MINI PROJECT

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AIDLINK

DISASTER MAGEMENT SYSTEM

Scrum Master :

Mr.Jinson Devis

Assistant Professor

AJCE, Kanjirappally

Submitted By :

AMAL BABU

S3 RMCA - A

ROLL NO : 13

ABSTRACT

This abstract introduces a comprehensive disaster management system that facilitates collaboration between both local and global organizations for resource management purposes. The system serves as a platform where local and global entities come together to efficiently allocate and coordinate resources during times of disaster. By merging the capabilities of local organizations and extending them through global partnerships, this system ensures an optimized approach to disaster response. It harnesses the strengths of local knowledge and resources while leveraging the broader reach and expertise of global organizations. This collaborative synergy enhances the overall effectiveness and responsiveness of resource management efforts, ultimately contributing to more effective disaster mitigation and recovery.

SOFTWARE SPECIFICATION

1. Frontend: HTML/CSS
2. Backend: Django

TECHNOLOGIES

1. Payment
2. Chat Bot

MINI PROJECT

USERS

- **Admin**

  Administrators in a disaster management system oversee user access, resource inventory, and emergency alerts. They manage user accounts, ensuring appropriate permissions, maintain an accurate resource database, and initiate emergency notifications for effective disaster response. Administrators also play a pivotal role in

configuring system settings, facilitating collaboration among stakeholders, and ensuring data security and compliance.

- **Coordinator**

  Coordinators in a disaster management system facilitate communication and collaboration among teams. They allocate tasks and resources based on incident severity, ensuring efficiency. Coordinators also monitor progress, provide real-time updates, and adapt strategies as needed to ensure a coordinated and effective disaster response.

- **Normal User**

  Normal users in a disaster management system report incidents, request resources, and provide real-time updates on the ground. They access emergency alerts, safety information, and guidance during disasters. Normal users play a crucial role by contributing essential data, aiding decision-making, and actively participating in the coordinated response efforts.

KEY FEATURES

- **Geographical mapping**

  Geographical mapping in a disaster management system visually displays disaster-affected areas and available resources. It assists in identifying critical zones, resource distribution, and accessibility routes for effective response. Geographical mapping aids decision-makers by providing a clear overview of the disaster's spatial impact and helps optimize resource allocation.

- **Resources Monitoring System**

  The Resources Monitoring System tracks the availability and status of critical resources during disasters. It maintains an up-to-date inventory, ensuring accurate data on resource quantities and locations. By providing real-time insights, the system aids in efficient allocation, minimizing shortages and optimizing the utilization of resources for an effective disaster response.

- **Local updates/information or News**

  Local updates/information or news in a disaster management system provide real-time situational awareness to responders. They relay crucial information about the disaster's impact, road closures, shelter locations, and safety instructions. These updates help response teams make informed decisions and communicate accurate information to affected individuals, ensuring a coordinated and timely disaster response.

- **Request Resources**

  The "Request Resources" function allows users to submit resource requirements based on the specific needs of a disaster situation. It enables responders to communicate their resource deficits and essential needs, such as medical supplies, equipment, or personnel. By streamlining resource requests, this function facilitates a targeted and efficient allocation process, ensuring that critical resources are delivered where they are most needed.

MAIN PROJECT

USERS

- **Managers**

  Managers in the disaster management system play a vital role in coordinating the efforts of their company. They assess the situation, prioritize resource distribution based on severity, and lead their team in making informed decisions to optimize response efforts. Managers ensure efficient communication between various stakeholders, both within and outside their organization, and facilitate the timely and effective deployment of company resources.

- **Team Leaders**

  Team leaders, representing companies or organizations, assume crucial roles within the disaster management system. They guide and supervise their designated response teams, ensuring effective coordination of resource allocation and task delegation. By fostering transparent communication among team members, these leaders facilitate cohesive collaboration, driving the efficient execution of disaster response strategies aligned with their respective entities.

- **Staff**

  Staff members from companies or organizations actively engage in the disaster management system by contributing their expertise and resources. They execute tasks as assigned by their team leaders, assist in resource distribution, and provide on-ground support. Through their participation, staff members enhance the system's ability to effectively allocate resources and respond to disaster situations in a coordinated and impactful manner.

KEY FEATURES

- **Chat bot**

  The chat bot in the disaster management system serves as an automated communication tool, providing instant responses to user inquiries and information requests. It offers real-time updates on disaster situations, safety guidelines, and available resources, assisting users in making informed decisions. By facilitating quick and accessible information exchange, the chat bot streamlines communication, enhances user engagement, and contributes to a more efficient disaster response process.

- **Payment/Donations for Recovery**

  The payment/donations function within the disaster management system enables individuals and organizations to contribute funds towards recovery efforts. It allows users to make financial contributions to support affected communities, aid agencies, and relief operations. This function streamlines the process of collecting and managing donations, ensuring transparency and accountability in financial transactions aimed at facilitating effective disaster recovery.

- **Scalability**

  Scalability in the disaster management system signifies its capacity to proactively anticipate and adapt to the demands of future disasters, encompassing the resources required for those scenarios. This functionality ensures the system's capability to efficiently accommodate heightened data influx, increased user engagement, and the allocation of resources needed to effectively respond to upcoming challenges. Scalability, when focused on adapting and preparing for future disasters, is paramount for maintaining a responsive and well-prepared disaster management framework that can readily address evolving demands and resource needs.

- **Communication and Collaboration**

  Communication and collaboration within the disaster management system involve facilitating seamless information exchange and cooperative efforts among various stakeholders. This function ensures that emergency responders, local authorities, organizations, and communities can effectively share real-time updates, coordinate actions, and make informed decisions. By fostering transparent and efficient communication channels, the system enhances the overall coordination, resource sharing, and joint response efforts necessary for an effective disaster management strategy.