

EMBEDDED SYSTEM FOR EMPLOYEE LOGIN AND LOGOUT MANAGEMENT SYSTEM WITH RFID AND CHANGING THE PASSWORD USER MANUALLY

G N Prashanthi¹, H.Raghupathi²

¹Pursuing M.Tech (ES), ²Assistant Professor,

Visvesvaraya College of Engineering and Technology

Patelguda, Ibrahimpatnam, Ranga Reddy Dist. Telangana, (India)

ABSTRACT

As we can see that attendance tracking is one of complicated task in office or in academic environments. There are large chances to cheat or mislead the data. In our project we are implementing a system to track the employee attendance and at the same time the log in and log out time of the employee. Every employee has the unique identification for which we are providing finger print to everyone and at the same we are allotting the password for every user so that some has to enter the password also to get the details registered in their system. At the same we are reading the user with the help of ID number and also stores the time of arrival of user and all the details are store in system. With the help of our system every employee login and logout are stored in the system. There is also user password changing facility so that they can keep their password safe and secure. We are using web site to acquire data from the micro controller and received data is analyzed and stored in web side sheet. Admin can access the data at the moth end calculate the data from the excel sheet which is so easy when compared to the login account book and they know how much amount of time employee stayed in the office.

Keywords: *ARM7 board, Finger print, switch, web page*

I. INTRODUCTION

Fingerprint Based Attendance System is a machine advanced for each day employee attendance in corporations. Employee's proper attendance control is till date an important difficulty in many organizations. Attendance plays a crucial role in coping with salaries of employees and also in monitoring the regularity & sincerity of employee's closer to their occupation. The procedure of tracking attendance manually the use of pen and paper has come to be an outdated technique. It now not simplest entails faux entries with the aid of employees but even sometimes lead to unsuitable evaluation of attendance. There continually exist a chance of facts/check in getting misplaced or can also get harm due to unfavorable occasions. To triumph over some of these drawbacks and lots of greater than that we intend to increase a system which now not handiest eliminates the tedious mission of monitoring attendance manually but additionally allows in preserving a machine so that it will assist an employer in right & appropriate assessment of

earnings, regularity & even punctuality of an worker primarily based on attendance. The purpose of developing attendance management device is too automatic the subculture way of speaking attendance. The attendance of the employee may be taken via Fingerprint and could robotically get stored inside the database. So forth. Regarding their attendance & earnings. The gadget records info along with arrival and departure of employees except maintaining information concerning their personal and respectable profiles. Official employee facts consisting of designation, department, shift, location, leaves fame, repayment, etc. Can be related to any payroll software program to automate the whole manner.

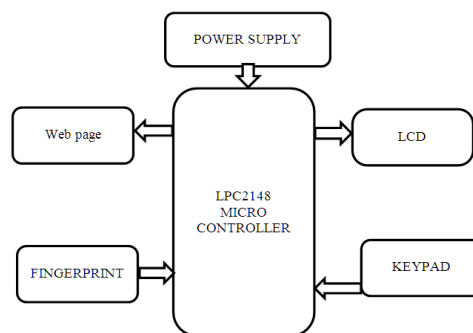
II.EXISTING SYSTEM

Employee's proper attendance management is till date a critical problem in lots of companies. Attendance performs an important function in coping with salaries of employees and also in tracking the regularity & sincerity of employee's closer to their career. The system of tracking attendance manually the use of pen and paper has end up a previous technique. It now not most effective includes faux entries with the aid of employees but even from time to time result in wrong assessment of attendance. There continually exist a risk of facts/check in getting misplaced or may additionally get damage due to damaging circumstances.

III. PROPOSED SYSTEM

As we can see that attendance tracking is one of complicated task in office or in academic environments. There are large chances to cheat or mislead the data. In our project we are implementing a system to track the employee attendance and at the same time the log in and log out time of the employee. Every employee has the unique identification for which we are providing Fingerprintfingers to everyone and at the same we are allotting the password for every user so that some has to enter the password also to get the details registered in their system. At the same we are reading the user with the help of ID number and also stores the time of arrival of user and all the details are store in system. With the help of our system every employee login and logout are stored in the system, and that will be to the webpage through ESP8266(wifi module) .

Block Diagram



LPC2148 microcontroller

The ARM7 (superior RISC system) processors board primarily based complete on a 16/32-bit ARM7 its approach of 16/32-bit ARM7 TDMI-S microcontroller, eight computer memory unit to 40 pc reminiscence unit of on-chip static RAM and 32 computer memory unit to 512computer reminiscence unit on-chip flash reminiscence; 128-bit In-system Programming (ISP). 32-bit timers/out of doors occasion counters, PWM pulse width modulation unit (six outputs) and watchdog, Low electricity of actual-Time Clock (RTC), more than one serial interfaces which has 2 UARTs , speedy I2C-bus (400kbit/. There are sixty four pins of ARM7 processor and a couple of ports (port0, port1) 45 pins are enter/output.

