

Android Application for Flood Relief Fund

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Abstract— As we know in a last decades we have face many nature disasters, which has ruined all the environment near us. People forms an organizations to help the survivals of that incidents, Most of peoples donated crores of rupees to this fund, Still there are some middleclass family members who wants to denote but they have some fears like whether my money will go to proper places? Or someone else will take it? So are many question that may arises in mind of people. We are introducing a smart system that allows user to track he/her money by using block chain technology, it will allow user to see for what purpose his/her money is been used. Smart system to monitor user money donated to floods organization, user able to see the running status of his/her and able to make action if he/she found any this suspicious in the transaction. We are providing user Login and Signup panel to our system, each user have its own user identification and authentication. Our application allows user to track and monitor his/her money, which he has donated to flood organization. We are also providing a feature where if user fined any fraud or stealing money he can direct make a complaint by its panel.

Keywords: Android, Application, Flood Relief

I. INTRODUCTION

From a national economic viewpoint, floods both riverine and coastal, are the mostly destructive listing of natural hazards in India. The economic losses to homes and personal property, to crops, business efficiency and stock, utilities are major manifestations of flood losses. India is highly vulnerable to floods. In that scenario there is an urgent requirement for development and installation of enhanced flood forecasting sites in disparate commonly flooding regions. In this system, we describe the design and contrivance of a sensor-based embedded system for flood management. The project is mainly disquiet on how the data of the flood is being used and analyzed for future forecasting.

Flood disaster usually happens due to awkward irrigation method in a housing area or the sudden increase of water volume in a river. Flood disaster generally causes loss of property, damages and life. Since this disaster is considered unreliable to human life, an efficient antidote or alert system must be implemented in order to notify people in the early stage so that safety precautions can be taken to avoid any mishaps. Natural disasters are a worldwide anomaly and require significant cooperation to address. Recent hurricanes, floods, and other events have illustrated this along with the differences of the effects of disasters on developed compared to developing countries. In the recent US flooding due to storms in the Midwest, loss of life and estate damage were minimized due to emergency systems available in the highly developed US, while a storm that ravaged approximately seven states caused twenty deaths and \$30 million dollars in damage with only a few left homeless or hungry [1]. On the opposite side, over a much smaller geographic area, North

Korea struggled to deal with the displacement of over 300,000 people, approximately 221 deaths, and a cost of \$6 million, most to feed those made homeless by the disaster that resulted in part from the lack of development of warning systems and information at the community level of the impending flooding. The problem of early warning rapidly grows in complexity upon close inspection and the addition of work within a developing country only increases that complexity. Many other necessity affect the system in addition to those listed above including those related to the devastating effect of the event in question. The problem then encircle those necessity resulting from both very low activity times when maintenance and attention drop, and highly important times when a flood occurs and the system must continue operation. To properly work, the system also becomes not simply a breakdown, but one of cooperation between government, relief agencies, and the communities to create, maintain, and use the system. These more communal and civic problems define the success of the system, and ensuring their solutions involves a different approach than the technical issues.

II. LITERATURE REVIEW

A. Real-time WSN based early flood detection and control monitoring system, 2017 International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICICT):

The downstream flooding from dams due to environmental disasters leads to failure of evacuation of nearby staying peoples cause high mortality rates and casualties. It is essential to record the height reached by the water and leak of water through the walls of dams in real time to avoid flooding and thereby casualties. The traditional manual monitoring are discommodious and scattered nowadays. It has also certain shortcomings that includes high cost and poor network connectivity. This paper presents a real time Wireless sensor network based early flood detection and control monitoring system designed with a function of real time monitoring, guaranteeing connectivity in low cost. This system collects data as images from CMOS image sensors through wireless sensor nodes which transmit these images to remote monitoring centre via Zigbee network and GSM network. The remote centre will process the data by analyzing it and give necessary alert to clients. Simulation results show this system is cost effective and reliable for early detection of flood.

B. Early warning of flash floods based on the weather radar, Proceedings of the 2015 16th International Carpathian Control Conference (ICCC):

Recently running climate changes have resulted in an increased incidence of natural phenomenon that can adversely affect the life of people - so called flash floods. A

typical characteristic of these floods is their very rapid onset, relatively short peak and rapid retreat. This short period varies and might range somewhere between few minutes up to one hour. In addition, these flash floods often affect areas without recent precipitations.

