

# Android based Attendance and Prediction System

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## Abstract:-

Android based Attendance and Prediction System can be used by any business institutes or colleges to maintain the records of students or employees easily. The creation and the board of precise, forward-thinking data with respect to an understudies' scholastic vocation is fundamentally significant in the college just as schools. Android Based Attendance And Prediction System manages all sort of understudy subtleties, understudy results, expectation of understudies result, notes refreshed by staff, scholarly related reports, school subtleties, course subtleties, educational plan, group subtleties, position subtleties and other asset related subtleties as well. It will likewise have workforce subtleties, cluster execution subtleties, understudies' subtleties in all angles. It provides minimal error in report generation of a particular student's attendance and prediction of students results. The fundamental thought process behind this product is to supplant the customary pen and register framework. Prediction system is use to predict marks of students depending on their Unit Test Examination and Attendance monthly. This can also identify whether the student is slow learner or fast learner.

## I. INTRODUCTION:-

These days, cell phones have become a lifestyle for understudies particularly in advanced education. PCs are currently supplanted by smaller PDAs that can fit into take and can be conveyed anyplace. Attendance System is an application for taking daily attendance in schools and colleges. It gives negligible blunder in report age of a specific understudy's participation. The principle rationale behind this product is to supplant the conventional pen and register framework. Another explanation behind building up this product is to create the report consequently toward the finish of the meeting or in the between of the meeting. Prediction system helps staff to predict marks of the students monthly or weekly. Prediction makes easier for teachers to identify the fast learners who can score good marks in their final examination and slow learner who can score less marks or can get fail in the final examination. Prediction is based on their Unit test marks and the percentage of their attendance.

It gives a wide range of understudy data subtleties, scholastic related reports, school

subtleties, course subtleties, educational plan, cluster subtleties, position subtleties and other asset related subtleties as well. It likewise encourage us investigate all the exercises occurring in the school, various reports and inquiries can be created dependent on immense choices identified with understudies, cluster, course, staff, tests, semesters for a specific branch or the whole school.

## II. LITERATURE SURVEY:-

All researchers have aimed to develop and provide a generalized solution to monitor the various works that are carried out by a College for automation of various tasks. There are no satisfactory solutions for achieving student information. Due its continuous evaluation process. This has led the researches for it. They provide up to date information of the system which improved efficiency of college record management and decrease the space between student and college. The major contributions to this topic are explained below:

It is discussed in [1], a mobile solution is provided for those students who are registered with senior design project course of bachelor engineering technology program. During the process of selection projects, the student likes to choose those projects supervisors who are flexible and committed to them for successful completion of their project at the end of the semester.

It is observed in [2], attendance and prediction system manages all sorts of student details, academic related reports, students marks predictions, college details, branch wise subject details, batch details, attendance details, notes updates by the staff. It tracks all the details of the student from very first moment and will generate report at the end of the month and also to the end of the course. This information would be utilized for generating students report purpose. [3], proposed attendance and prediction system, this helps staff in maintaining information of student and also provides the guidelines for students in different areas.

## III. PROGRAMING LANGUAGE USED:-

1. Java is the primary language used for programming in the Back End.

2. XML (Extensible Markup Language) is used for programming in Front End.

**IV. EXSISTING SYSTEM:-**

Participation control can be viable in the event that they are executed reliably and decently. This is particularly true for smaller schools that has very less number of students or companies that work on the same projects. On the other hand, systems of this kind are totally dependent on the human factor and are not suited for large school or colleges, complex business systems with hundreds or thousands of employees.

