School Monitored and Controlled Remotely using Mobile Computing (Android OS)

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Abstract
A school is a place full of information from lesson plans, assignments, books, and even documents. Schools have to accurately manage, store, and process data every day in order for the school to be well-organized and operational. This is an important factor to achieve success in every school. Schools just have to keep it going even if the whole operation is hard. Aside from ensuring that everyone can communicate with and understand one another, schools also have to process a lot of information. But all of these tasks are very hard to do especially if the school uses a traditional method of storing and managing data. The problem with this way of managing information is the vulnerability of humans to commit errors. If you are dealing with important information such as student performance, attendance, quizzes and examination records, and grades, you cannot afford to make mistakes anymore. It is indeed a difficult task to manage information in a school. You must also ensure that there is a good communication among the members of the school. While these tasks might be overwhelming, school authorities still keep it going. That is one of the reasons why there had been an innovation in schools today. This is the use of school administration software. In this fast-growing world, the use of technology is a must. To convince you to use this software, here is the list of reasons why your school should use this type of system .quiz and notes can be uploaded and managed on Moodle.

Cutting the Manual Labor
Having cloud-based school administration software means lesser work for the management, teachers, and students. Tedious works such as information management, enrollment, cards distribution, examinations and quiz recording, and making reports and documentation will be easier and faster. It will eliminate the need for manual labor. A teacher will not have to put little check marks in class records anymore.

Keeping Records and Processing Grades
The most time-consuming tasks of the administrators and teachers. There are a lot ofinformation that they need to store and process. From the basic info of students up to the most crucial ones such as their examination scores, attendance records, and class performance, the teachers and administrators will have to manage all of it.

The administrators should be careful about choosing the right software for their school. There will be a lot of choices in the internet and all of them will have the same claim and it might be overwhelming for someone to select the best school administration software.

Keywords: *SQL server, Students, Admin, faculty, Parents, Android studio, xampp server, Firebase console.*

INTRODUCTION

The plan and execution of a complete School Administration Android application and Website and UI is to supplant the current paper records. School Staff can straightforwardly get to all parts of an understudy's scholastic advancement through a safe, online interface installed in the school's site. The framework uses client validation, showing just data important for a person's obligations. Furthermore, each sub-framework has confirmation enabling approved clients to make or refresh data in that subsystem. All information is altogether explored and approved on the server before genuine record adjustment happens. Notwithstanding a staff UI, the framework gets ready for understudy UI, enabling clients to get to data and submit demands online along these lines lessening handling time. All information is put away safely on SQL servers overseen by the school manager and guarantees most noteworthy conceivable dimension of security. The framework includes an unpredictable logging framework to track all clients' entrance and guarantee adjustment to information get to rules and is required to expand the effectiveness of the school's record administration in this manner diminishing the work hours expected to get to and convey understudy records to clients. All information is completely inspected and approved on the server before genuine record change happens. The framework gets ready for understudy UI, enabling understudies to get to tips and traps as given by their seniors. All information is put away safely on Firebase servers overseen by the school Administrator. The framework diminishes printed material and time expected to get to understudy records. Already, school depended intensely on paper records for this activity which had its very own hindrances. This framework gives a basic interface to the support of understudy data. It tends to be utilized by instructive foundations or schools to keep up the records of understudies effectively. Accomplishing this goal is troublesome utilizing a manual framework as the data are scattered, can be excess.

EXISTING SYSTEM

Android College Management framework is an android application which is useful for understudies and in addition the schools. In the current framework every one of the exercises are done physically. It is expensive and tedious. In our proposed framework, understudies can see results utilizing Android telephones. The information will be put away in the school server. The workforce can login into their school account through the application itself and refresh the scholarly outcome. In this framework, understudies have simple access for review the imprints, gave their validations are right and they are not allowed to change/refresh the imprints. The proposed work has two modules: 1.Student 2.Admin.

Online College Management System (OCMS) gives a straightforward interface to support of understudy data. It very well may be utilized by instructive foundations or universities to keep up the records of understudies effectively. The creation and administration of exact, up and coming data with respect to an understudies' scholarly vocation is basically vital in the college and also schools. Understudy data framework manages all sort of understudy points of interest, scholastic related reports, school subtle elements, course subtle elements, educational modules, cluster points of interest, position subtle elements and other asset related subtle elements as well.

