

# Institute Staff Management System on Android Phone

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## ABSTRACT

Manual registration in biometric systems and entering in the attendance catalog in different physical locations is the current system used in all the colleges. The long queues in front of the attendance machine at the time to come to work and leave work. In existing system leave process done through paper work as well as web application is also use but in web application notification system is not introduce hence they have to inform manually that leave application has been send. In event management notice has to be circulating to every staff manually. In staff allocation for supervision exam section head has to give notice to every staff and acknowledgment is not receive to head in existing system. In this study, we proposed a system in which staff can give their attendance through android phones by connecting to college Wi-Fi. We can trace staff location by GPRS which will be stored at portal. In leave module whole process of leave application is done. If a specific staff wants to take leave for day or half of day they can take through our system, The leave application will pass through 2 phases i.e. HOD and Principal .We also include several modules like, syllabus , time table.

**Keyword:** - Mobility, Tracking, GSM, Wi-Fi.

## 1. INTRODUCTION

Attendance system has been known since ancient time. In the beginning, attendance system using only paper and performed manually by calling the name of an existing name listed and marked as present or not present along with the notes. This way is not efficient, it would be very time consuming if we have to call one by one all the people who exist on the list. In line with technological developments in the field of clock then created the attendance system used machine that more efficient than manual attendance system. The first attendance machine was very simple, the employees just inserting the attendance paper or called time sheet into the machine, and the time will be printed on the time sheet. Basically, this attendance machine consists of a manual card slot or hole to insert the time sheet employees and an analog clock showing the current time. The time when the employees insert the card into the slot is what will be printed on the time sheet. This attendance system has several disadvantages:

- In this system, the data on time sheet has to process manually. Human Resources Division should note and record employee attendance manually that it can be take a lot of time.
- Inefficient due to spend a lot of paper. The use of this manual attendance machine card is not environmentally friendly and efficient because of the paper used as employee time sheet.
- Vulnerable fraud. Using this attendance system has a vulnerable fraud because the fact is, many fraudulent employee time sheets entrust them to his friend so that when it comes late or absent, their cards will remain in the list of attendance.

The need for such a mechanism increases even more as in this era of technology, platforms exist to support them. One such platform and a very common one in that is a smartphone. Almost everyone today carry a smartphone with them as they become more and more affordable and easily available. Also within the smartphone market android is the clear leader in terms of market share. According to one report, 78.1% of the total smartphones sold in 2013 were the smartphones that run on Android Operating System. Hence developing an android application becomes an obvious choice.

Using these application staff can give their attendance easily by just one click. Attendance sheet is generate at portal side therefore no need of generating attendance sheet manually.

Also staff can give their leave application and leave report is also generated. Also staff can use these application for event creation, for seeing lecture timetable and syllabus.

The development of this project needs a great research work. With research work done properly one can make out the success or failure of the project, as it provides complete exposure of knowledge, business, human networking, better insights and understanding of the required area.

## 2. LITERATURE SURVEY

Attendance system has been known since ancient time. In the beginning, attendance system using only paper and performed manually by calling the name of an existing name listed and marked as present or not present along with the notes. This way is not efficient, it would be very time consuming if we have to call one by one all the people who exist on the list. In line with technological developments in the field of clock then created the attendance system used machine that more efficient than manual attendance system. The first attendance machine was very simple, the employees just inserting the attendance paper or called time sheet into the machine and the time will be printed on the time sheet. Basically, this attendance machine consists of a manual card slot or hole to insert the time sheet employees and an analog clock showing the current time. The time when the employee insert the card into the slot is what will be printed on the time sheet.

Manual registration in bio metric systems and entering in the attendance catalogues at different physical locations is the current system used in all the colleges. The long queues in front of the attendance machine at the time to come to work and leave work. The record of attendance is stored manually. If in case any data get misplaced, recovery of that data is quite difficult. In existing system leave process done through paper work as well as web application is also use but in web application notification system is not introduce hence they have to inform manually that leave application has been send. Also the record of leaves is stored manually. Each time staff have to tally their previous record and then accordingly they have to apply for leave and then decided which kind of leave should be taken, which again is very hectic In event management notice has to be circulated to every staff manually. In staff allocation for supervision exam section head has to give notice to every staff and acknowledgment is not receive to head in existing system. In existing system to get the syllabus staff has to check the university website and every time they have to go through searching tools. Similarly for time table staff has to check notice board.

