

Reference ID: IJCS-406

Volume 10, Issue 1, No 5, 2022

ISSN: 234 PAGE NO: 2765-2769

Flood Relief Information System

Ali Hashem Mohsen Alsayani^{#1}, Dr.T.Velumani^{*2}

[#]Student, M.Sc Computer Science, Rathinam College of Arts and Science, Coimbatore, Tamil Nadu, India -641021 ali.alsyani73@gmail.com

*Assistant Professor, Department of Computer Science, Rathinam College of Arts and Science, Coimbatore, Tamil Nadu, India -641021 velumani.cs@rathinam.in

Abstract - The project is a web application that can allow users to track location of cyclone shelters available around them for specific distance in the emergency situations. Communication during disaster time is very crucial for both rescue team and victim. Emergency never comes with prior intimation. The System is intended to function in case of emergencies in society. The emergencies include Fire, Medical Emergencies, accident and External Emergencies (Earthquake, Floods, Storm). Location Coordinates are sending on each request. The system works on the principles of client-Server system, wherein the server responds to the requests of the Clients. The front end of this web application is Web and the back end is MySQL. The chosen shelters will display details such as type of building like cyclone shelter, school, hospital, etc., The locals can also include their shelter details if they are ready to provide for the victims (details to be send to server located in the government premises). The digital coast is organized by categories as states with coastal areas (South India). Each states have the list of cities present and based on the chosen city, it will display user's current location, the list of cyclone shelters in their cities and its location, number of people it can support, size of the building, its distance from shore and also map view system. This application can be used by news channel reporters in case of tower problem, because news channel reporters have satellite connection and solar power generation kit etc. Admin can sell solar power bank or solar battery or electricity battery.

Index terms - Solar Power, Disaster Management Server, **Cyclone Shelters.**

I. INTRODUCTION

Disasters, both man-made and natural, occurs frequently throughout the globe. When these happen, it furnishes some outrageous results. Loss of life, property and habitat are few of the outcomes of the disasters. Efficient management techniques should be implemented for minimizing the damage and risks involved with disasters. Technology growth is not reflecting in the area of emergency management. Disaster management or emergency management is the creation of schemes through which communities are encouraged to reduce the peril towards hazards and are trained to cope with disasters. Disaster management is not about averting or eliminating the threats; instead, it emphasis on creating plans to decrease the consequences of disasters. Disasters are of two types, natural and man-made. Natural disasters comprise of earthquake, volcanic eruptions, floods, Tsunami, droughts, cyclone, forest fires and landslides. Events such as chemical leaks, nuclear leaks, road accidents, structural damage and terrorist attacks can be listed under man-made disasters. All of these disasters are more frequently happening in this century due to urbanization and globalization. Many early warning systems are present, but management techniques are restricted to rules and regulations. With rapid technology growth, significance should also be given to management process.

II. RELATED WORK

EXISTING SYSTEM:

This system only manually. All the process like cyclone and earthquake and flood are so many disasters affect our region.

JCS International Journal of Computer Science

Scholarly Peer Reviewed Research Journal - PRESS - OPEN ACCESS

Volume 10, Issue 1, No 5, 2022

ISSN: 2348-6600



ISSN: 234

PAGE NO: 2765-2769

http://www.ijcsjournal.com **Reference ID: IJCS-406**

This system not talking about preparedness and response and recovery. Information to reach people it will take so much of time. Affected people difficult to find safe zone and helpers.

DRAWBACKS:

- Existing system is when emergency situation occurs the user cannot set the alert function when they are in risk situation
- Immediately user cannot pass their information to friends and family members to intimate they are in risk.
- The existing system user interface is more complex to understand.

PROPOSED SYSTEM:

Proposed system is a web application consisting of Disaster Management Server as third party server. If the user of application is in probable disaster affected area, then user will get help people on the user of the application. This system helps out to people to reach to the nearest safe place prior to disaster. Our application also facilitates the work of authority to track evacuation progress constantly so that user can take immediate steps if needed to reach to safe place.

FEATURES:

- Unlike other apps work only at danger, our app can be used as precaution measure
- Easy to use and friendly interface.
- insertion and deletion operation take less time to load.

III. SYSTEM DEVELOPMENT

The proposed project work contains the following modules:

ADMIN MODULE:

(a) Admin Login

Admin logs into the system by specifying unique username and password.