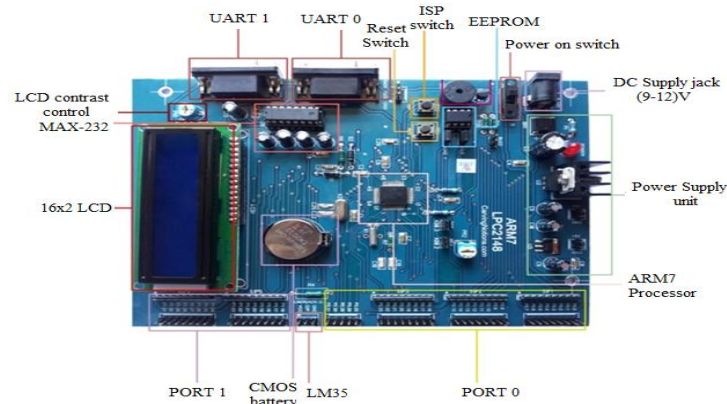
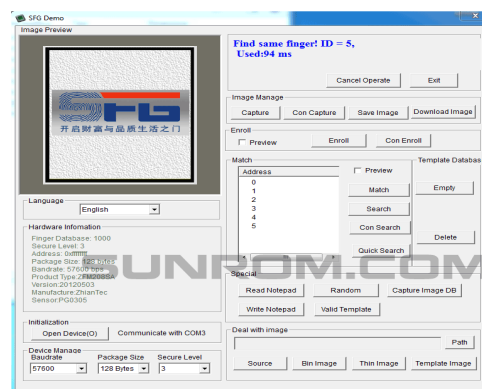


Fig2:-LPC2148 board

Fingerprint Module

This is a fingerprint sensor module with TTL UART interface for direct connections to microcontroller UART or to PC thru MAX232 / USB-Serial adapter. The consumer can shop the finger print data in the module and may configure it in 1:1 or 1: N mode for identifying the character. The FP module can without delay interface with 3v or 5v Microcontroller. A stage converter (like MAX232) is required for interfacing with PC serial port. Optical biometric fingerprint reader with splendid features and may be embedded into an expansion of cease merchandise, together with: get admission to manipulate, attendance, protection deposit field, vehicle door locks

PC Application:-



VI. SOFTWARE DESIGN

In this proposed contrivance, as we tend to used LPC2148 we wish to use following software package instrumentation to program for it.

1. Keil4 Vision
2. Flash Magic

The Keil4 Vision an IDE for Embedded c programming language. In this IDE, we want to import the utilities and libraries steady with the controller. This IDE may be very extra effortlessly and in person friendly thanks to practice, assemblers, and debuggers in it. It simplifies the manner of embedded simulation and trying coming into conjunction with Hex file technology. The flash magic is a programming application. The C/C++ software program written in IDE could be processed into Hex report i.E. In .Hex format. By the usage of hex report we tend to products the code into microcontroller and carry out application