PROPOSED SYSTEM
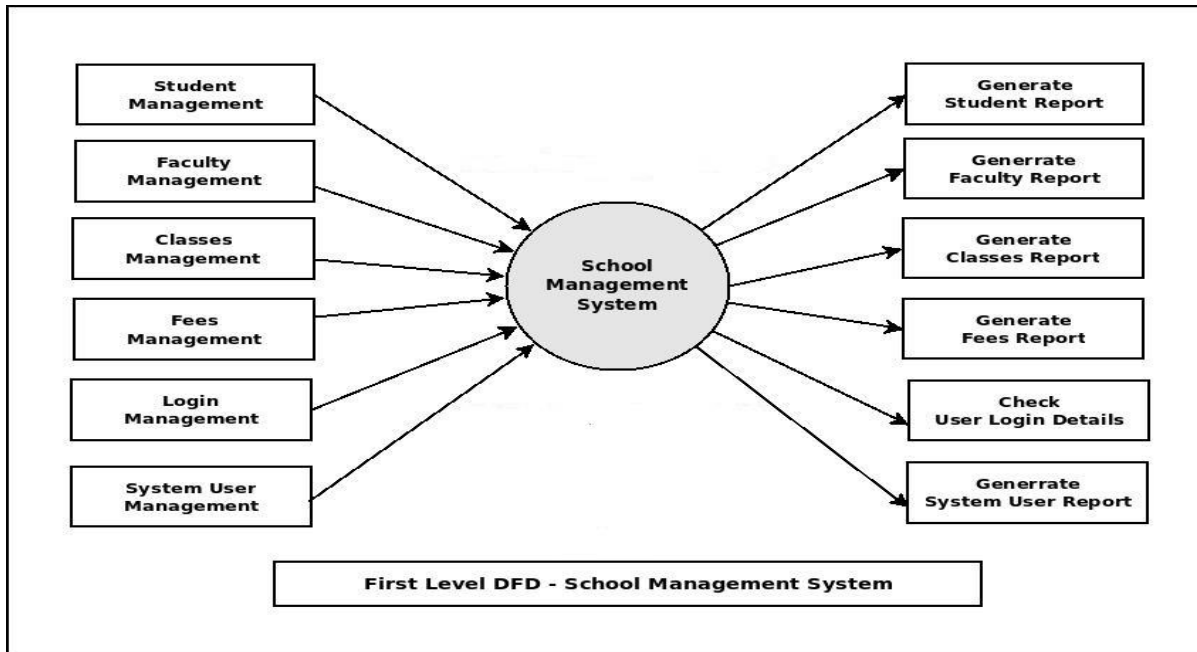
(a)
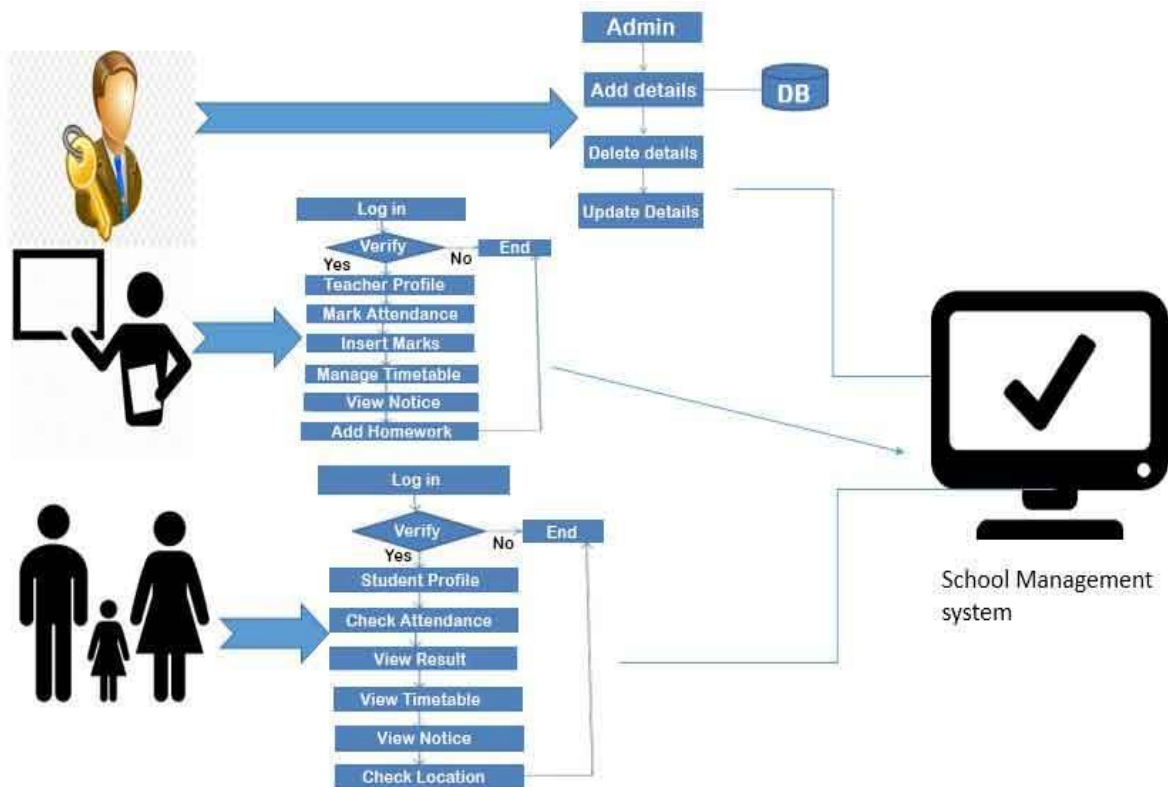
(b)

Fig: 1. (a, b): School Management Systems.

IMPLEMENTATION

Module 1: Admin

Admin will register faculty, add personal details of students, assign subject and role to the faculty, broadcast notices and broadcast timetable, updated personal details of faculty and student, view student and faculty details.

Module 2: Faculty
Faculty will mark attendance of students, assign homework to students, prepare result, add notes, search records of students, broadcast and view timetable and assign class.

Module 3: Parents
Parents can view all the details of their child such as attendance of student, notices broadcasted by the faculty, notes, timetable, homework uploaded by the faculty, result of student.

Cost Estimation
As we have developed website by using firebase and android application by using android studio, we have not included any hardware. So cost estimation is zero.