## 3. PROPOSED SYSTEM

We have proposed a system in which staff can give their attendance through android phones by connecting to college Wi-Fi; we can trace staff location by GPS which will be stored at portal. In leave module whole process of leave application is done. If a specific staff wants to take leave for day or half of day they can take through our system. The leave application will pass through 2 phases i.e HOD and Principal. We also include several modules like syllabus, time table. We added several modules in this system:

1. Attendance module: In this study, we proposed a system in which staff can give their attendance through android phones by connecting to college Wi-Fi, we can trace staff location by GPS which will be stored at portal.
2. Leave module: In leave module whole process of leave application is done. If a specific staff wants to take leave for day or half of day they can take through our system, The leave application will pass through 2 phases i.e. HOD and Principal.
3. Event module: In this module college level event can be manage. Any type of notice will be sent to staff. Staff will get notification about event through application instantly.
4. Syllabus: In this module staff can check university level syllabus through this application.
5. Time Table: In this module staff can check time table of their lectures.
6. Supervision allocation: Only exam section head can use this module. In this module exam section head allocate the supervision to staff through this system.

## 4. SYSTEM ARCHITECTURE

Once staff logged in successfully staff can see the several options like attendance, leave, event, syllabus, time table. User should connect valid Wi-Fi to give their attendance and then and then only their attendance report will be generated. User should on his/her mobile GPS at the time of giving attendance so that their exact location can be traced. For taking leave user should fill leave application form and click on send button. This application will be send to respective HOD and then after approval of HOD these application is send to principal after approval of principal, acknowledgement will be send to staff about confirmation or rejection of leave application.

