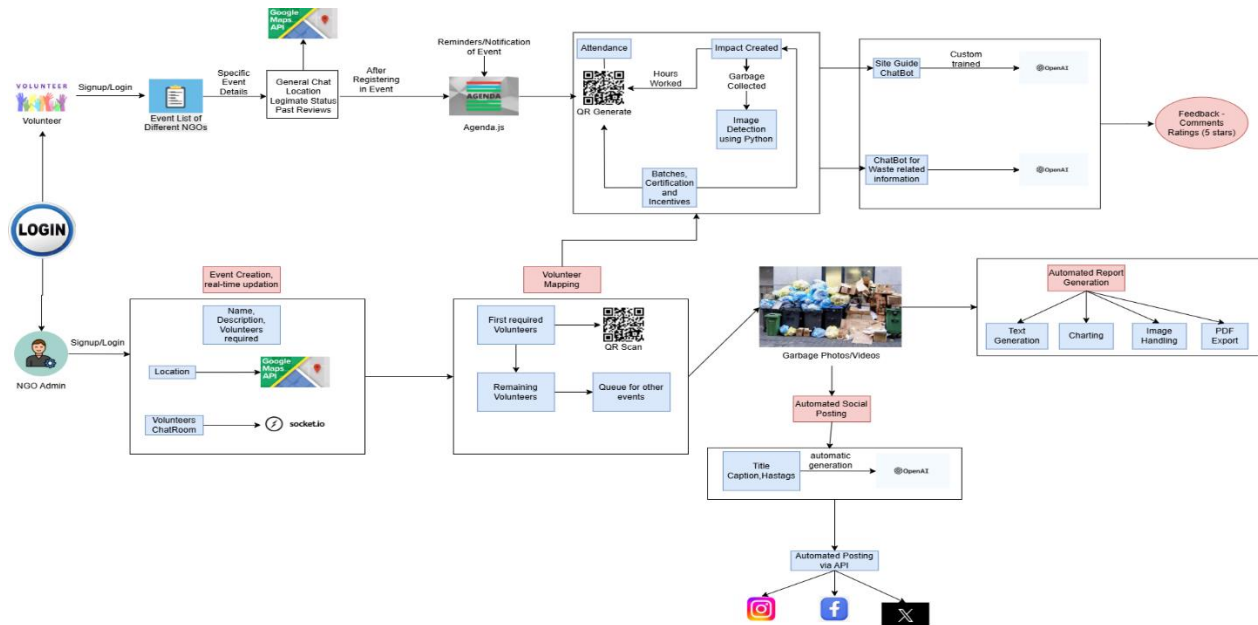
2. During Event

- Check-in and Check-out with QR Code
- Access AI Chatbot for website manual, instructions, safety tips, waste related information
- Join event-specific volunteers chatroom

3. Post Event

- Track personal impact (hours worked, waste removed, events attended)
- Earn badges, certificates
- Give feedback and rate the event

Use Case:



Development Tools Required

Tool	Version	Tool	Version	Tool	Version
Visual Studio Code	1.89.0	Ubuntu	22.04 LTS	React.js	18.3.1
Postman	11.0.5	Windows/MacOS	Latest	shadcn/ui	latest (2025)
Git	2.44.0	Firebase Cloud Messaging	N/A	Express.js	4.18.3
Firebase CLI	13.0.0	OpenAI GPT-4 API	Latest	Socket.IO	4.7.2
Node.js	20.16.0 LTS	OAuth 2.0	RFC 6749	Puppeteer	21.4.1
npm	10.5.0	MongoDB	7.0.6	TensorFlow.js	4.15.0
Meta Graph API	v19.0	LinkedIn Marketing API	v2	X (Twitter) API	v2
agenda.js	0.6.3				