

Rfid Based Attendance System through Web-Page with Sms Notification

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Abstract: A data from the National Crime Records Bureau reports that a child goes missing for every eight minutes in India. . To lessen the parent's anxiety about their children, tracking system is formulated by merging Radio Frequency Identification (RFID).The system consists of RFID tags and readers which are designed to scrutinize the entry and exit of a student in a campus. Each student is assigned with a tag which holds the precise details. When he/she enters the campus, the reader reads the student's tag and stores the details of entry and exit. This information is notified to the concerned authority via SMS using GSM. The GPS technology connected with this system helps to updates on student's real time location. The detail of current location is updated in the campus server. This project tracking structure with enriched features is designed and implemented for the purpose of protection and also safety in various streams. It is up and coming technology in the field of communication and also with the networking concept.

Keywords: RFID technology, Radio-frequency identification, Radio waves.

I. Introduction

According to the statistics from national crime records bureau, in India a child keeps disappearing for every eight minutes. Around 60,000 children go missing in a year from which 40% of children have not been found [1]. In Coimbatore 2010, a 10-year-old girl and her 7-year-old brother were abducted by a taxi driver while waiting for the van that usually takes them to the school [2]. Children safety is a major anxiety among parents. They want to know whether all the safety measures are available for their children. Parents will want to know about the where their children, when they are late home. By tracking the location of the students we can reduce the parents fretfulness. The aim of this paper is to develop a student Safety System which provides the details of entry and exit of the student from campus using RFID . The proposed system provides a facility to track the exact location of the student using RFID . So this could be implemented even in small scale schools. Such systems must be installed in order to reduce the number of abduction taking place.

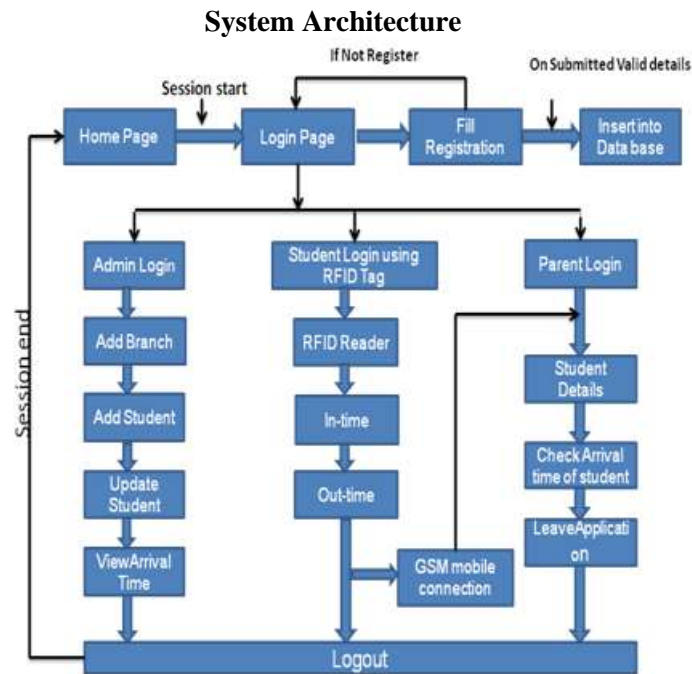


Figure-1 Architecture of system

**PROPOSED SYSTEM
RFID Reader-**

The RFID reader uses low frequency band, and practically, the reading distance between the tag and the reader is about 7cm. The result of this reader is transmitted data serially, so the data is transmitted at about 9600 baud rates. However, this reader has been chosen because it has a DB 9 female header, which can be used to connect to the serial port of computer, and also it can display all the unique ID of the particular tag in Window operating system. this applications includes Pet Toys and Access Control System in network.



Figure-2 RFID Reader

RFID Card-

The RFID tags use a card. These RFID tags are passive tags so thus it has no internal any power supply. These tags activated by radio frequency transmitted by the reader in rfid. The reading distance is about 7 cm of the tag. When the RFID reader receives the data from the tag, the data then will be compared with the data in the mysql database to identify the holder of the particular tag.



Figure-3 RFID Card

MYSQL Database-

The method/approach used in achieving this project design to include; the designing of the a hardware part consisting of a reader interfaced with a designed mysql database and graphical user interface(GUI) that will be responsible for taking and storing the data to the reader and also tag. And the software development unit consisting the php language and mysql.as database .,This is done by comparing the information received from the RFID reader to the information stored in the database of particular tag id.

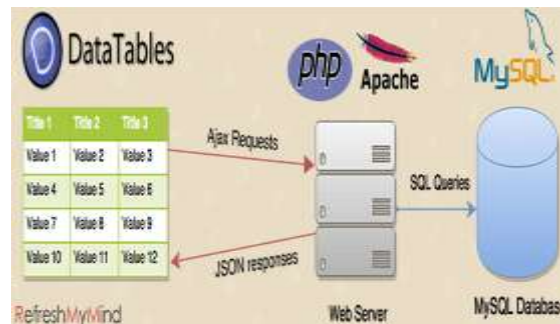


Figure-4 MYSQL Database

II. Result



Figure-5 Home Page

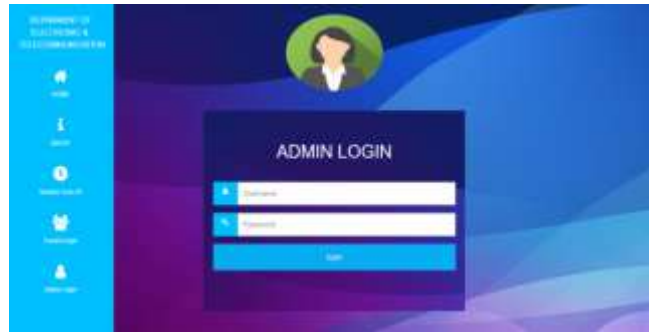


Figure-6 Admin login



Figure-7 Scan Card

III. Methodology

RFID system is an evolving technology in various fields, which is renowned for its condensed design of size, processing speed etc. It plays a preeminent role in Anti-Theft and tracking process. The RFID technology has a feature of exclusively identifying an object or a person with a wireless radio link, allowing particulars to be stored on an RFID tag and reacquires it in distant application. The details about the student like his/her name, roll number, boarding place will be logged in the electronic automated database and also on the RFID tag. Radio Frequency Identification (RFID) utilizes radio waves to detect an object or a person by a unique serial number. The micro-controllers are used as a communicating bridge between devices.. This security system is simple and cost effective. RFID technology is an emerging technology in the field of construction of roads which has extensively grown in intelligent transportation systems (ITS) [9-16]. Because of its evolution in various fields, transportation and tracking industries are researching and implementing RFID technology to improvise the precision of data acquiring process.the student attendances GUI Design .the GUI of the Time format Attendance is developed using HTML, CSS, JAVASCRIPT, and BOOTSTRAP. securitysystem interface is divided into two parts which are login part and the main interface part. The purpose of the login part is to make the system more secure as user(parent and student) has to login before having the access of the main interface. This project is design named “security system using rfid”.

Using GSM(Global system mobile communication) is use to send message to parent login to show the student are arrival in college campus i.e also security system for the parent.

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