PERFORMANCE ANALYSIS
Different Modules and their working, Output Screens
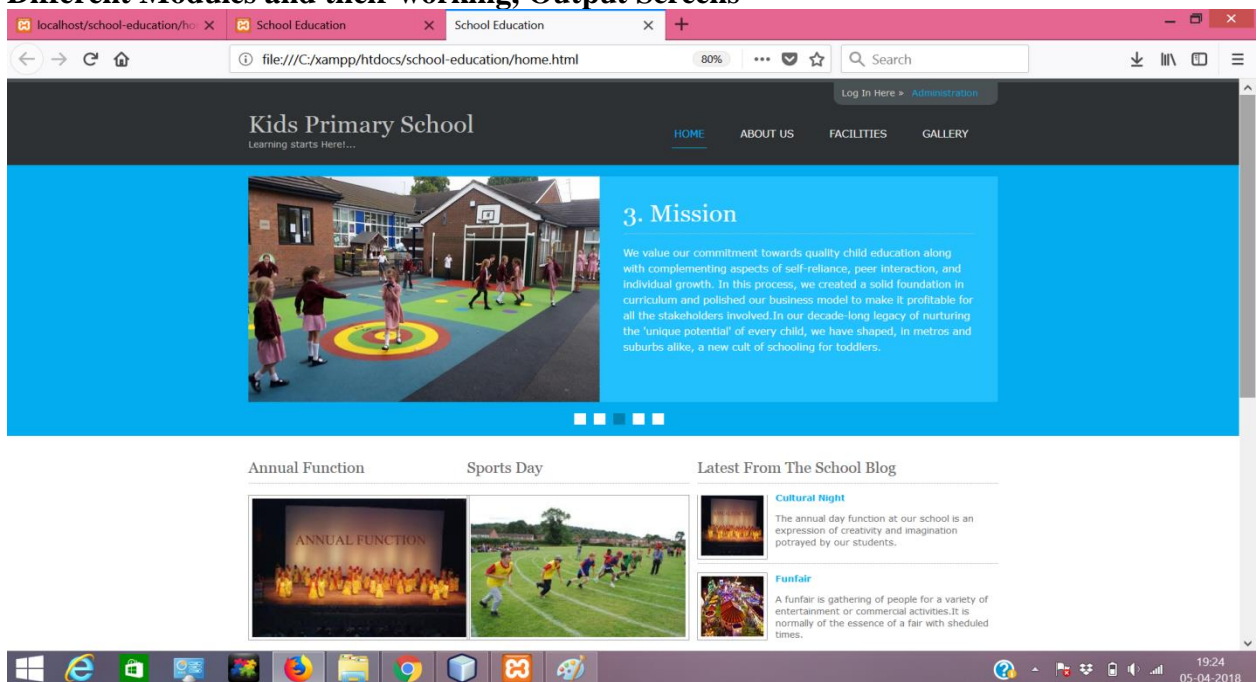
Fig: 2. Website Home Page
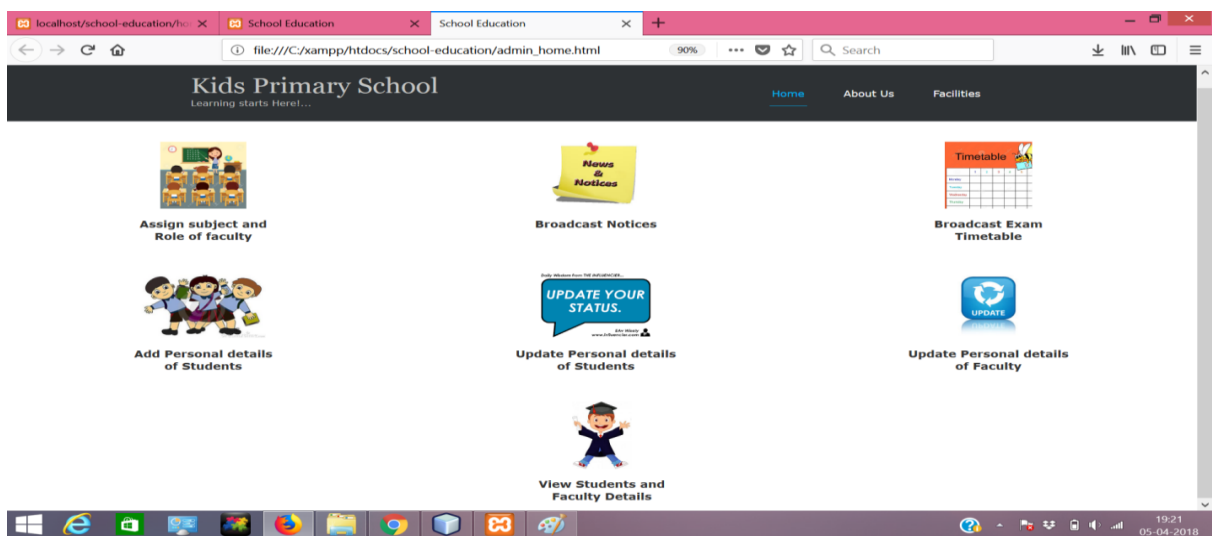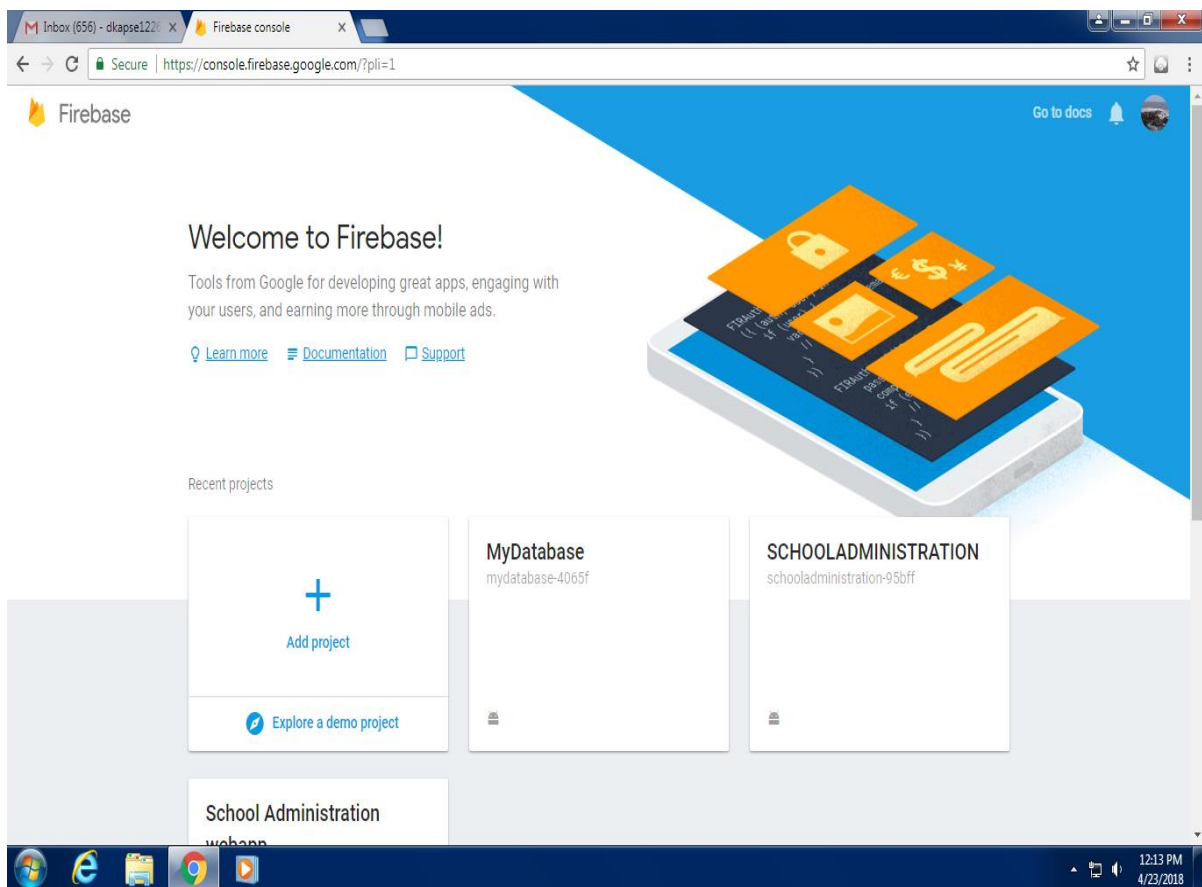