(b) Add Help center Shelters

After Login admin can add available help center Shelters details like name, location, contact person name, phone number, email.

(c) Add Food details

In this module admin can add available food details like food name, quantity available, food category.

(d) Add Medical facilities details

In this module admin can add available medical facilities details like medicines, doctors available, doctors name, doctor speciality, doctor visiting date, doctor visiting time, doctor visiting location.

(e) Add Emergency Alert notification

In this module admin can add if any emergency alert notification about flood or any natural calamities. Any orders from government will also be updated as notification.

USER MODULE:

(a) User Registration

The user registration contains the user details such as user id, name, password, mail id, phone number, location etc. These details get stored in user table.

(b) User Login

he authorized persons only login this

project. The user login contains the user's name and password

(c) View Help center Shelters

After Login user can view available help center Shelters details like name, location, contact person name, phone number, email.

(d) View Food details

In this module user can view available food details like food name, quantity available, food category.

(e) View Medical facilities details

In this module user can view available medical facilities details like medicines, doctors available, doctors name, doctor's speciality, doctors visiting date and time, doctors visiting location.

JCS International Journal of Computer Science Scholarly Peer Reviewed Research Journal - PRESS - OPEN ACCESS ISSN: 2348-6600 http://www.ijcsjournal.com **ISSN: 2348-6600** Volume 10, Issue 1, No 5, 2022

Reference ID: IJCS-406

PAGE NO: 2765-2769

Flow Diagram:

Level 0:



Level 1:



IV. OUTPUT SCREENS

Home Page



Admin Login



Add Help Centres





Reference ID: IJCS-406

Volume 10, Issue 1, No 5, 2022

ISSN: 2348-6600 PAGE NO: 2765-2769

Add Food



User Registration



Add Medical Facility

Emergency Alert



View Food







Scholarly Peer Reviewed Research Journal - PRESS - OPEN ACCESS

ISSN: 2348-6600

http://www.ijcsjournal.com Reference ID: IJCS-406

Volume 10, Issue 1, No 5, 2022



ISSN: 2348-6600

PAGE NO: 2765-2769

View Medical Details



View Alert



V. CONCLUSION

This Project concludes the three main components namely Communication, Data Distribution and Data Management Systems suggested as a solution for natural disaster data and information management to reduce the cost and time for contingency and decision-making. Communication system will provide a real-time data and information to support control centers and operating agencies related to disaster monitoring, mitigation and enforcement. Data Distribution system is responsible for information retrieval, extraction. Data Management System functions principally to support value-added data and information requirements of the disaster management unit and the national coordinator of disaster and relief in the country. Other subdivision integrated with natural disaster data and information management system are described.

REFERENCES:

- Babak Abedin and Abdul Babar, Institutional vs. Noninstitutional Use of social media during Emergency Response: A Case of Twitter in 2014 Australian Bush Fire, Information Systems Frontiers, DOI 10.1007/s10796-017-9789-4.
- [2] Nitesh Bharosa, JinKyu Lee and Marijn Janssen (2010), Challenges and Obstacles in Sharing and Coordinating Information during Multi-agency Disaster Response: Propositions from Field Exercises, Information Systems Frontiers, 12 (1), Springer, Pages 49-65.
- [3] Jane Fedorowicz and Janis L. Gogan (2010), Reinvention of Interorganizational Systems: A Case Analysis of the Diffusion of a Bio-terror Surveillance System, Information Systems Frontiers, 12 (1), Springer, Pages 81-95.
- [4] Dedi Iskandar Inan, Ghassan Beydoun and Simon Opper, Agent-Based Knowledge Analysis Framework in Disaster Management, Information Systems Frontiers, DOI 10.1007/s10796-017-9792-9.
- [5] Marijn Janssen, JinKyu Lee and Nitesh Bharosa (2010), Advances in Multi-agency Disaster Management: Key Elements in Disaster Research, Information Systems Frontiers, 12 (1), Springer, Pages 1-7.
- [6] Othman, S. H. and G. Beydoun (2011). A Disaster Management Metamodel (DMM) Evaluated in 11th International Workshop on Knowledge Management and Acquisition for Smart Systems and Services. 2PKAW 2010. LNCS (LNAI), vol. 6232, pp. 111-125, Springer.
- [7] M. Sakurai, D. Thapa, Building resilience through effective disaster management: an information ecology perspective, Int J Inf Syst Crisis Response Manag, 9 (1) (2017), pp. 11-26.