

Wake up My India – A review paper

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Abstract: The past decade has seen a dramatic rise in natural disasters and inclement weather conditions leading to catastrophic loss of human life. In order to curtail the loss of lives in the advent of any disaster, it is important to have a system in place which can alert the general public well in advance so that they can be evacuated from the endangered area before the actual disaster strikes. In this paper we have designed and proposed a 'Smart Alert' mobile application which is capable of alerting the users during the development of a disaster or a threat. The proposed system is intended to provide timely help to the affected victims by navigating them to safe place before the disaster strikes. The system provides the alert to user in real time directly on their smartphones and informs them regarding the threat they are under. It further navigates them using a map to the nearest safe house so that they can be rescued by the disaster rescue team.

Keywords: Distributed System, Disaster Management System, Disaster alert, emergency services, Client Server

Introduction:

Smart Alert has been created with an aim of reaching out to maximum number of people in shortest span of time and the reason why mobile application was deemed fit for the purpose for alerting the user during the development of any disaster was based on the statistical data on how people use their mobile phones. Numerous studies and research on human habits and lifestyle have found that an average person checks his/her mobile 85 times a day or approximately once every 3 hours. This means that a mobile alert is the best way to warn person of upcoming disaster. Information from varied and unofficial sources may lead to unwanted panic and confusion.

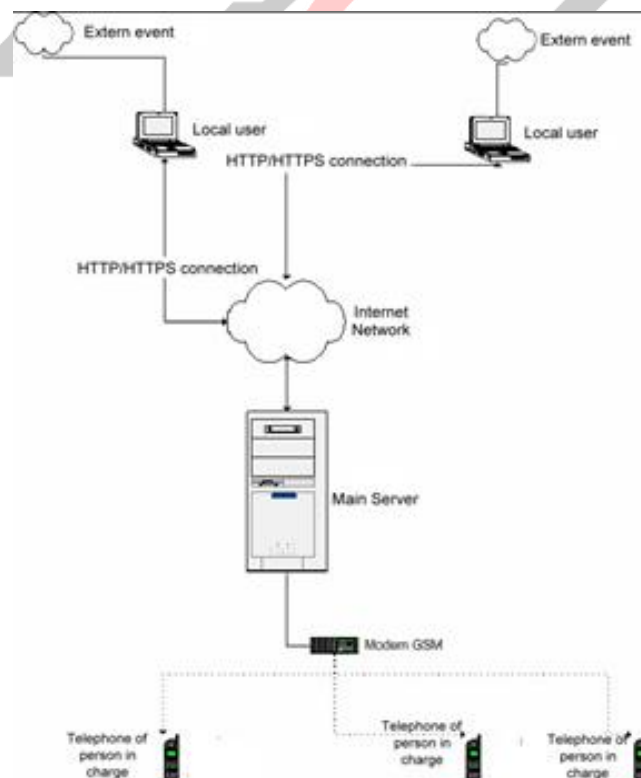
Literature Survey:

A .Intelligent disaster warning and response system with dynamic route selection for evacuation:

Author: Dastgir Pojee, Farooq Shaikh, Mohd. Abbas Meghani, Sajjad Zulphekari

Description: Smart Alert Application has many features that make it a useful and lifesaving tool. It is mainly based on the concept of having safe houses. Safe houses are places which are not located in the area where the threat has been issued and these places serve as emergency shelters until the rescue team arrives for further support. The notification system notifies the user as soon as an alert is issued.

System Architecture:



B. Video Surveillance System for Real-time Flood Detection and Mobile App for Flood Alert*Author:* Priya Menon K, Kala L

Description: The information about flood disaster from video monitoring process is an important task in disaster management. In this paper, a new surveillance video-based flood monitoring and warning system is introduced. Most of the currently used flood warning analysis and notification systems, rely on water level sensors and precipitation forecasts, and is not capable of providing near real-time and automated flood monitoring and warning-signal analysis. Therefore a new video surveillance system and a mobile application is developed to inform the people about the disaster which has occurred. This method does not need any of the currently used water-level measuring techniques, such as suitable locations and structures for setting up the rulers and various sensors. It also provides the most accurate flood warning information to disaster relief units and the general public, in order to take necessary precautionary actions for the disaster which has occurred.

C. Real time streaming fast data and proposed framework for disaster alerts*Author:* Prasannakumari.V

Description: Pursuance for efficient data collection, processing and analysis is one of the critical topics of interest in recent years. With affordable cost of storage and computational powers, interconnected devices have provided access to invaluable data.

D. SMS Disaster Alert System Programming*Author:* Marius Cioca, Lucian-Ionel Cioca

Description: Starting from a critical analysis of all other similar systems in the world and in our country, we may infer that our project theme substantially improves human knowledge of this field of study and brings several original elements through the development of this “fast flooding warning system”, as current warning strategies do not include such solutions. Present-day warning systems are the telephone, the fax machine, television, radio, etc. and not the SMS alternative. we have developed in this project and which we are presenting in this paper.

Limitations and challenges in Existing Systems:

1. Country Background.
2. Disaster Situation.
3. Past Major Disaster.
4. Organization.
5. Functions & Duties of the central natural disaster relief committee.
6. Fund Channel Process
7. Expectations & Conclusion

Scope of Improvement:

Disaster is an event which threatens society with unwanted consequences. It is associated with disruption of normal pattern of life, negative effects on human life and social structure. It victimizes large number of people and cause social and economical losses. The International task group appointed by Department of Humanitarian Affairs of United Nations defines disaster as ‘a serious disruption of the functioning of a society, causing widespread human, material or environmental losses, which exceed the ability of affected society to cope using only its own resources’. Disasters are characterized by the scope of an emergency. An emergency becomes a disaster when it exceeds the capability of the local resources to manage it.

References:

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- [5] AnasAloudat and Katina Michael, “Toward the Regulation of Ubiquitous Mobile Government: A Case Study on Location-Based Emergency Service in Australia,” Journal of Electronic Commerce Research, Vol. 11, Issue 1, Article 3, pp. 31-74, Jan. 2011.