Fig: 3. Admin Home Page
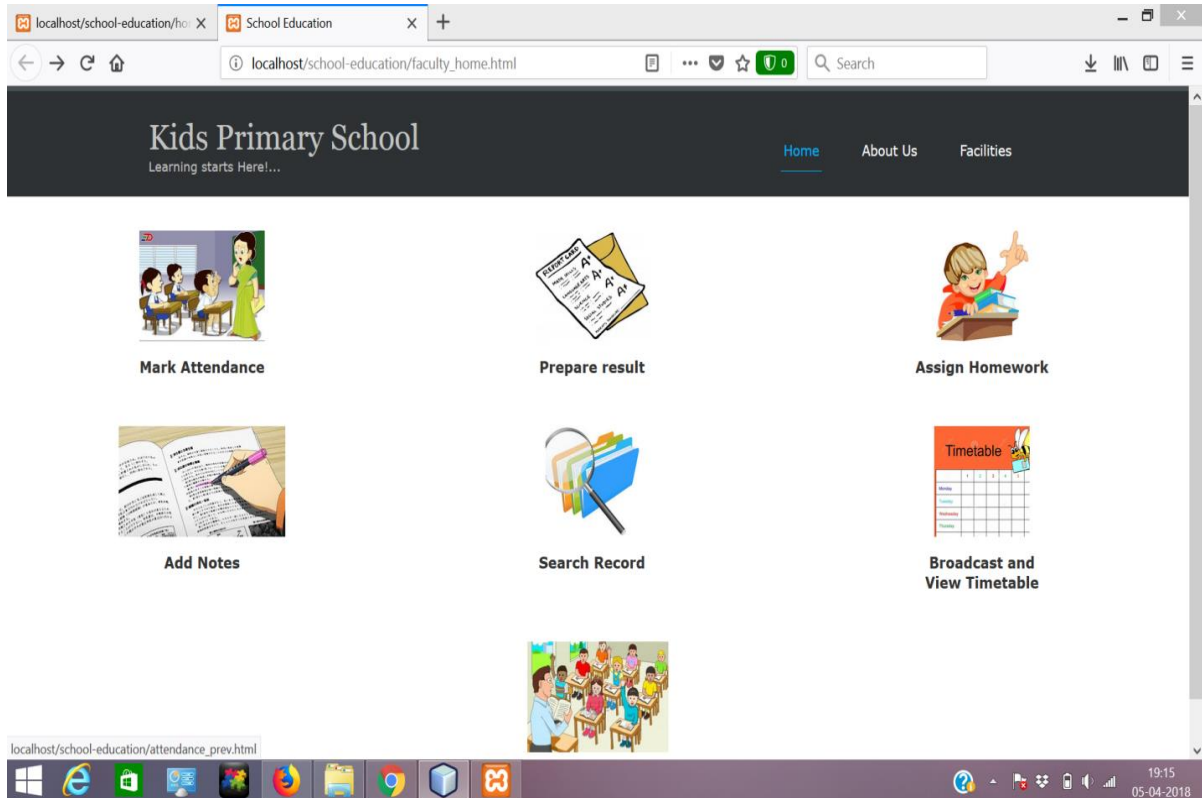
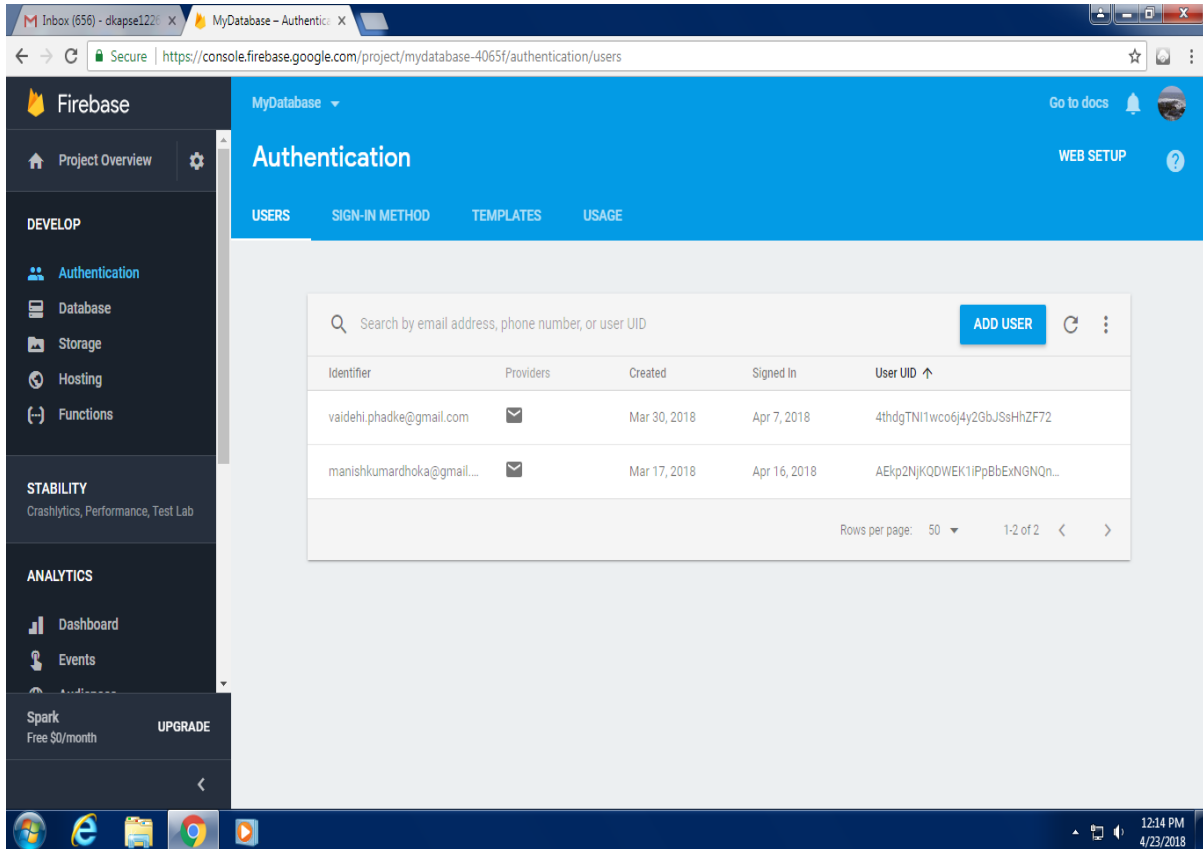*Fig: 4. Faculty Home Page*

