

IoT Based Flood Monitoring and Alert System

Prof. Dr. U. B. Pawar¹, Giri Princekumar², Wagh Mansi³, Kale Arati⁴, Shaikh Tagdis⁵, Pawar Shivani⁶

Assistant Professor, Department of Engineering¹

Students, Department of Engineering^{2,3,4,5,6}

SND College of Engineering and Research Center, Yeola, India

hodcomputer@sndcoe.ac.in¹, giriprince711@gmail.com², mansiwagh2020@gmail.com³, arati6843@gmail.com⁴, tagdisshaikh1603@gmail.com⁵, shivanipawar86791@gmail.com⁶.

Abstract: Flood is one of the natural disasters that cannot be avoided. It happens so often that it affects so many lives and properties. Before this most of the existing systems that have been developed are only focused on certain areas. Other than that, majority of the public cannot monitor and have no idea when the flood is going to happen since they do not have any information and data about the weather condition. This system is suitable for cities and village areas. Furthermore, if the public has an internet access, they can monitor what is happening and predict if there is any upcoming flood at the web server. This project will update the water level at the web server and the system will issue an alert signal to the citizens for evacuation so that fast necessary actions can be taken.

Cayenne IOT Platform accelerates the development of IOT-based solutions, including quick design, prototyping and other commercialized projects. It is a drag-and-drop IOT project builder that can help developers build complete, ready-to-use IOT solutions with little to no coding.

Keywords: Arduino Mega, DHT11 Sensor, GSM Module, Thing Speak, Water level Sensor, Web Application, Battery

REFERENCES

- [1]. Internet of Things Based Real Time Flood Monitoring and Alert Management System Author: Tibin Mathew Thekkil ; Dr.N. Prabakaran Year:2021
- [2].Development of Flood Monitoring System using WSN and IoT based on Cloud Author : PallaviCB1; Chandrakala; Year:2019
- [3].Flood Detection using Sensor Network and Notification via SMS and public Network Author: MohamedIbrahimKhalafalfahadiwy;Azizahsuliman;Year:2018
- [4].IoT Based Flood monitoring and Alert System Dr. JRajanikant International journal of creative research paper 2023.
- [5]. A New WSN Paradigm for Environmental Monitoring and Data Collection Author:Eric Dines, Hassanain Al-Majeed, Asanka Fernando, Mutaz Abdalla, Year: 2016
- [6]. Internet of Things Based Real Time Flood Monitoring and Alert Management System Author: Jagadeesh Babu Mallisetty and Chandrasekhar V; Year :2015
- [7]. An Intelligent Flood Monitoring System for Bangladesh Using Wireless Sensor Network Author: Z.M.Taib, N.S.Jaharuddin and Z.D. Mansor ;Year : 2014
- [8]. Development of a low cost Community Based Real Time Flood Monitoring And Early Warning System –Abimbola Atijosan, Ayodeji Olalekan Salau, Rahmon Ariyo Badru, Taofeek Alaga ; Year: 2013
- [9].SMS Based Flood Monitoring and Early Warning Author: Sheikh Azid, Bibhya Sharma, Krishna Raghuwairya, Abinendra Chand Year Year: 2012
- [10]D. Mysar, M.Jagadeesh Babu, Real Time Monitoring of Water Level Variation in Rivers and Flood Alerting System using ARM7 on International Journal of Advanced Research in Computer and Communication Engineering , 2016
- [11]L.S.C. Johnson, and S.N Hidayah M., A Review of Flood Catastrophic Management in Malaysia, ARPN Journal of Engineering and Applied Sciences, Vol.11, No. 14, Jul 2015.

[12] Z.M.Taib, N.S.Jaharuddin and Z.D. Mansor, "A Review of Flood Disaster and Disaster in Malaysia" International Journal of Accounting and Business Management, Vol. 4, No.3,2014.