**Pros:**

1. No technology expenses.
2. Simple to implement and administer.
3. Resistant to power outages.

**Cons:**

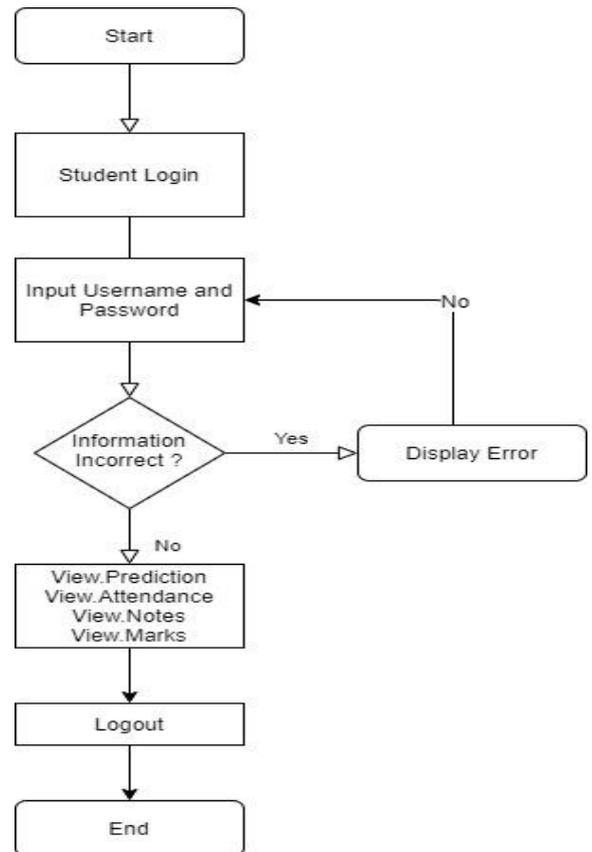
1. Inaccurate and subject to manipulation ('time theft').
2. Time consuming.
3. Offers less security.
4. High possibility of human error.
5. Low adaptability and no consolidation with other structure.

**V. PROPOSED SYSTEM:-**

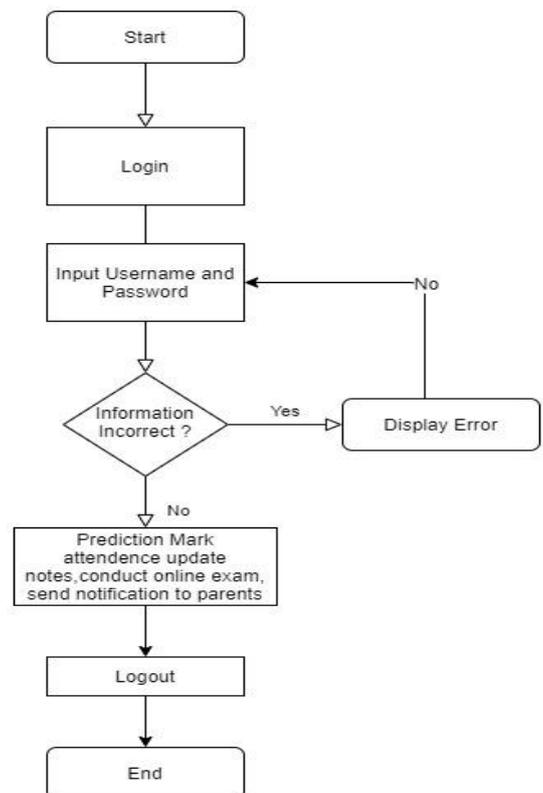
**AUTOMATED ATTENDANCE AND PREDICTION SOFTWARE:-**

Software solutions for human resource management are constantly advancing and are now considered far more reliable than manual timekeeping. They greatly simplify the human efforts, check in process and allow easy access to data that can be graphically analyzed. This system provides high security.