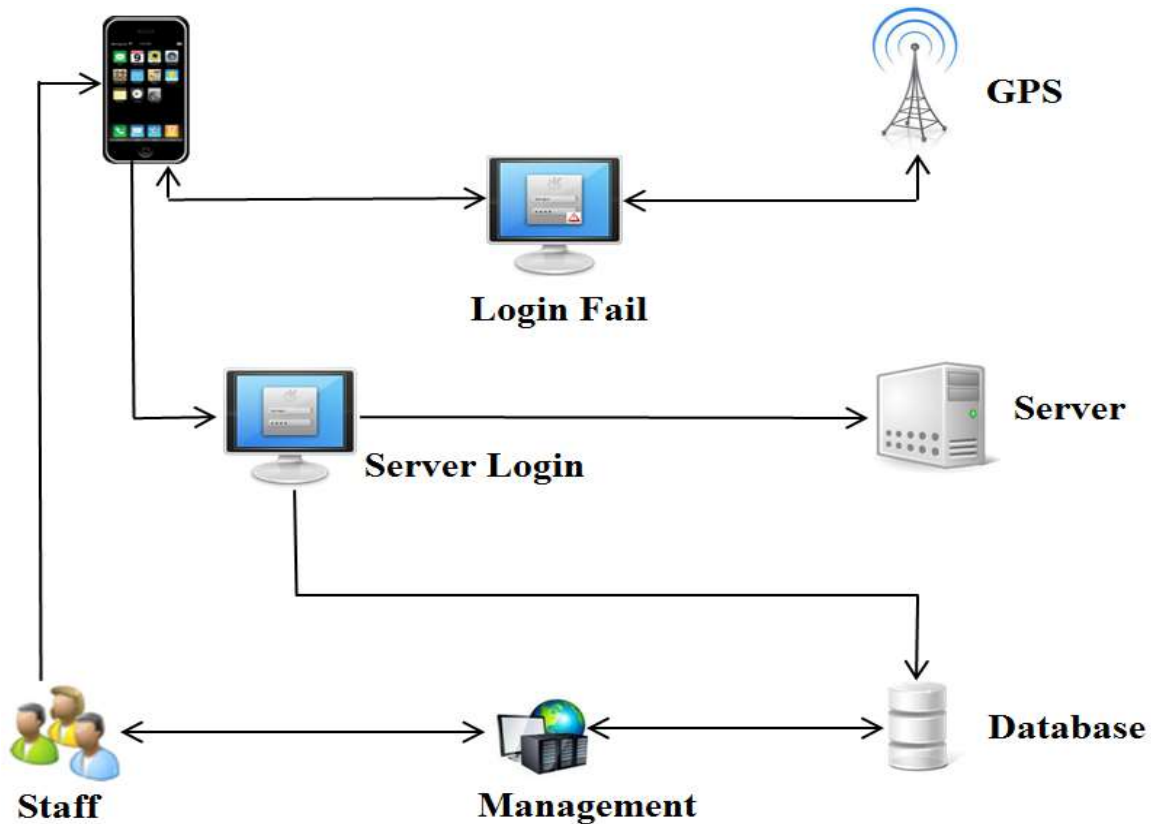


Fig-4.1: System Architecture

The main functions and features of the application are:-

- The user of the application has to login by entering a username and password the first time he/she opens the app on their device. They then remains logged into the application until they logs out explicitly.
- If the user does not have an account, he/she can register on the login screen.
- The user can also choose the password reset option in case he/she does not remember their password. A new password is set for the user and a mail containing this new password is sent to the registered email id.
- Once logged in, the user is directed to the main screen of the application. This is the screen that would open up when the user opens the application.
- After logged in successfully staff should fill their profile form.
- Once staff logged in successfully staff can see the several options like attendance, leave, event, syllabus, time table.
- User should connect valid Wi-Fi to give their attendance and then and then only their attendance report will be generated.
- User should on his/her mobile GPS at the time of giving attendance so that their exact location can be traced.
- For taking leave user should fill leave application form and click on send button. This application will be send to respective HOD and then after approval of HOD these application is send to principal after approval of principal, acknowledgement will be send to staff about confirmation or rejection of leave application.

## 5. ALGORITHM

### 5.1 ALGORITHM FOR LOGIN:

Step-1: Feel the sign up page.

Step-2: Pass the login credential.

Step-3: Check the employee id in server.

Step-4: Login in the server.

Step-5: Check the value in database.

Step-6: If user exist login successful.

**5.2 ALGORITHM FOR ATTENDANCE:**

Step-1: Check wifi is turn on or off.

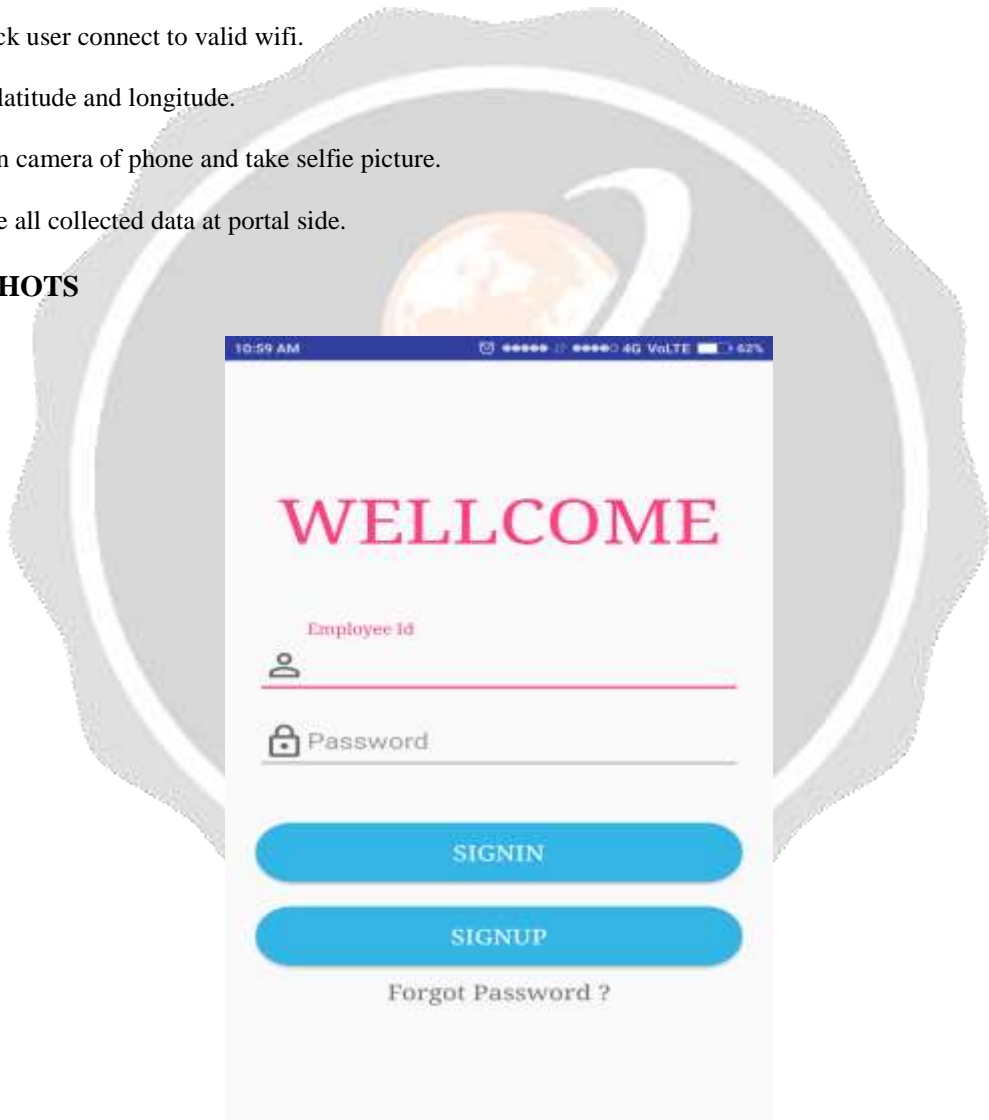
Step-2: Check user connect to valid wifi.

