



FLOOD INTIMATION THROUGH GSM WITH USER PROGRAMMABLE NUMBER TO STATION MASTER

Devasis Haldar*

Assistant Professor*

AAISHWARYA CHANDRA, AKASH MISHRA, ASJAD KHAN, PRIYANK AWASTHI

Department of ECE

SRM University, NCR campus

Modinagar

ABSTRACT:

The main objective of the project is to detect rising water level in a river before the railway track at a reasonable distance from the rail track and intimate that to the nearest station master to detain train movement. Sensor will send an interrupt to the microcontroller indicating that it has crossed the danger point.

KEYWORDS: GSM, GPS, Android Apps

INTRODUCTION:

In today's world, electronic equipment's play a very important role, for security and accidents. The device operates by processor and sensors to control train. We are designing this type of railway system to detect rising water level in a river and intimate that to the nearest station master to detain train movement. It will help to show the longitude and latitude of the trains. It is a system which can prevent serious accidents in the sensitive areas.

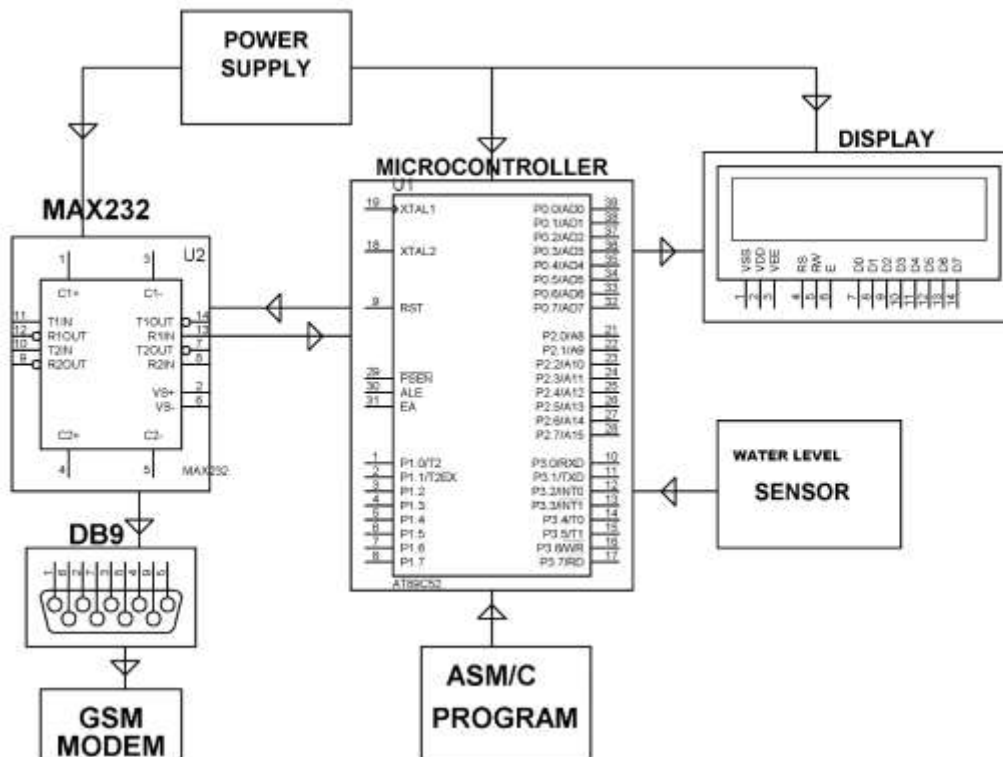
WORKING:

The proposed system detects the possibility of occurrence of flash flood across the railway track or roadways by sensing the rising water level in rivers at a considerable distance away from the tracks or roads to alert the concerned authorities by SMS.

The proposed system uses a microcontroller of the 8051 family and a rectified-power supply. In this system, a GSM modem is interfaced to the microcontroller through a level shifter for communication. The flash flood sensing circuit is interfaced to the microcontroller for sensing the water level.

Whenever any user presses a button, used in place of rising water level to create a fault at a considerable distance from the respective track or road, then the information is sent to the microcontroller through a transistor logic. The microcontroller compares this information with the predefined data; if the information matches, then it sends the corresponding information over SMS to the respective authorities through a GSM modem. The microcontroller stores the mobile number. Thus, many lives and properties can be saved by this warning system.

The future scope of this project can be augmented by adding a very special feature of changing the stored phone number according to the user requirement. This can be achieved by interfacing an EEPROM along with a keypad to the microcontroller for storing the desired contact number.



CONCLUSION:

This project in future can be enhanced by adding a feature of changing the stored phone number by the user as per his requirement. The exact location of area submerged will be sent to the authority concerned.

The project in future can be used in uninhabitable areas and can be used to prevent disaster from floods and hence prevent loss of life and property.

It also involves the use of user friendly android app with the no hence an alarm can be raised and the human error of negligence can be avoided.

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