Sajilo Sahayata – Real-Time Disaster Reporting and Coordination System

1. Project Overview

Objective

To provide a comprehensive, real-time, and user-friendly platform for reporting public emergencies and hazards in Nepal, enabling instant coordination between citizens, local government bodies, responders, and volunteers.

2. Problem Statement

During emergencies such as accidents, fires, disasters, and public hazards (e.g., garbage dumps, broken roads, exposed wires), citizens face the following challenges:

- Confusion During Emergencies: People panic and are unaware of the correct emergency numbers to call.

- Call Congestion: Helpline numbers often become busy during critical times.

- Unclear Location Information: Lack of precise location details delays emergency response.

- Neglected Public Hazards: Common public issues like damaged infrastructure and garbage often remain unnoticed, unreported, and unresolved.

3. Project Solution

Sajilo Sahayata addresses these challenges by serving as a bridge between citizens and authorities. Key features include:

- Mobile-First Access: Easy availability through mobile devices.

- Two-Way Communication: Real-time updates exchanged between citizens and authorities.

- Sahayata Call System: Simplified routing of emergency calls.

- Smart Clustering & Prioritization: Automatic grouping and prioritizing of incidents based on severity and location.

- Administrative Dashboards: Centralized interface for authorities to monitor and manage reports.

- Scalable Ecosystem: Platform designed to support future growth, integrations, and additional features.

4. Features of Sajilo Sahayata

Feature	Description
Real-Time Reporting	Instant alert system for emergencies and hazards.
Location Tracking	Integrated map system for precise location identification.
User-Friendly Interface	Simple and intuitive design for ease of use by all age groups.
Volunteer Coordination	Option to include verified volunteers for assistance.
Incident Prioritization	Reports automatically sorted by urgency and impact.
Dashboard for Authorities	Admin panel for viewing, filtering, and managing incidents.
Notifications & Alerts	Automatic notifications sent to responders and relevant agencies.

5. Technology Stack

Component	Technology Used
Frontend	React.js
Backend	Node.js, Express.js
Database	MongoDB
Authentication	Firebase Authentication
Map System	Leaflet.js
Hosting	Vercel

6. Scalability & Future Potential

- Development of native mobile applications.

- Expansion of incident categories to include environmental hazards, health emergencies, etc.

- Real-time data integration with municipalities for faster service dispatch.

- Partnership with telecom providers (e.g., NTC) to offer zero data cost access to the app.

7. Social Impact

- Completely free to use for all Nepalese citizens.

- Promotes civic responsibility and public safety awareness.

- Bridges communication gaps between the public and government bodies.

- Enhances community safety with faster response times.

8. Conclusion

Sajilo Sahayata is more than just an app — it is a social service initiative empowering every citizen to report, respond to, and resolve public emergencies efficiently. It aims to make Nepal safer and more responsive through technology and community collaboration.

9. Team Information

Project Title: Sajilo Sahayata
Developed by: Team EmergeX
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