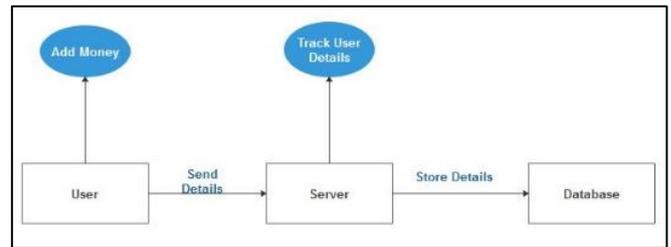
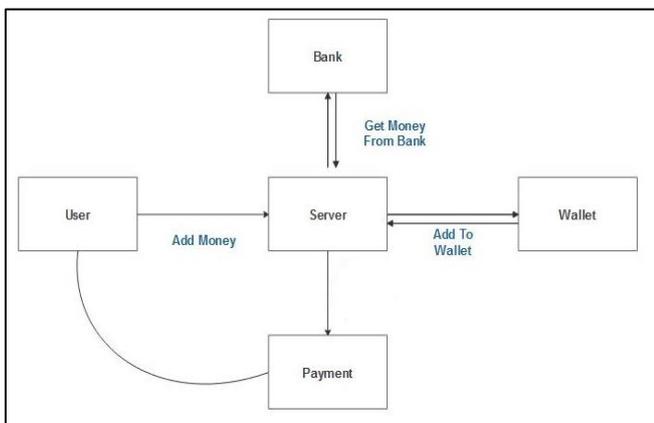
C. *Video surveillance system for real time flood detection and mobile app for flood alert 2017 International Conference on Computing Methodologies and Communication (ICCMC):*

Transportation is one of the most important requirements in people's daily lives. Both urban and rural areas are connected by highways and bridges. Usually bridges constructed over rivers, seas and other waterways are more prone to disasters such as flooding and tsunamis. In order to alert the people about the damage caused by these disasters, an early detection and Warning system is designed. The flood/overflow range is detected using video streaming process, and warning information is provided if it exceeds a certain threshold. The flood information is transferred to the local public using a mobile app named "FLOOD ALERT", developed using Android and Java. It will help them to take necessary actions for the disaster which has occurred. It gives information about the location of the flood occurred region and also the corresponding date and time. This system is capable of reducing the negative impacts, mainly accidents that caused due to the collapse of the bridge due to flood.

D. *Flood Detection and Control Using Deep Convolutional Encoder-decoder Architecture, 2018 International Conference on Computer, Control, Electrical, and Electronics Engineering (ICCCEE):*

In most major cities, there are certain areas with insufficient sewage systems that are incapable of moving drainage water efficiently, especially in heavy rain scenarios. Using CCTV (Closed-circuit television) cameras in order to detect such water pooling requires human focus and attention, however, immediate action has to be taken to minimize the environmental impact of such incidents. Detecting flooding not only might help save people's and city's money and time, but also human lives as well. In this paper, we propose a deep learning approach to detect flooding. Using the method of image segmentation and state-of-the-art architecture, system is capable of detecting flooding early on.

III. SYSTEM ARCHITECTURE



IV. PROPOSED METHODOLOGY

The single problem can be solved by different solutions. This considers the performance parameters for each approach. Thus considers the efficiency issues:

- 1) Problem Solving Methods are concerned with efficient realization of functionality. This is an important characteristics of Problem Solving Methods and should be deal with it explicitly.
- 2) Problem Solving Methods achieve this efficiency by making assumptions about resources provided by their context (such as domain knowledge) and by assumptions about the precise definition of the task. It is important to make these assumptions explicit as it give the reason about Problem Solving Methods.
- 3) The process of constructing Problem Solving Methods is assumption based. During this process assumptions are added that facilitate efficient operationalization of the desired functionality.

V. CONCLUSION AND FUTURE SCOPE

This system is becoming more and more relevant for multiple areas of our life. Our system is overcoming drawbacks of existing system. Hence our system is Cost efficient, High Performance, Reliable, more user friendly, etc. Our system also introduce the smart way to monitor payments of user.

The application that will be developed is going to be useful to the smart people living in the smart cities. There are many other applications going to be developed due to this project.

- 1) Organizations
- 2) Industries
- 3) Personal
- 4) Funds transaction

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