Fig: 5. Firebase Console
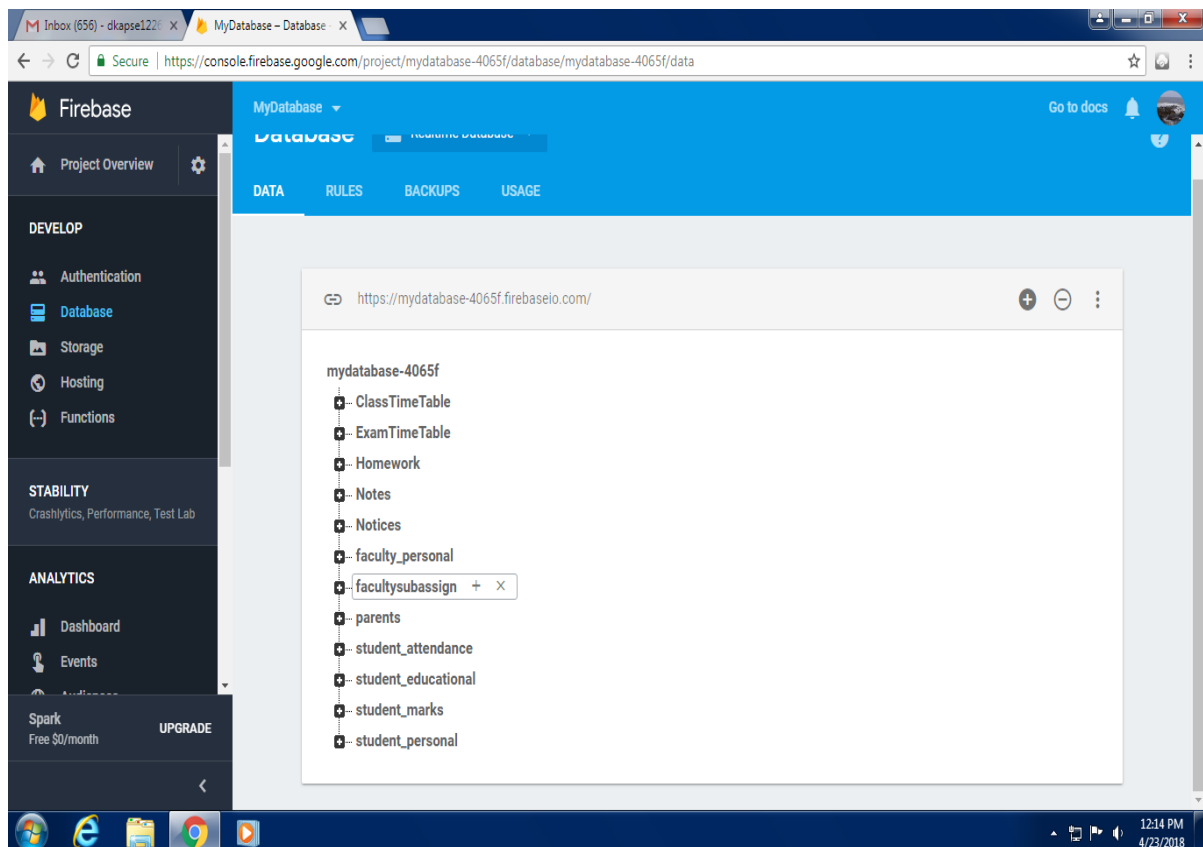
***Fig: 6.** Firebase authentication*

