WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Labour Work Monitoring System

Dr. S. R. Mahadik[1], Omkar Vaibhav Vaidya[2], Tejas Gurudatta Gurav[3]

[1,2,3]Dep. of Electronics & Telecommunication,
Dr.J J Magdum College of Engineering, Jaysingpur, Maharashtra, India

ABSTRACT:

In past few years automation has reached to new revolution. Industrial relations is the term that describes how the management and the employees of a company interact with each other. We are going to implement this project in industries with the aim to monitor the work of labours. Designing a system which easy owner of industry/foundry by sitting in front of a single monitor and monitor its whole system is very profitable and time saving. The title of project is "Labour work monitoring system".

This system will record the operation time of the machine and also details of worker who is operation it. It can also be used to monitor safety and productivity of employees, but it also may help business financially. All the system is designed on basis of wed server, and microcontroller. This system is based on microcontroller and web server designing. In this project we are going to have an RFID for technicians, which will interface by the microcontroller AT89C51.The production data will be upload on the Web Server through Wi-Fi module (IOT).

INTRODUCTION

Industry has become the second largest employment generating sector in the world. Data interpretation system is an Automated Information System which gives better control over production monitoring and takes corrective steps immediately. It provides better control over working process of labours. Continuous performance of every single worker in a mill gives a high productivity. With its increasing growth and demand, textile industry faces many problems which have to be changed. One of the methods to solve those problems is the use of automation in the industries. Automation can be defined as the process of reducing human assistance in the process performed. In most sectors of manufacturing, automation is one of the major key to improvement and maintain working hours of labour. A process control or automation system is used to automatically control an industry. The Process Automation System uses a network to interconnect sensors, controllers, operator terminals and actuators. During the past 15 years, the Internet revolution has redefined business to Consumer (B2C) industries such as media, retail and financial services. In the next 10 years, the Internet of Things revolution will dramatically alter manufacturing, energy, agriculture, transportation and other industrial sectors of the economy which, together, account for nearly two-thirds of the global gross Domestic product (GDP). It will also fundamentally transform how people will work through new interaction between humans and machines.

LITERATURE SURVEY:

[1]. Prof. Niranjan M, Madhukar N, Ashwini A, Muddsar J, Saish M (Department of Electronics and Communication, Jain College of Engineering Belagavi, India) Internet of Things (IoT) in industries has created a new revolution in industries. IoT in industry has given rise to the term "INDUSTRY 4.0" where systems are connected to each other over the internet and can communicate with each other to take necessary decisions (also called as M2M communication) through artificial intelligence. In this paper, we shall design a system which will automatically control and monitor the industrial applications and also allow the user to control the application from anywhere in the world. Having control over the applications over the internet is one of the best ways to deal with the industrial applications. **Keywords:** Artificial intelligence, Industry 4.0, M2M communication

[2]. D. L. Wu, Wing W. Y. NG, D. S. Yeung, and H. L. Ding, "A brief survey on current RFID applications," in *Proc. International Conference on Machine Learning and Cybernetics*, Baoding, July 12-15, 2009, pp. 2330-2334.Radio Frequency Identification (RFID) is the next generation wireless communication technology applicable to a wide range of application areas. There are an increasing number of retailers, banks, traffic managements, exhibitions and logistic providers practicing this new technology to their products and services. Therefore, it brings both opportunities and challenges to RFID researchers. In this paper, we provide a brief survey on RFID applications and suggest some opportunities in intelligent RFID applications.

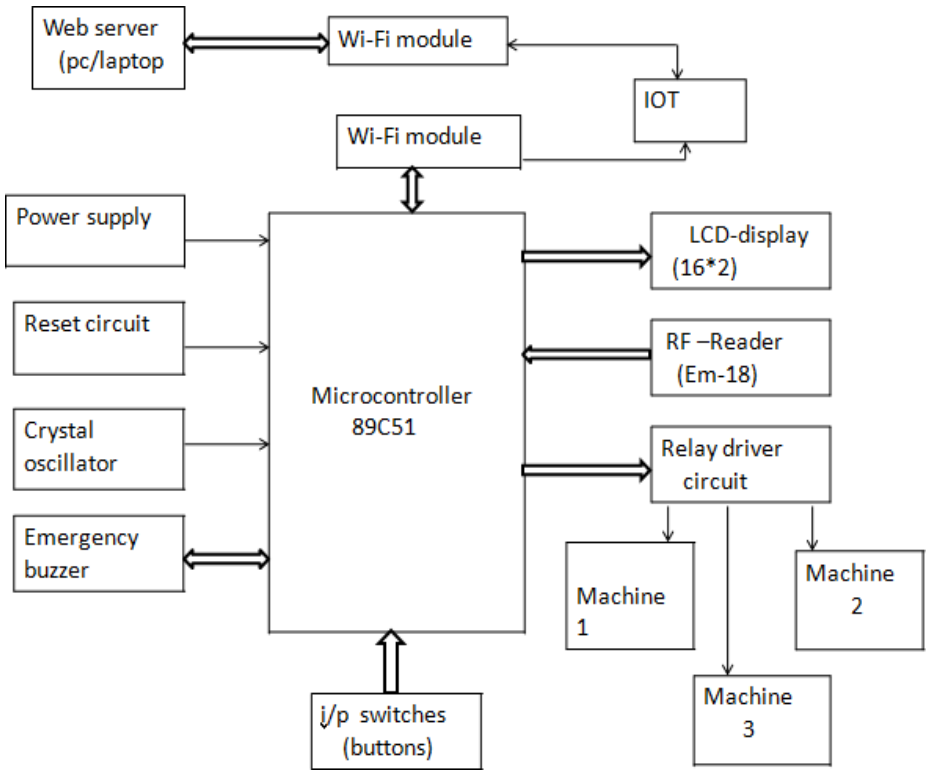
[3]. Umar Farooq, Mahmood ul Hasan, Muhammad Amar, Athar Hanif and Muhammad Usman Asad. This paper describes the design of RFID based security and access control system for use in hostels inside the Punjab University premises. The system combines RFID technology

