Disaster Coordination System

Project Name :- Disaster Coordination System

Team Name :- HackByte Warriors

Team Leader :- Surya Pratap Sharma

Team Members :- Kritagya Yadav

:- Rahul Kumar

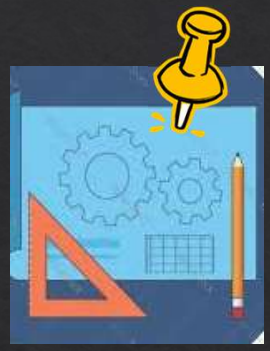
Problem Statement :- **During disasters, lack of coordination and delayed communication between agencies lead to ineffective response and increased casualties.**

Aim :- “Building a Smarter , Faster Response Network”

IDEA

An intelligent system that uses AI to predict, coordinate, and manage disaster response efficiently. It helps authorities, rescue teams, and civilians by providing real-time alerts, resource allocation, and communication tools to reduce damage and save lives.

Prototype



Dashboard: Displays disaster status, alerts, and resource tracking.

AI Bot: Automates emergency response suggestions .

GIS Mapping: Real-time location-based coordination.

Tech Stack

Frontend : HTML, CSS, JavaScript, React.js.

Backend : Node.js, RESTful APIs.

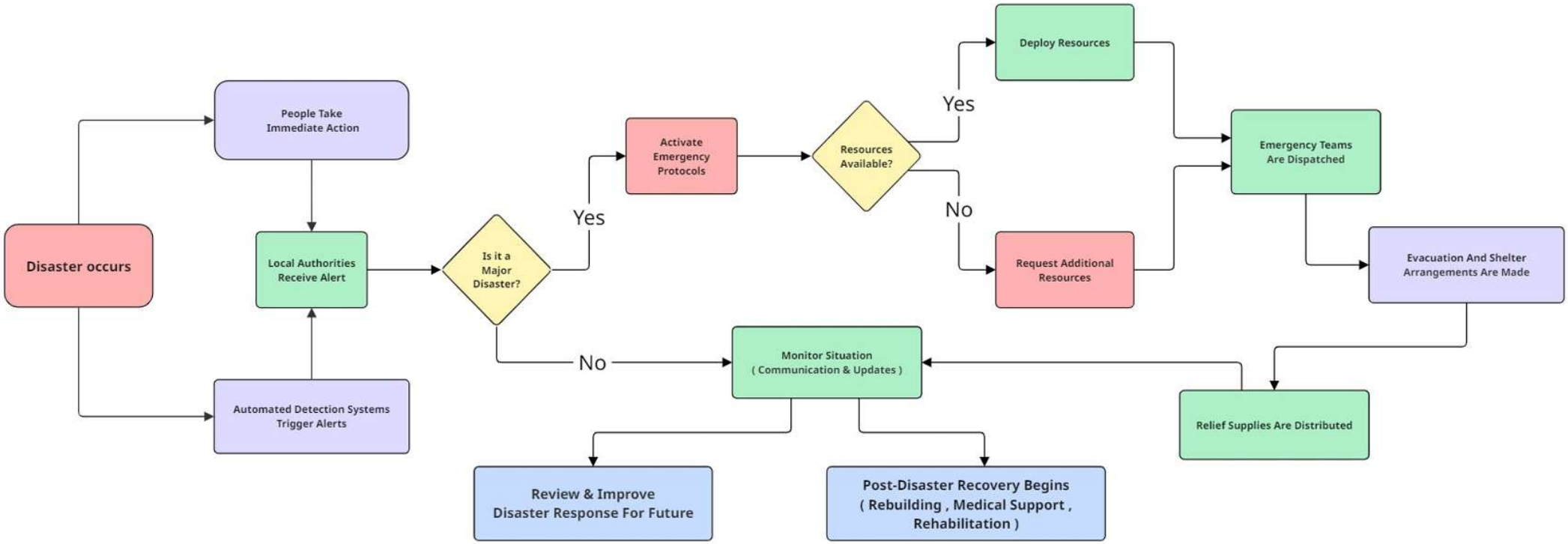
Database : Firebase.

Other Tools & Services : Google Maps API, GitHub.

Approach Details

1. **Data Collection & Prediction –** AI analyzes weather, social media, and historical data to detect disaster risks.
2. **Real-Time Coordination –** Connects emergency services, volunteers, and affected communities for quick response.
3. **Resource Optimization –** Smart allocation of rescue teams, medical aid, and supplies.
4. **User-Friendly Interface –** A mobile & web app for alerts, SOS, and live updates.
5. **Machine Learning & Automation –** AI-driven insights for faster decision-making.

Process Flowchart



Impact & Benefits

Faster Help – AI quickly detects disasters and alerts people.
Better Resource Use – Sends rescue teams and supplies where needed most.
Real-Time Updates – Helps authorities make quick decisions.
Easy to Use – Simple website for everyone, from citizens to rescue teams.
Saves Lives – Early warnings and quick action reduce harm.

Future Scope :

➔ Enhancing AI predictions with IoT sensors
➔ Expanding GIS mapping for better coverage Improving automated rescue coordination

THANK YOU