

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 also have faculty details, batch execution details, students' details in all aspects, the various academic notifications will be send to parents by the staff. It provides minimal error in report generation of a particular student's attendance and prediction of students results. The main motive behind this software is to replace the traditional pen and register system. 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 provides minimal error in report generation of a particular student's attendance. The main motive behind this software is to replace the traditional pen and register system. Another reason for developing this software is to generate the report automatically at the end of the session or in the between of the session. 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 also facilitate us explore all the activities happening in the college, different reports and queries can be generated based on vast options related to students, batch, course, faculty, exams, semesters for a particular branch or the entire college.

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 summarized 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. All these will be available through a secure, online interface in the college's student record management system.

It is observed in [3], proposed attendance and prediction system, this helps staff in maintaining information of student and also provides the guidelines for students in different areas, and it also provides the different facilities to the student related to the placement exam section details etc.

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:-

Attendance control can be effective if they are executed consistently and fairly. 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 versatility and no incorporation with other framework.

V. PROPOSED SYSTEM:-

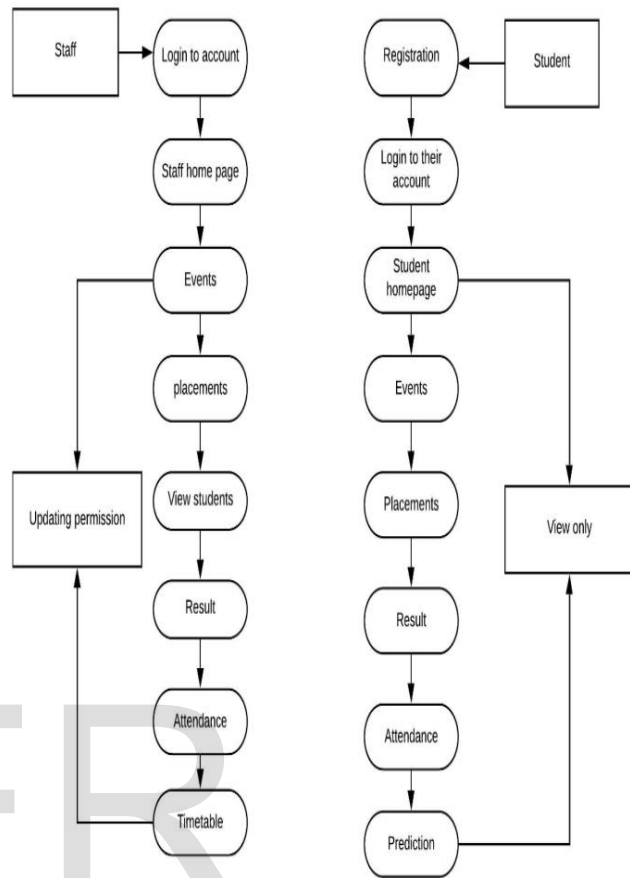
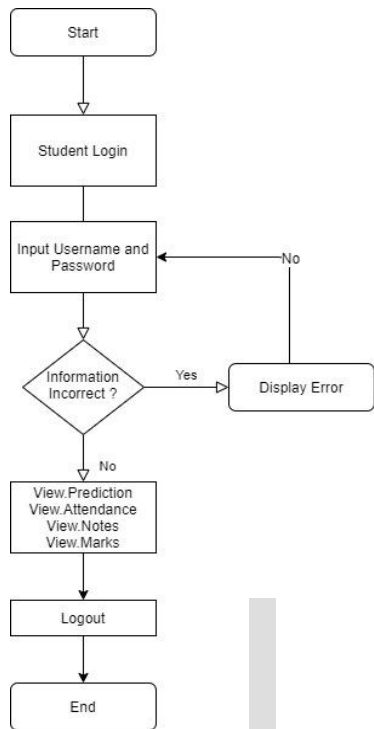
AUTOMATED ATTENDANCE AND PREDICTION SOFTWARE:-

Software solutions for human resource management are constantly advancing and are now considered far more reliable than manual timekeeping. They greatly simplify the human

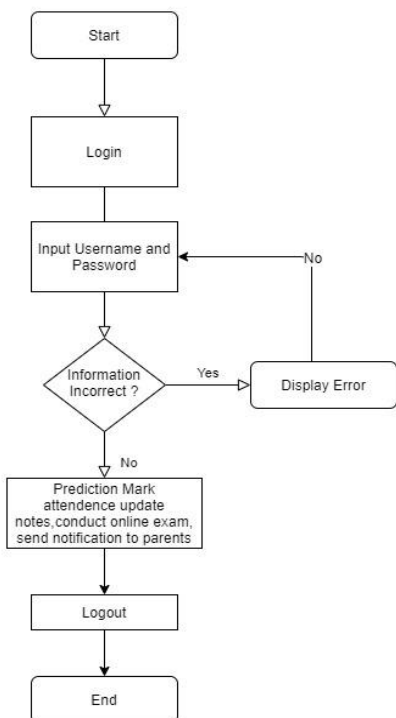
efforts, check in process and allow easy access to data that can be graphically analyzed. This system provides high security.

VI. DATA FLOW DIAGRAM:-

Flow chart of Student Login:-



Flow chart of Staff Login:-



VII. METHODOLOGY:-

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.