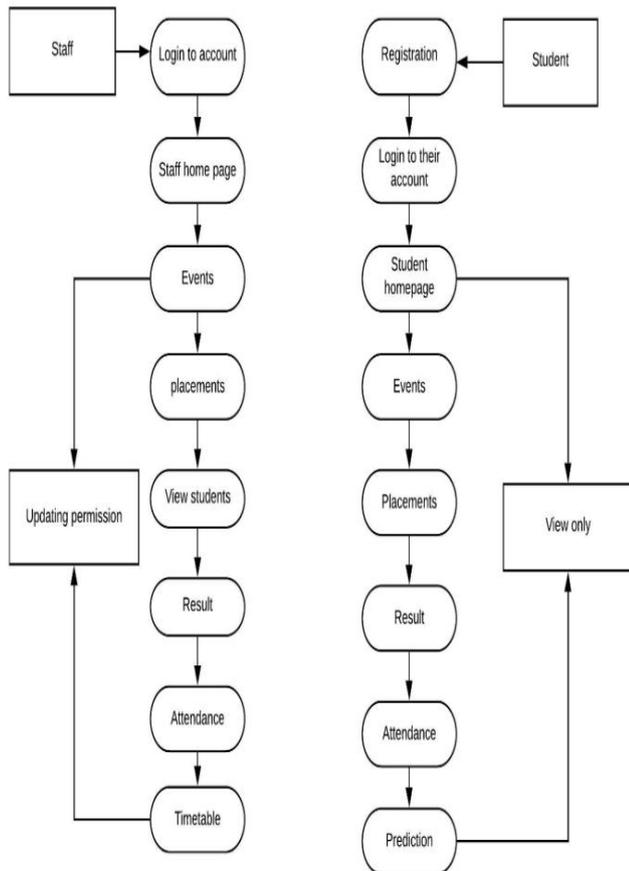
Flow chart of Student Login:-



Flow chart of Staff Login:-



**VI. DATA FLOW DIAGRAM:-**



There is lots of information is required in the education institution but we are concentrating on attendance and marks prediction of the student using Android, as keeping manual records in difficult and time consuming. The main purpose of this project is to provide students all the information which is updated by the staff like Student results and also prediction of marks display attendance of student, Timetable for every semester, Exam details, Event details, Placement information. In our proposed system there are four panels, Admin/Hod, Staff, Student and Parents. The admin (HOD) and staff. HOD has the authority to add and remove staff and student of every branches. Staff has authentication for editing and modifying the details like updated noted, Results, Attendance, exam details, event and placement, etc.. In student and parents panel, they are only eligible for login, register the subjects and also they can view all the details posted by admin. The proposed system is easy to use, it keeps all records, information provided is accurate, not time consuming, needs less memory space, no need for looking college notice board, create the awareness of permissions to the user, secured.

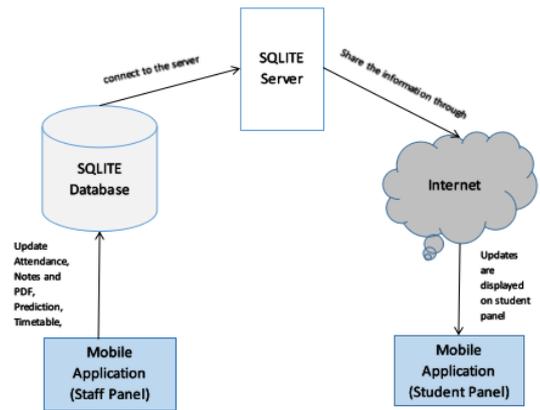


Fig. Architecture

**1. FACULTY**

The staff is responsible for entering the new student and managing the student accounts. The faculty/admin also manages the faulty accounts like entering a new faculty assigning the faculty to the subjects, schedulers etc. Admin/staff can add students according to their branch and semesters. The staff can update the information every day, of notes which will be covered daily. The notes may consist of text, images, videos, PDF. They can also update student attendance during the lectures, once the attendance is marked it gets saved in database automatically. They can also send notification to the parents about parents teachers meet. Staff can also conduct online exams. They can also differentiate student who has paid the fees and students who has not paid the fees.

**2. STUDENT:-**

Student can access the information of the college, subject details which staff will be updating, placement cell information and online exam conducted. The course details will include information regarding branch the student is studying in, the academic year wise subject of the branch, the subject details include the syllabus of the subjects, the subjects he presently study for the semester, attendance and prediction of the internal marks of the subjects and also whether the students will pass or fail the subject, he can also ask any queries or doubts by sending message to a particular staff.

**VII. REQUIREMENT ANALYSIS :-**

The basic requirements for the design are:

Every user should have their own unique identity Login facility. Staff can update students his/her personal information and can view the attendance,

Prediction, notes, results, and exam updates etc. Faculty can update any of the information anytime.

