

IoT Based Flood Monitoring and Alerting System

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Abstract: A flood is an overflow of an expanse of water that submerges land. The EU floods directive defines a food as a temporary covering by water of land not normally covered by water. In the sense of flowing water, the word may also be applied to the inflow of the tide. Flooding may result from the volume of water within a body of water within a body of water, such as a river or lake, which overflows or breaks levees, with the result that some of the water escapes its usual boundaries. while the size of a lake or other body of water will vary with seasonal changes in precipitation and and snow melt ,it is not a significant flood unless such escapes of water endanger land areas used by man like a village ,city or other inhabited area.

Keywords: Flood monitoring

I. INTRODUCTION

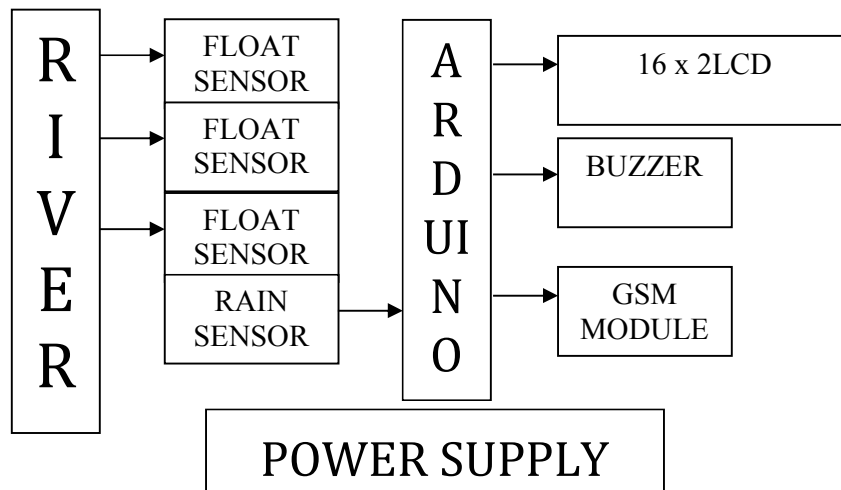
A flood is an overflow of expanse of water that submerges land. Flood can also occur in rivers. When flow exceeds the capacity of the river channel particularly at bends or meanders. Flood often causes damage to homes and businesses if they are placed in natural flood plains of rivers. A flood happens when water from river, lake or oceans overflows into the lands around it. Too much rain or melting snow are the main causes of flood.

II. METHODOLOGY

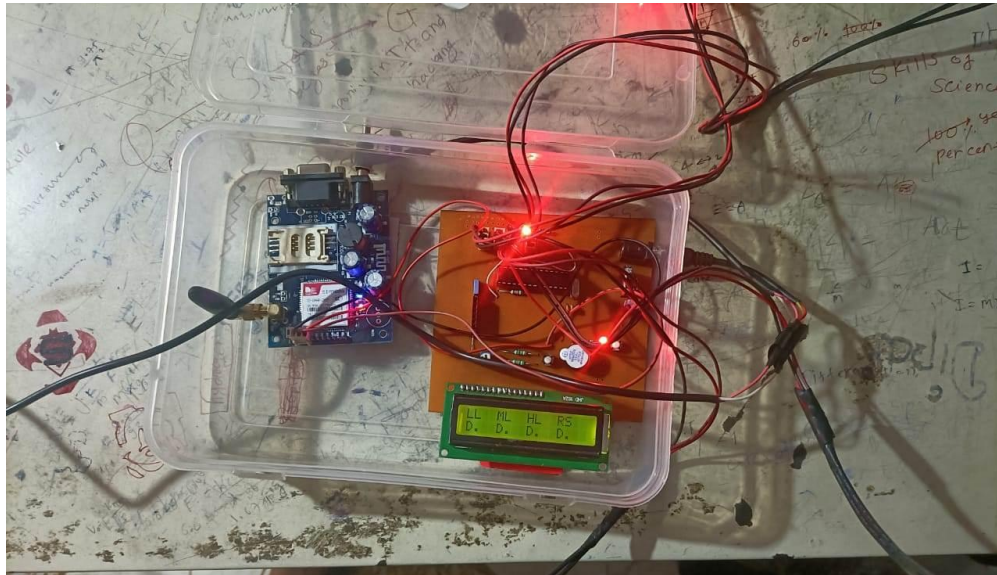
Arduino is an open source platform used for building electronic projects. Arduino consist of both a physical programmable circuit board and a piece of software, or IDE (integrated Development Environment) that's runs on your computer, used to write and upload computer code to the physical board. The Arduino platform has become quite popular with people just starting out with electronics, and for good reason. Unlike most previous programmable circuit board, the arduino does not need a separate piece of hardware (called a programmer) in order to load new code onto the board you can simply use a USB cable.

Additionally, the Arduino IDE uses a simplified version of C++, making it easier to learn to program. Finally, Arduino provides a standard form factor that breaks out the function of the microcontroller into a more accessible package.

III. MODELING AND ANALYSIS



IV. RESULTS AND DISCUSSION



V. CONCLUSION

IOT based flood monitoring system is very useful for monitoring flood. In this system we can monitor the status of flood on SMS from any place of the world. When there is a flood, automatically SMS will be send on predefined number. and same status will be displayed.

REFERENCES

- [1]. 'Can in Automation (CIA):CAN FD - The basic Idea . www.can-cia.org. retrieved 2017-01-25.
- [2]. <https://www.kvaser.com/wp-content/uploads/2016/10/comparaing-can-fdwith-classical-can.pdf>.
- [3]. 'High speed CAN FD bus is coming to cars, says microchip. Electronic weekly.
- [4]. CAN bus ESD protection for 12V systems.STMicroelectronics-ESDCAN03-2BWY.
- [5]. Embedded System: Mazdi and Mazdi.
- [6]. www.google.com.
- [7]. www.arudino.ac