**FIELD OF INVENTION**

The present invention is generally related to the attendance system of the staff in an organization. This invention can be deployed in any type of firm either small or large. The only need is the availability of the smartphone to every employee and availability of firm’s own wireless network in their campus.

**BACKGROUND OF INVENTION**

Now days, there are many advanced attendance systems are deployed in various places. Prominent of them are based upon the thumb impression. But this creates a problem in a way that there is a lot of time elapsed for a person from the campus gate to the impression machine and also time is elapsed in a way if there is long queue of people for their own attendance. Also the installation of this machine is also difficult due to economic issues for various sectors.

Therefore, there felt a need of fast and efficient system solution that addresses above issues. We planned to distribute the attendance system into the individual devices that solves the issue of “waiting in queue”. Those devices will be smartphones installed with our Application. As now a days Android runs on almost 87.5% devices (According Strategy Analytics, in the 3rd quarter of 2016) in the whole world. This availability of devices solves the “economic issues” in terms of machine installation.

This invention is unique in terms of way it marks the attendance and identifies the user from the trivial thumb impression techniques. Talking about user identification this application uses the MAC (Media Access Control) address of the device as the unique identifier for user. Talking about the next steps of marking attendance we used the most emerging technology , Face Recognition that will mark the attendance.

**Following are the unique features :-**

* Application will be auto-start in the background at the firm-employee allotted time.
* Application will only open after auto-start when it will connect to WiFi network whose MAC address and security key will be registered on the application.
* User Face and his/her device MAC address will be binded in the database. So their will be no case of proxy attendance.
* If user left the office in between it leave time will automatically updated to the database by GPS location detection.
* Application will restart on the official leaving time of the firm to mark the leaving attendance.
* WiFi will be forgotten after the attendance being marked. This will restrains the user to have benefits of WiFi for any personal use.
* All the services will be deployed over the servers so user can’t able to manipulate the technical features of the application for its own benefits.
* Application will automatically mark the user as late if the user will not make the office on time.

**Flow Chart of the Application:-**