Step-3: Get latitude and longitude.

Step-4: Open camera of phone and take selfie picture.

Step-5: Store all collected data at portal side.

**6. SNAPSHOTS**



**Fig-6.1: User Login**



Fig-6.2: Account Information

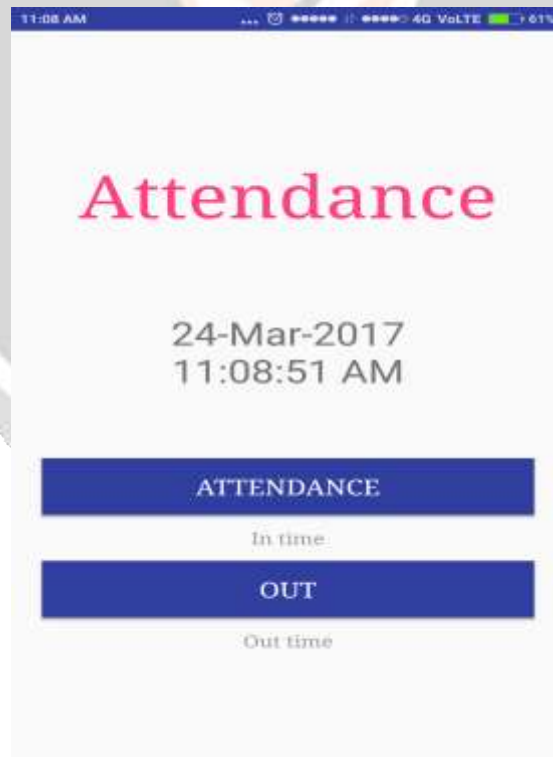


Fig-6.3: To Give Attendance

The screenshot displays a mobile application interface for submitting a leave application. At the top, the status bar shows the time as 11:08 AM, signal strength, 4G VoLTE, and a battery level of 61%. The form fields are as follows: 'Leave Type' with a dropdown menu set to 'Casual Leave'; 'From Date' and 'To Date' with date pickers showing 'dd/mm/yyyy'; 'Duration' with a dropdown menu set to 'Full Day'; and a 'Reason' field with a large text input area. A blue 'SUBMIT' button is located at the bottom of the form.

**Fig-6.4: Leave Application Form**

The screenshot displays a mobile application interface for creating an event. At the top, the status bar shows the time as 11:00 AM, signal strength, 4G VoLTE, and a battery level of 62%. The form fields are: 'Name of Event' (text input), 'Date' (text input), 'Time' (text input), 'Venue' (text input), 'Event Set By' (text input), and 'Description' (text input area). A blue 'SUBMIT' button is located at the bottom of the form.

**Fig-6.5: To Create Event**

**Fig-6.7: Block List****7. CONCLUSION**

Our attendance system can avoid long queue in front of attendance machine because the process of attendance in our system used smart phone or other mobile devices. Time will be saved for the staffs from entering the attendance manually. The application is user friendly with several features and some basic and small requirements. No need to maintain several records and manual calculation. 24\*7 availability of information. In one sentence it is simple ,handy , effective , creative and advanced software that bring ends to the time consuming problem.

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