1. ADMINISTRATOR/HOD:-

The administrator is responsible for entering the new student and managing the student Accounts. The administrator also manages the faculty accounts like entering a new faculty assigning the faculty to the subjects. Admin can add students according to their branch and semesters. Only admin has the authority to remove staff and students. The administrator will check all the updates i.e. student updates faculty, updates, exam updates etc. The administrator has the highest level of power in the college management system.

2. FACULTY

The staff can update the information every day, of notes which will be covered daily. The notes may consist of text, images, 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.

3. 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.

PARENTS:-

Parents can access their student information like marks, attendance, test time table or any update made by the staff about parents teachers meet. A notification will be sent to the parents by the staff about their meet.

VIII. REQUIREMENT ANALYSIS :-

The basic requirements for the design are:

Every user should have their own unique identity Login facility. User can update his/her personal information and can view the notice, results, placement and exam section updates etc. Faculty can update any of the information anytime.

IX. ALGORITHMS USED:-

1. BIGDATA ALGORITHM:-

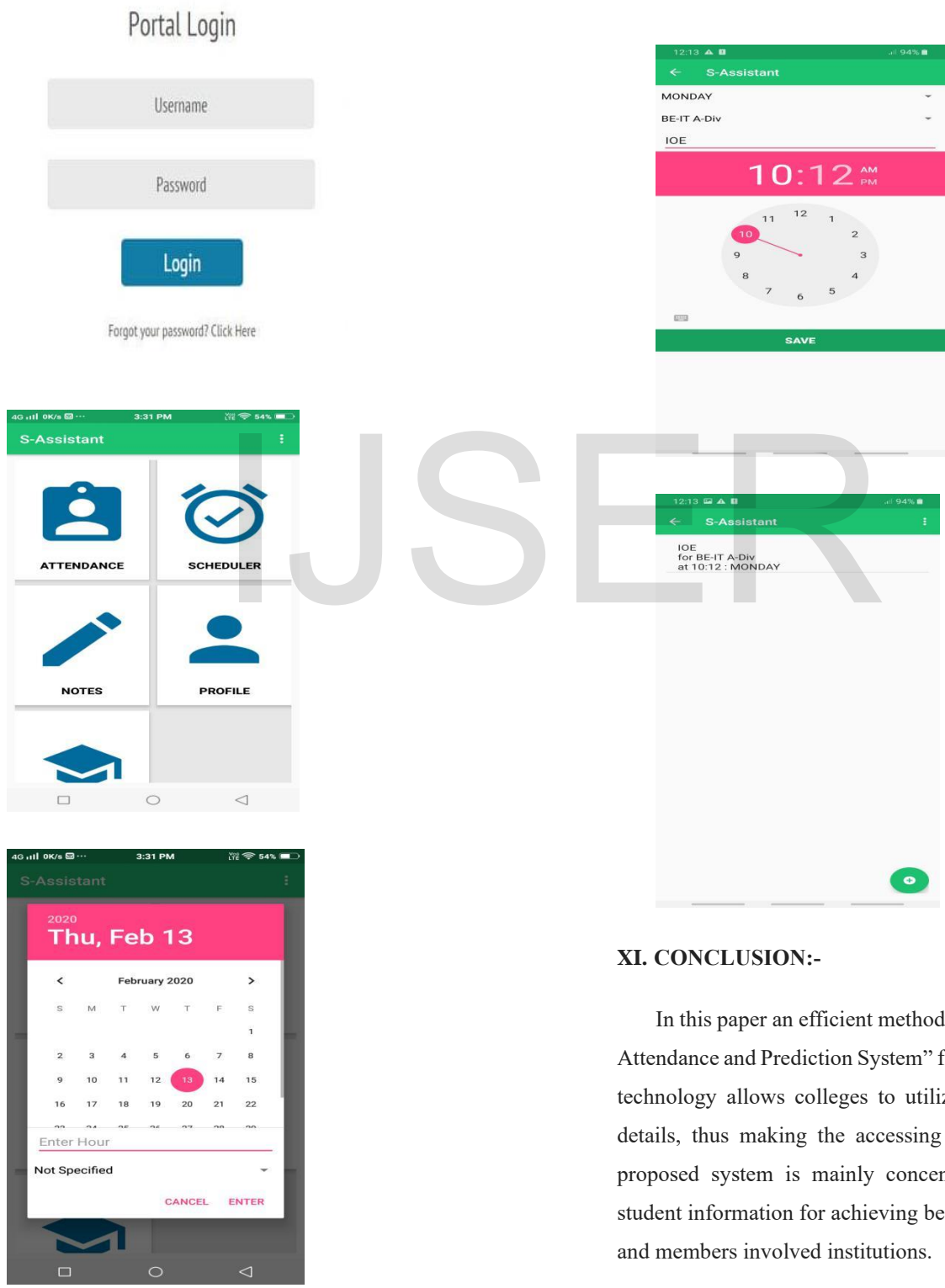
Big data is a field that treats ways to analyze, systematically extract information from, or otherwise deal with data sets that are too large or complex to be dealt with by traditional data-processing application software.

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 effectiveness to quickly build models and make predictions by using this algorithm.

X. RESULT



XI. 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 system is mainly concentrated and efficiently on student information for achieving better information to all staff and members involved institutions.

XII. FUTURE WORK:-

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.

XIII. REFERENCE:-

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