ReliefNet: A Digital Platform for Disaster Response

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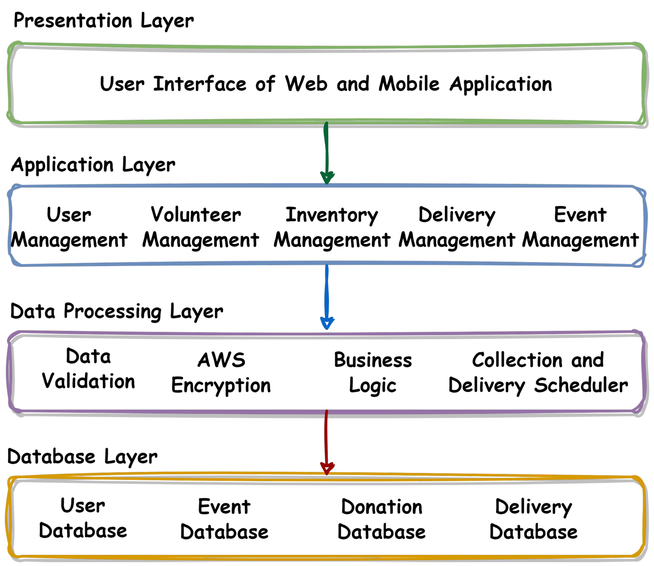
Introduction

ReliefNet,a digital platform for disaster response is a single platform to make use various sources to improve situational awareness, coordinate relief efforts, and provide timely assistance to affected communities.

Objectives

- To improve coordination efforts, avoid duplication of tasks, and optimize resource allocation.
- To ensure that resources are allocated effectively based on real-time needs and priorities, reducing waste and maximizing their impact.
- To effectively utilize volunteer resources and enhance community participation in the response efforts.

System Architecture



Features

Donation

Coordination of Volunteers

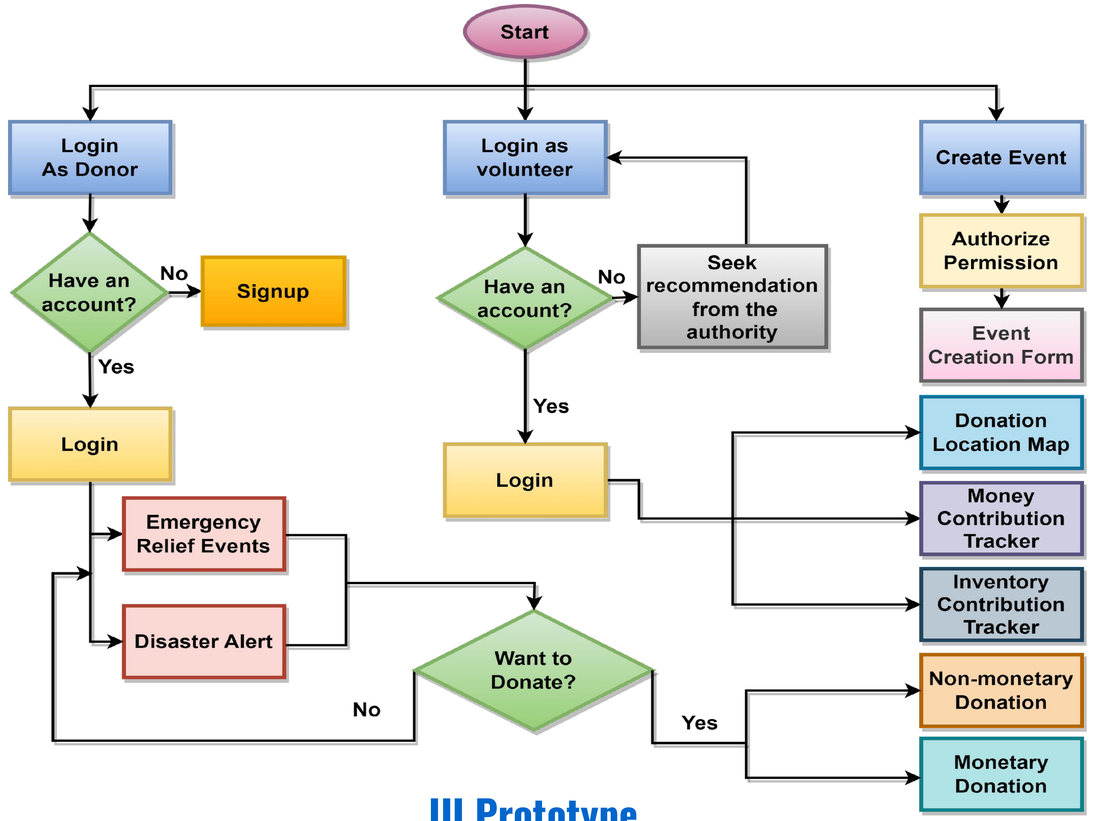
Donation Location

Data privacy & security

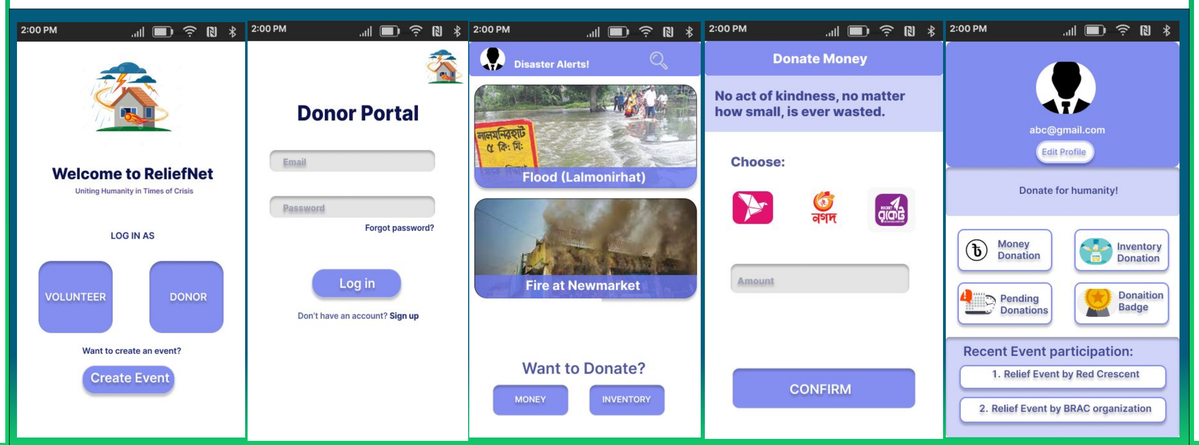
Timely Donation Collection

Event Creation

Workflow Diagram



UI Prototype



Comparative Characteristics Analysis

Charactrstics	Candidate System 1	Candidate System 2
Global Accessibility	Multi-language accessibility.	Not mentioned.
Data Management	Amazon built-in services.	Separate database.
Geospatial capabilities	Google map.	Not needed.
Transparent donation & Inventory tracking	Amazon built-in services.	Monetary donation track.
Donation process	Mobile banking and inventory donation.	Online banking.
Volunteer management	Volunteer registration.	No need.
Event Management	By event forms.	By the posts.

Estimated Cost

Fields	Estimated Cost
Developer Cost	2,00,000 BDT
Maintenance (per month)	2,00,000 BDT
Infrastructure (per month)	5,18,000 BDT
Database (per year)	4,57,000 BDT
Total	**13,75,000 BDT**

Future Work and Conclusion

Integration of AI as future works can help in automating certain processes, such as incident classification, resource allocation.In conclusion,this platform will create a real-time picture of the disaster, allowing responders to make informed decisions and allocate resources effectively.