**ABSTRACT**

**Title:**Real time attendance system over IOT along with monthly, yearly analytics

**Proposed Idea**:

Attendance is for keeping records of number of students present in schools, colleges or in any organization. It is very important to maintain discipline among employees in an organization and monitor students in schools, colleges and if someone drifts from required standards proper action can be taken. Complexity of this process increases even more with increase in number of student.

If we look at the current scenario of our education system, though there are many technologies available the traditional system of taking attendance through manual of calling out roll numbers or sheets is still in practice. This manual approach is time consuming and inefficient.

Radio Frequency Identification(RFID) is one the solutions to this problem. This system can be used to take attendance of students, employees in educational institutions and work places. The ability of RFID to uniquely identify each person based on the tag of the id card make the process of taking attendance easier, faster and secure compared to that of manual method. Students or employees only need to place their ID on the scanner and their attendance will be taken immediately. It will be more accurate as the logging time will be recorded. The data will be uploaded after scanning and stored into the cloud.

The data can be analyzed monthly, yearly for checking the progress of the students and appropriate improvements can be suggested.

**Hardware Requirements:**

* Esp8266
* Mfrc522
* RFID(Radio-Frequency Identification) Cards

**Software Requirements:**

* Processor : i3(min.)
* Back End : php
* Storage : Cloud
* OS : Windows 7 and higher
* Web Browser : Google Chrome,Mozilla Firefox
* Arduino

**Block Diagram:**

Enroll Student details into RFID

Scan the RFID of Student

ValidateStudent with ID

Upload attendance into Cloud