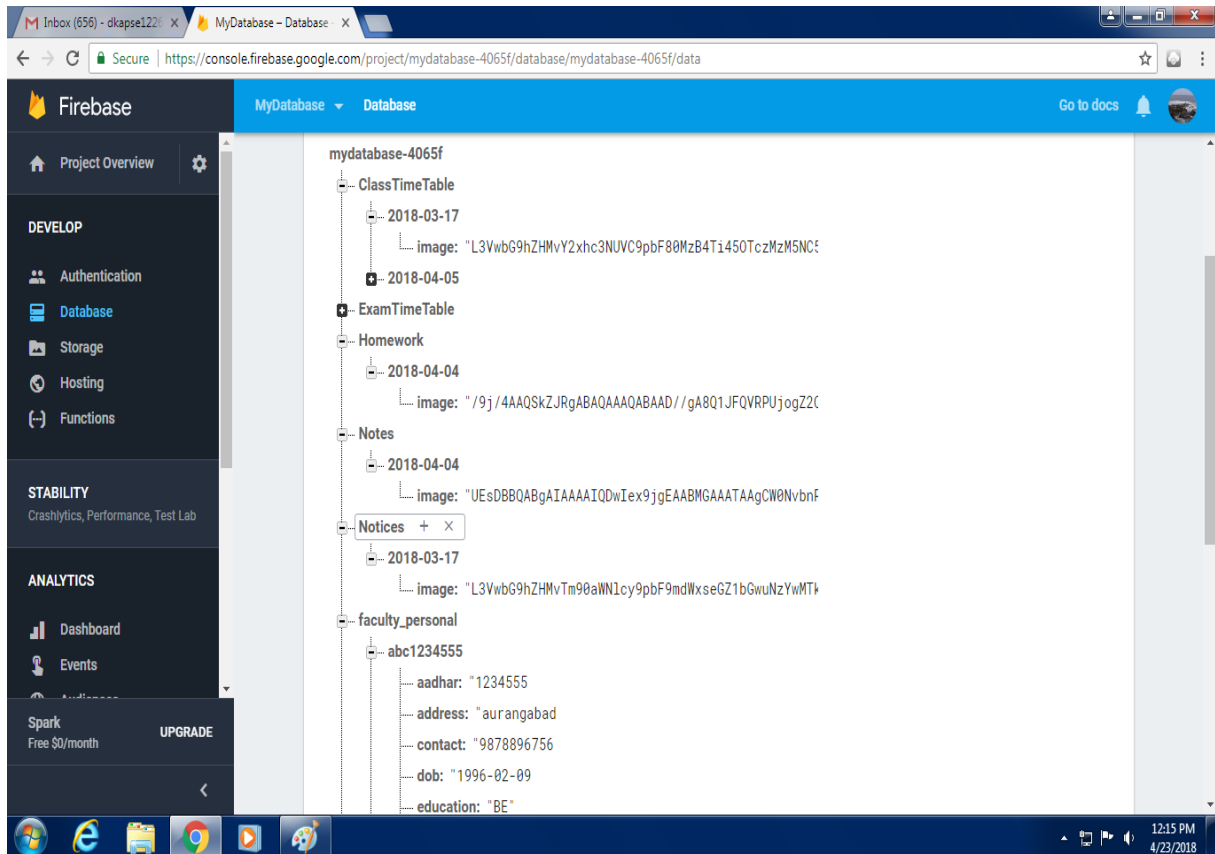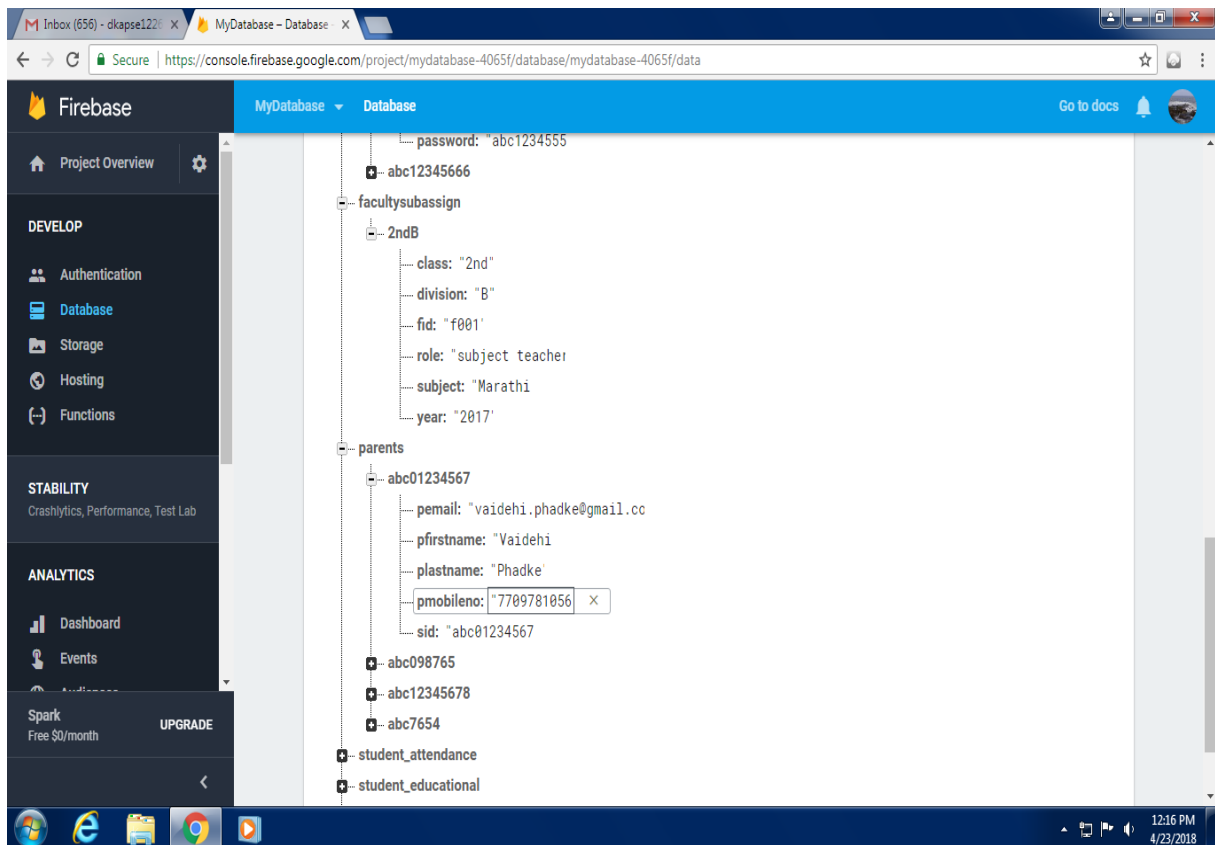***Fig: 7.** Firebase database*

