

Industrial Parameter Monitoring System using IoT

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Abstract

This project is derived from IoT. The principle behind this project is to construct a control system which effectively does the job of monitoring industrial parameters utilizing IoT. It aims to monitor temperature, pressure and humidity of an industrial environment. IoT or internet of things is a tool which has extensive use in today's technological era. It is made by clubbing communication & embedded systems which are then used for potent transmission and reception of data. Using IoT different systems can implement industry standard protocols. By this system small scale industries can monitor their plants wirelessly through devices such as mobiles and tablets. From the mode of this paper we aspire to summarize IoT's importance which does handy monitoring of small scale industrial applications.

Keywords: Internet of Things, Industry, Control System, Embedded Systems, Monitoring

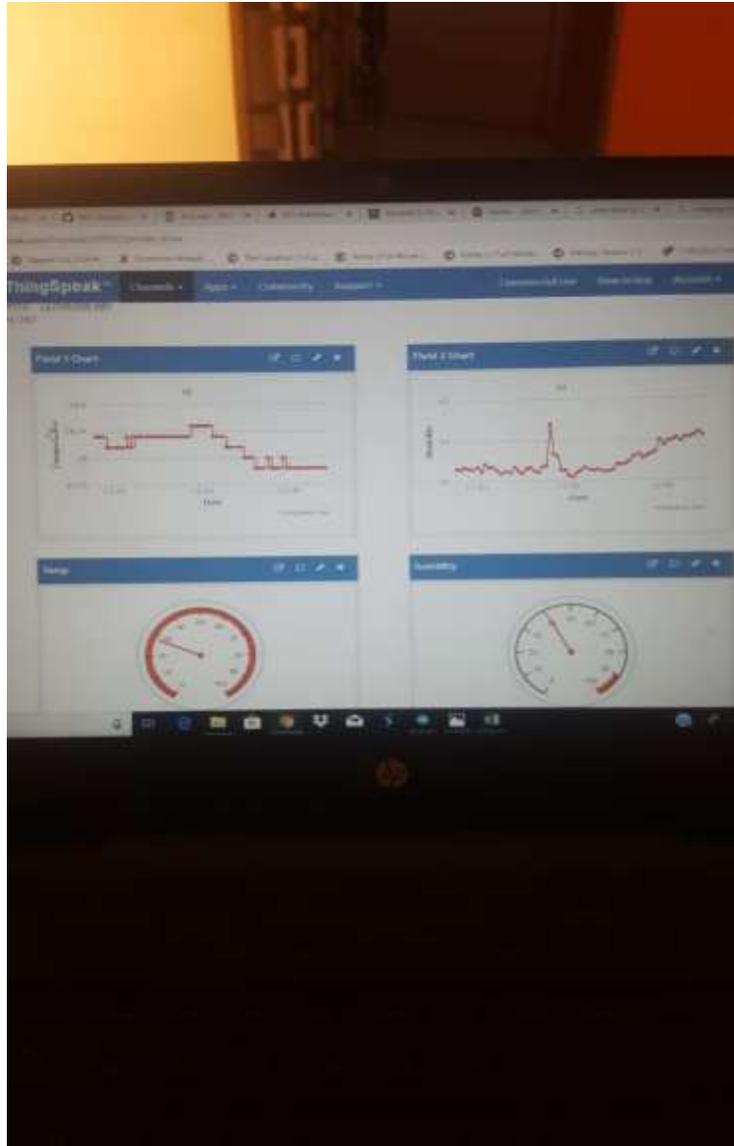
I. INTRODUCTION

In today's world it is vital to have an industrial monitoring system for proper monitoring and controlling of various equipments and installations. It is used to get information about dynamic conditions of machines and industrial apparatus. Industrial monitoring is used to lessen the expenses, improving quality and proper management of industry worldwide. There are a load of other methods used for monitoring industrial systems such as ZIGBEE, PLC-SCADA, WSN etc. But we use Internet of Things as it is the most favorable technique because of easy functioning and reasonable cost. The IoT is a term derived by British technology trailblazer Kevin Ashton. He told everyone that using sensors we can connect any physical object in the world to the internet. Because of his efforts world is able to use the technology called IoT.

II. TABLE

<i>Created AT</i>	<i>Entry ID</i>	<i>Field1(Temp)</i>	<i>Field2(Humidity)</i>
<i>10/3/19 11:30</i>	<i>1</i>	<i>28 degrees</i>	<i>50%</i>
<i>10/3/19 12:00</i>	<i>2</i>	<i>30 degrees</i>	<i>40%</i>
<i>10/3/19 01:30</i>	<i>3</i>	<i>35 degrees</i>	<i>40%</i>
<i>10/3/19 04:30</i>	<i>4</i>	<i>30 degrees</i>	<i>50%</i>

III. FIGURES



IV. ABOUT REFERENCES

The first reference introduces the status of IoT development in China, including policies, R&D plans, applications, and standardization. The second reference attempts to provide a definition of the word 'Things' in the context of the Internet of Things (IoT). The third reference discusses deployment of the Zigbee based WSN for monitoring and controlling the power at each work station.

REFERENCES

- [1] Shanzhi Chen, Hui Xu, Dake Liu, Bo Hu, Hucheng Wang, "A Vision of IoT: Applications Challenges and Opportunities With China Perspective", IEEE Internet Of Things Journal, vol. 1, no. 4, pp. 349-359, 2014.
- [2] K. Ashton, "That 'Internet of Things' Thing - RFID Journal", RFID JOURNAL, 2009, [online] Available: <http://www.Rfidjournal.com/articles/view?4986>
- [3] M. Barathi Kannamma, B. Chanthini, D. Manivannan, "Controlling and Monitoring Process in Industrial Automation using Zigbee", 2013 International Conference on Advances in Computing Communications and Informatics (ICACCI), pp. 806-810, 2013