youSupply

Crowdsourced Logistics Network for Disasters

Introduction

When a disaster strikes, the main bottleneck for recovery is resources, or the lack thereof. However this is not a problem that can be solved by simply adding more money and resources, the real problem is inefficient distribution. This is a problem that can even affect centralized organizations like NGOs and is a major prohibitor of recovery for decentralized systems.

Each household possesses resources, yet faces needs. If these providers and consumers are made aware of each other, they can help each other with their deficits.

Functionalities

The system's main functionality is to facilitate interaction between providers and consumers, considering factors such as location and type of resource.The system acts as the mediator between the producers and consumers. All the users will be able to post their surpluses and requirements to a common database and be matched with potential providers/consumers that can fulfill their needs

As well as this, some extra functionalities can also be added such as integration with NGOs and government agencies that are also helping with recovery or location services, emergency alerts and resource tracking

However useful the platform may be, there is always a chance for users to misuse it. There will also be functionalities to reduce the spread of these people and to promote a sense of harmony among the users

Implementation

Technically, the app will have a relational database that contains all the resources and users will be able to interact with this database through a frontend mobile application. By including factors such as location, the system can show only feasible options to users

The UI for showing the viable consumers can be implemented in multiple ways, based on different social media platforms that people will be comfortable with such as Snapchat's Heat Map or a more formal tabular representation

In order to decrease toxicity and misuse, a 'like' system will be implemented to promote positive interactions along with a rating and reporting system to flag misuse

Shortcomings

While the app can take steps to prevent misuse, there is no guarantee that misuse will not happen, but we hope that we can trust the users to use the system well, particularly in times of disaster.