Fig: 8. Firebase database

Fig: 9. Firebase database

Fig: 10. Sign Up Screen

Student Profile: Navigation Drawer:
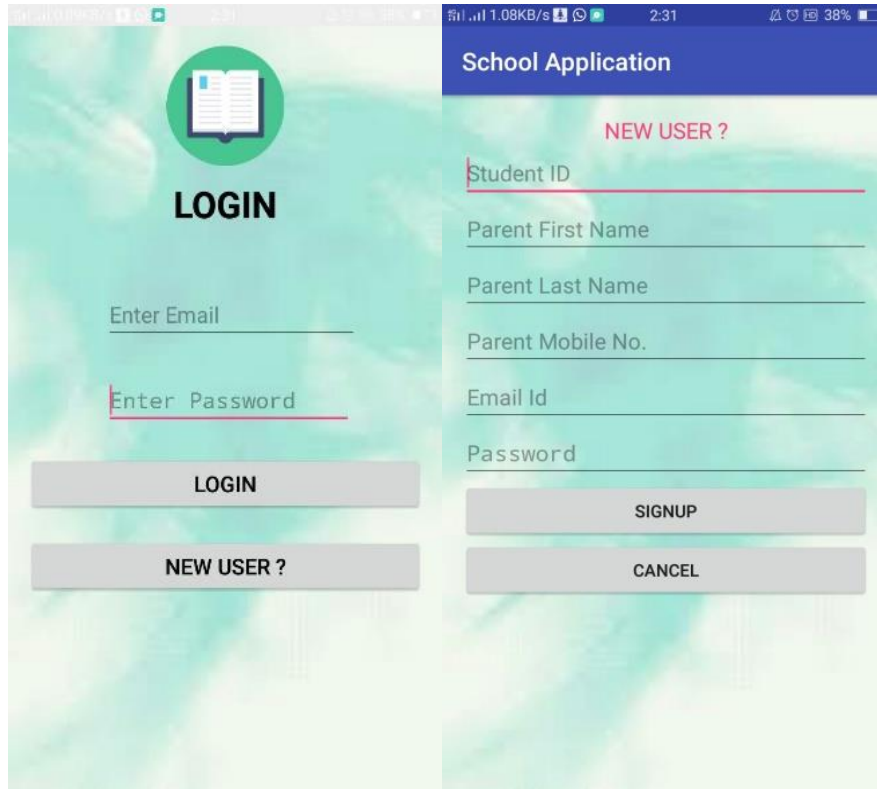
Fig: 11. Student Profile.

