Raspberry Pi in Attendance Tracking System

Abstract

In the recent years there has been rise in the number of application based on raspberry pi and RFID (Radio Frequency Identification) cards and has been successfully applied to the attendance tracking system. This project will be used for automatically managing the student attendance process for any given learning organization. This system facilitates automation in terms of aggregating the number of head count and is managed completely by an automated system. In this paper, an attempt is made to solve the current problem of inconsistency, time consumption and also elimination of paper work. The current system has various flaws like class attendance are not secure, time consuming and it can be prone to errors if it is taken verbally or visually. There also persists the issue of proxy as well as a nuisance is created when the attendance is taken manually which ultimately ruins the discipline. There are many ways in which this is performed today such as a sign up sheet which is passed around, attendance taken verbally, or sometimes not taken at all. All of these will be eliminated with the implementation of the system using Raspberry pi. The configuration of the project will consist of a Raspberry pi with an attached RFID card and RFID reader. By using raspberry pi an accurate
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process will be maintained which will take attendance automatically when the student enters the room. Each student will be required to have their student ID card (RFID card) which will ensure consistency. The Attendance Tracking system will rely heavily on computer hardware and its backend database and an RFID card which does all the processing tasks when the system is interconnected and made ready for implementation. This system facilitates automation in terms of aggregating the number of head count and is managed completely by an automated system.

References

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Index Terms

Computer Science Information Sciences

Keywords

Application of raspberry pi, raspberry pi model, reports, RFID reader, Simplified Attendance Tracking.