### VIII. ALGORITHMS USED:-

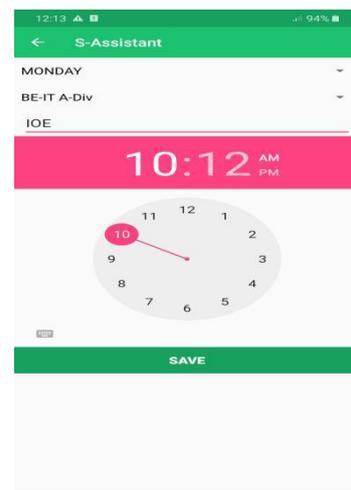
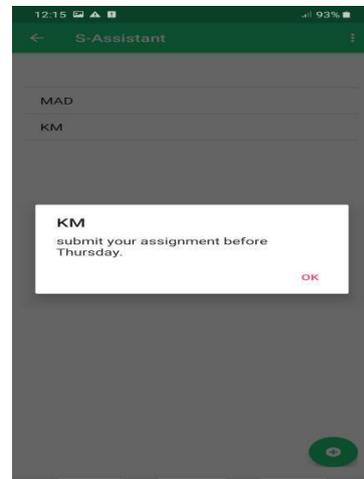
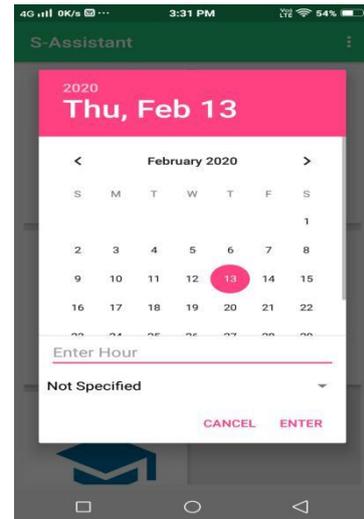
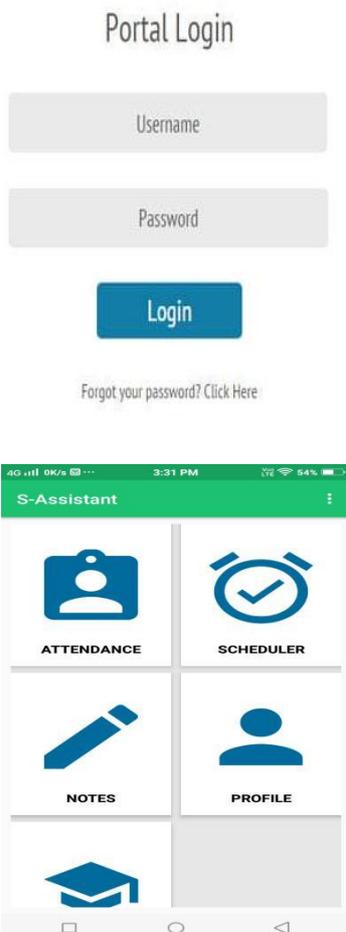
#### 1. BIGDATA ALGORITHM:-

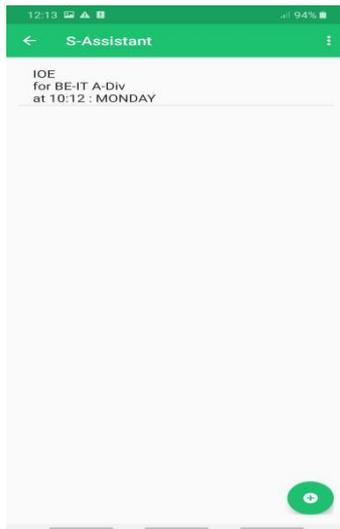
Huge information is a field that gets ways dissect, methodically extricate data from, or in any case bargain with data sets that are excessively huge or complex to be managed by traditional data-preparing application programming.

#### 2. PREDICTION ALGORITHM:-

It is used for text classification which involves high dimensional training data sets. It is a simple algorithm and known for its viability to rapidly fabricate models and make predictions by utilizing this algorithm.

### IX. RESULT





3. Kartiki Datarkar Neha Hajare Nidhi Fulzele, Sonali Kawle, Vaibhav Suryavanshi, Dipeeka Radke "Online College Management System" Issue. 4, April 2016.

## X. CONCLUSION:-

In this paper an efficient method proposed "Android Based Attendance and Prediction System" for challenging information technology allows colleges to utilize database and applicant details, thus making the accessing records centralized. This proposed framework is mostly focused and effectively on understudy data for accomplishing better data to all staff and individuals included establishments.

## XI. FUTURE SCOPE

Online assessment module would be acquainted with lead online assessment. Further the personnel can transfer the recordings of their lectures and understudies who had missed their lectures can see those recordings. Greater usefulness can be included the application relying on the detail and need. Faculty can also conduct online exams. Lectures can be conducted online through video calling. The project can be expanded as customers need by adding different branches in it. In future students can also be able to upload notes or videos.

## XII. REFERENCE:-

1. Saptorshi Bhattacharjee<sup>1</sup>, DipankarKundu<sup>2</sup>, Shinjini Raychaudhuri<sup>3</sup>, Papiya Chakraborty<sup>4</sup> "Attendance Management System an Android Application" Issue-6, Aug 2016.
2. Fezile Matsebula School of Natural and Applied Sciences Sol Plaatje University Kimberley, South Africa Ernest Mnkandla School of Computing University of South Africa Pretoria, South Africa "A BIG DATA ARCHITECTURE FORLEARNING ANALYTICS IN HIGHER EDUCATION" African 2017 Proceedings.