Attendance screen: Home Screen:
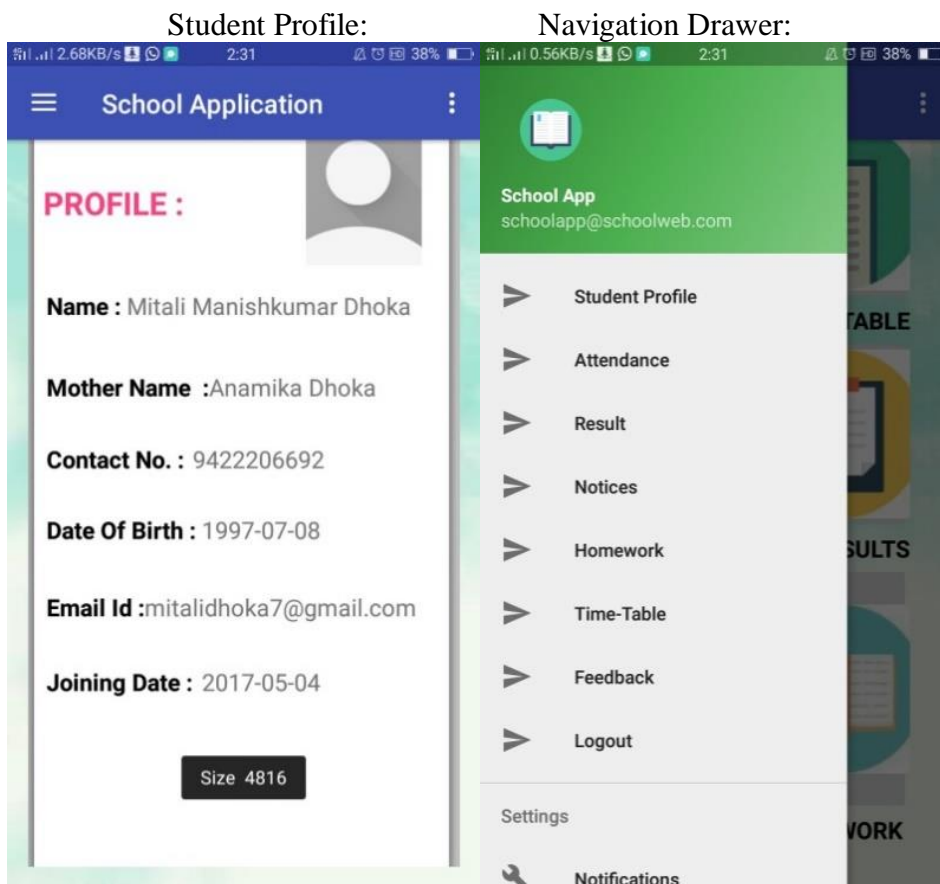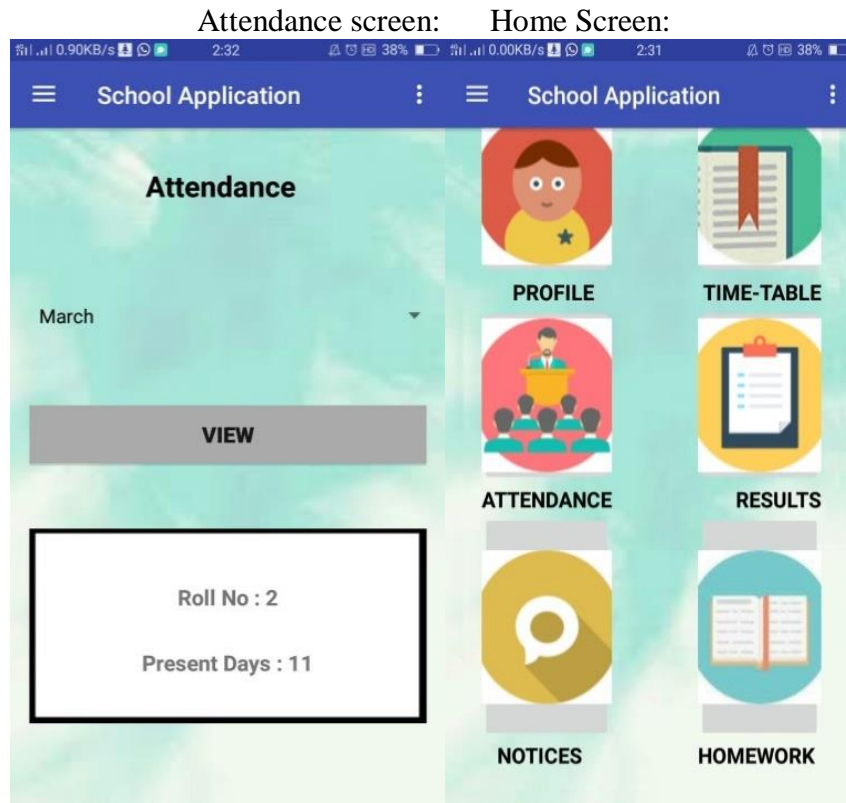

Fig: 12. Attendance screen

CONCLUSION

This framework helps with computerizing the current manual framework. This is a paperless work. It tends to be observed and controlled remotely. It lessens the labor required. It gives exact data dependably. Negligence can be lessened. All years together accumulated data can be spared and can be gotten to whenever.

The information which is put away in the store helps in taking canny choices by the administration. So it is smarter to have a Web Based Information Management framework. Every one of the partners, personnel and administration can get the required data immediately. This framework is basic in the colleges.

The data which is put away in the database can be gotten to whenever by utilizing this framework there will be no wastage of assets in schools and colleges. The destinations of this examination are accomplished and they are working great.

FUTURE SCOPE

We can utilize Moodle for taking Quiz and transferring notes on single Moodle site. Maintaining course objective, Outcomes, Notices, occasion administration, online paper checking module. The framework being planned is monetarily as for the understudies and instructors perspective. The objective is to remove valuable data from an unstructured information utilizing the idea of data recovery, sifting and secure arbitrary calculations .To build up an upgraded understudy data administration framework that can help illuminate disadvantages of existing ERP framework. Our fundamental methodology endeavors to build up an advanced mobile phone based application utilizing Android which can be utilized to make this procedure simpler, secure and less blunder inclined. More productive data will be accomplished through this framework. To give access to data identified with school, offices, transferred assignments, notes, news and occasions, exams, exchange

gathering and every day time table in a hurry.

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