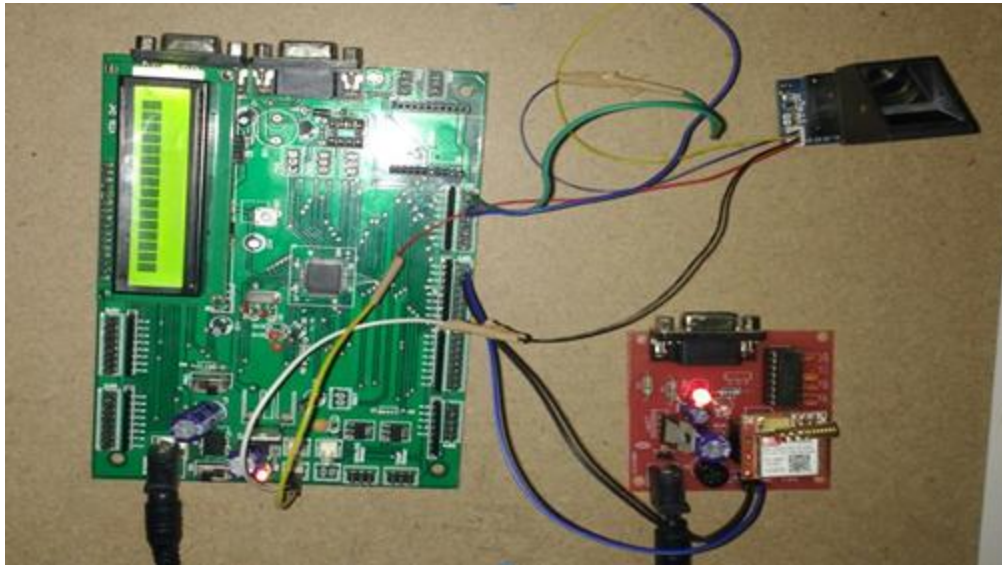
VII. WORKING PROCEDURE

Fingerprint Based Attendance System is a gadget developed for daily worker attendance in agencies. Employee's right attendance management is until date a essential trouble in lots of companies. Attendance performs a essential position in dealing with salaries of personnel and also in tracking the regularity & sincerity of employee's towards their occupation. The process of tracking attendance manually the use of pen and paper has emerge as an outdated method. The procedure of tracking attendance manually the usage of pen and paper has emerge as an old method. It not handiest entails fake entries by way of personnel however even every so often cause fallacious assessment of attendance.

To avoid the prevailing machine problem we offering the Fingerprint and password primarily based undertaking. In this assignment each employee/scholar have their personal Fingerprint. Whenever the scholar/worker input into the university/office they want to vicinity their personal Fingerprint, if the finger will match it's going to recall the check-in time or login time. Whenever you want go out from the institute, have to vicinity finger on the Fingerprint if the finger might be matches it's going to keep in mind as the logout time. In this mission we have the 2 modes, login mode/check in mode and logout/take a look at out mode. If we need test-in need to press one button for logout we've got another button. These buttons are interfaced to the controller. The data will upload to the web site the usage of wi-fi module. We can test the data within the web site.

VIII. RESULT

The project **"Embedded System for Employee Login and Logout Management System with Fingerprint and Changing the Password User Manually"** was successfully implemented and output was verified on the hardware. In this project we have one Fingerprint module, if we want login or logout we need to place the finger the module, if the finger will matches it will be uploaded to the webpage through ESP8266 wi-fi module.



VIEW USER INFORMATION

Search:

S.No	Employee Id	Employee Name	Morning		Afternoon		Evening		Center ID
			Login Time	Logout Time	Login Time	Logout Time	Login Time	Logout Time	
60	123123	siva	02/09/17 12:30:55 AM						hyd
59	1206	emb	01/09/17 06:52:54 AM	01/09/17 06:53:30 AM					tss

IV. CONCLUSION

The objective of this mission that is “**Embedded System for Employee Login and Logout Management System with Fingerprint and Changing the Password User Manually**” turned into to design a device based on Fingerprint generation in order to not best trade the worrying guide attendance procedure but additionally automate user’s workplace. The final layout of the project finished the concept of multimode environment which is responsible for

computerized attendance and workplace automation consistent with the personalized profile of the Fingerprintfinger holder. The design also offers with the troubles (reliable information transfer) of multimode surroundings. This undertaking helps the users in numerous methods like time saving in attendance method, security, personnel" attendance management and lots of extra.

REFERENCES

- [1.] Www.Projectsof8051.Com/Automatic-Room-Light-Controller-With-Visitor-Counter.
- [2.] Seminar-Projects.Net/Tags/Automatic-Counting-System-Circuit.
- [3.] Www.Academia.Edu/.../Automatic_Light_Control_By_Using_Microcontroller.
- [4.] [Https://Www.Elprocus.Com/Motion-Detector-Circuit-With-Working-Description](https://Www.Elprocus.Com/Motion-Detector-Circuit-With-Working-Description).
- [5.] Www.Electronicshub.Org/Microcontroller-Based-Mini-Projects-Ideas.
- [6.] Www.Ijareeie.Com/Upload/2015/Ncreee/7_Pid131.Pdf.
- [7.] Fullreport.In/Tags/Is-Any-Ppt-Is-Der-To-Download-Automatic-Room-Light-Control.
- [8.] Www.Engineersgarage.Com/Contribution/Automatic-Room-Lighting.
- [9.] Www.Slideshare.Net/.../Automatic-Roomlightcontrollerwithbidirectionalvisitorcounter.
- [10.] Www.Academia.Edu/.../A_Project_Report_On_Automatic_Room_Light.

AUTHOR DETAILS:

	GN PRASHANTHI Pursuing M.Tech (ES) from Visvesvaraya College Of Engineering And Technology, Patelguda, Ibrahimpatnam, RangaReddy dist, Telangana, INDIA.
	H.RAGHUPATHI working as Assistant Professor from Visvesvaraya College Of Engineering And Technology, Patelguda, Ibrahimpatnam, Ranga Reddy dist, Telangana, INDIA.