and biometrics to accomplish the required task. When the RFID reader installed at the entrance of hostel detects a number, the system captures the user image and scans the database for a match. If both the card and captured image belong to a registered user, access is granted; otherwise the system turns on the alarm and makes an emergency call to the security van through GSM modem. In this way, the suspicious persons can be caught. Index Terms—Security and access control, RFID, face recognition.

[4]. G. Ostojic, S. Stankovski, and M. Lazarevic, "Implementation of RFID technology in parking lot access control system," in *Proc. Annual RFID Eurasia Conference,* 2007, pp. 1-5. Currently, there are many parking lot management systems in use; however, most of them are unsuited to the problem of car theft. For example, a thief can drive a jalopy into a parking lot, and because the gate does not have any mechanism to detect 2hetherr the driver is the owner of the car, the gate will be open according merely to whether the driver pays the parking fee. A thief can drive away with a luxurious car away using his own parking ticket. We propose a new scheme to prevent the car theft. We adopt radio frequency identification technology conforming to EPC global Class 1 Generation 2 to our scheme design. Our scheme supplies an easy, cheap and high security parking environment for customers and the parking management system.

[5]. Using Assembly and C By Janice Gillispie Mazidi, Muhammad Ali Mazidi, and Rolin D. McKinlay This textbook covers the hardware and software features of the 8051 in a systematic manner. Using Assembly language programming in the first six chapters, in Provides readers with an in-depth understanding of the 8051 architecture. From Chapter 7, this book uses both Assembly and C to Show the 8051 interfacing with real-world devices such as LCDs, keyboards, ADCS, sensors, real-time-clocks and the DC and Stepper motors, The use of a large number of examples helps the reader to gain mastery of the topic rapidly and move on to the topic of embedded systems project design.

BLOCK DIAGRAM:



(1)

RESULT AND CONCLUSION:

The goal of the project was to design a system, which should be easy to implement, and short ranged. The project is implemented through onboard Wi-Fi, which is inbuilt in the mobile phones having an Android as its system. In industries to reduce manual overhead we have implemented Internet of Things (IOT) in Industry to monitor as well as to inform the responsible person to take appropriate measures, but this will partially fulfill our requirement of company.

In big industries where huge and multiple machines are used it is very difficult to monitor daily work manually. Hiring a person of supervising also will increase pay scale. Also it is not assuring of efficient work. This system also is applicable where workers attendance needs to monitor by changing in design. Productivity increases as analysing time slot, quantity of products is possible through this system. Workers will me more caution. Leads to company development.

FUTURE SCOPE:

- It can be implemented in any company which use big machinery where rate of product is very prior thing. It is a real time application.
- It can be used in small companies were humans survey is not affordable.
- It can also be used in Mines were big machineries cannot be checked

REFERENCES:

[1]. Prof. Niranjan M, Madhukar N, Ashwini A, Muddsar J, Saish M (Department of Electronics and Communication, Jain College of Engineering Belagavi, India)

[2]. D. L. Wu, Wing W. Y. NG, D. S. Yeung, and H. L. Ding, "A brief survey on current RFID applications," in *Proc. International Conference on Machine Learning and Cybernatics*, Baoding, July 12-15, 2009, pp. 2330-2334.

[3]. Umar Farooq, Mahmood ul Hasan, Muhammad Amar, Athar Hanif and Muhammad Usman Asad. the design of RFID based security and access control system for use in hostels inside the Punjab University premises

[4]. G. Ostojic, S. Stankovski, and M. Lazarevic, "Implementation of RFID technology in parking lot access control system," in *Proc. Annual RFID Eurasia Conference*, 2007, pp. 1-5.

[5]. M. A. Mazidi, J. C. Mazidi, and R. D. Mckinaly, *The 8051 Microcontroller and Embedded Systems*, Pearson Education, 2006.