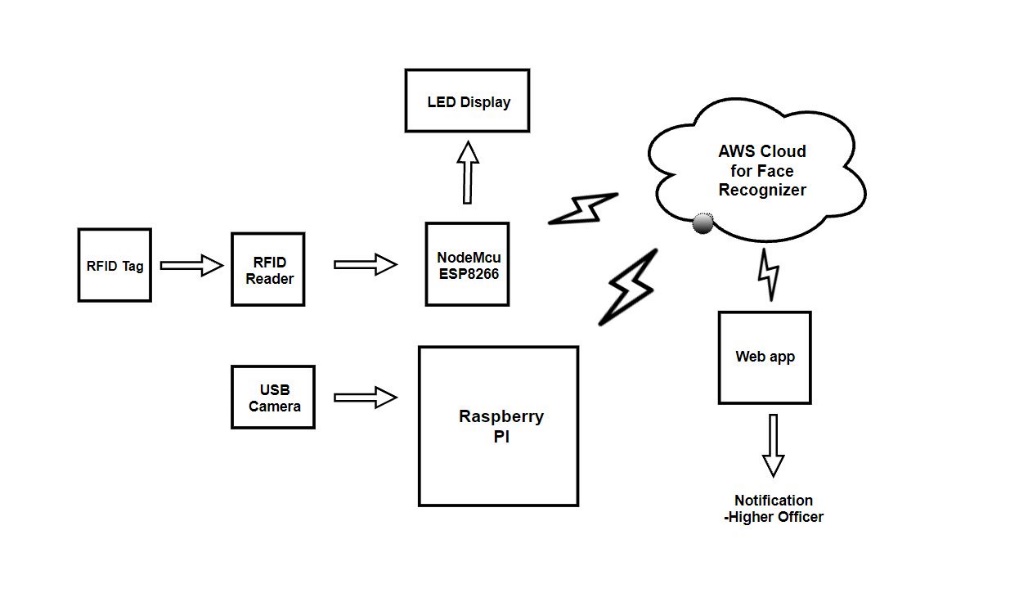
**IOT BASED ATTENDANCE MONITORING SYSTEM**

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In the Fingerprint based existing attendance system, a portable fingerprint device need to be configured with the students fingerprint earlier. Later either during the lecture hours or before, the student needs to record the fingerprint on the configured device to ensure their attendance for the day. The problem with this approach is that during the lecture time it may distract the attention of the students.

Biometrics seem secure on the surface. After all, you’re the only one with your ears, eyes, and fingerprint. But that doesn’t necessarily make it more secure than passwords. A password is inherently private because you are the only one who knows it. Of course hackers can acquire it by brute force attacks or phishing, but generally, people can’t Access it. On the other hand, biometrics are inherently public. Think about it: your ears, eyes, and face are exposed. You reveal your eyes whenever you look at things. With fingerprint recognition you leave fingerprints everywhere you go. With voice recognition, someone is recording your voice. Essentially, there’s easy access to all these identifiers.

Our proposed system uses USB Camera which is connected to the raspberry pi camera slot. Live video stream of students is captured in the class with USB1 camera, Raspberry pi takes those images as input images and sends to the cloud server and we make use of face recognition service to compare the input images with the existing image which is already uploaded in the database. Matched images are detected and attendance is marked with date and time for students present in class in the local data base using MYSQL. Unmatched images are denied. This process is carried out for every period and students are given attendance accordingly. A unique RFID card is given to the faculty, when faculty enters the classroom and swipes the RFID card, the RFID sensor scans and sends the data to the database and displayed on OLED. We also, design a web application for the tracking of their attendance. Admin tracks the attendance of the students and faculty periodically or whenever required by the administration and finds the result. The result is displayed on the monitor screen and stores the validate images in the database. Student attendance will be monitored and if the student is absent for that class then the notification will send to the faculty and parents.

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