

AAMCOR – A Flutter Based Students Support System

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ABSTRACT

An institution contains large count of scholars. It's delicate for the institution to keep details of so numerous scholars of association in one stretch. The traditional system has some faults. It'll involve a lot of pen paperwork. Occasionally there will be some huge mound of lines whisked up and kept together in some corner of the office. This pupil support system will allow data to be stored in a systematized manner. It's also helpful for faculty to upload accoutrements and other pupil related documents. This operation provides all of your course's accoutrements. It's the inexorable trend of the operation of ultramodern information technology in education. It'll make a huge impact in our institution. The design was developed in Flutter Framework. So, it's compatible for both Android & iOS. The system is enforced using Flutter for the frontend and Firebase or MySQL for the backend.

Keywords: Upload accoutrements, Course accoutrements Flutter, Android, iOS, Database, Firebase.

INTRODUCTION

In this technological world, everything is computerized. It saves heap of your time and human resources. Thanks to the raise of advantages of machine-controlled system, vast method that done by the humans' area unit machine-controlled currently. Recent days, there's a large necessity required for machine-controlled system which incorporates their role in educational infrastructures like faculties & faculties that has to modification the role of their manual system to mobile computing systems. For a corporation to reach its work, sensible management may be a key component. Today's generation is highly responsive towards smartphone applications. For an academic institute, communication between students and the institution is a vital issue to ascertain sensible management. Currently, the sole manner for the faculty to relay updates to students is the website or physical noticeboards placed throughout the institution. This can be a particularly inefficient way to convey messages that may be vital or time-sensitive, since there are no thanks to make sure that it reaches majority of the meant students. This results in lack of order among institution and students that, within the long-standing time, would possibly have an effect on students' performances. Here, our students' support system – AAMCOR will greatly help the faculty and students to efficiently communicate with each other. In our Design, we have separate login for the students, faculty and the administrator. By using this system, students can track on their attendance percentage, internal marks, assignment posted by them, timetable, course accouterments and college related circulars. With the help of this system, faculty members can post the course accouterments, view assignments posted by students, and college related circulars. Administrator only can post the college related circulars and students exam hall details. This system e Currently, Android is that the highest used platform for applications within the world. Each major organization has one or a lot of applications on the Google Play Store that helps them manage their folks and resources a lot of with efficiency. For a university, associate degree Android application would serve the majority of the scholars. Some students can have Apple mobile phones that solely supports iOS applications. Most of the applications were developed in Android. Currently, flutter comes as a bridge between 2 genera – Android and iOS. Application developed in flutter framework can support for both Android and iOS. This style makes use of Firebase as backend.

LITERATURE SURVEY

- A. Author of paper [1] paper discusses the advancement of Information Communication Technology(ICT) migrates the traditional face to face, classroom learning to anytime anywhere eLearning concept with the help of Android application. This application equipped with discussion module where students and faculty

members can discuss their queries. Course module helps the students to download the soft copies of their course materials. Instant notification module allows the faculty members to send immediate message to students.

- B.** Author of paper [2] it is an Android based application which makes easier for students to view attendance, course accoutrements, time table and so on. It has a secure login for user. It makes use of Google/Facebook login and OTP is also provided to the registered mail id. It has event module which allows only few people to add or post the events.
- C.** Author of paper [3] paper discusses about an Android based application which makes use of push notification to alert students about the college events.
- D.** Author of paper [4] this paper discusses about the students attendance system activities by prevent cheating. This system is equipped with verification and validation feature. The attendance is validated using QR code and Geolocation. This application can display the attendance history.
- E.** Author of paper [5] this paper discusses about the multi-platform college management system equipped with online paper correction module which will be very helpful for the faculty members to evaluate the answer script with minimal effort.

EXISTING SYSTEM

The existing system which we're using in our college is traditional process is a complete manual process. It is completely pen and paper method. There are some practical difficulties in this method. Faculty member had to carry and maintain student's record in papers. Faculty member has to maintain the assignment papers of students. It was difficult to maintain the papers for long time. If they want to check whether a student had submitted or not, they would check the whole bundle of papers. This was very difficult. If student want to know his/her Internal Assessment marks, then he/she must meet the facultymember and know about the details. If the faculty member was not available, then they had to wait for some time. Upcoming events can be informed to the students only by physical notice board and circulars. Some students will not get notified and miss the opportunity. All these practical difficulties will be cleared in proposed system.

PROPOSED SYSTEM

We resolve all the disadvantages of existing system in our proposed system. Through this application faculty members need not carry a bunch of papers that contains information about the students. The system to be developed here is a Mobile Application. So, it is very convenient for faculty members and students. It can be used to view attendance and academic details of the students on their own. Faculty members were able to post the assignment questions and students were able to post answer script of assignments in PDF form. It is very useful for faculty members to track the assignment submission details of students. Students can also able to view their internal exam hall details and timetable. Each student and faculty member will have a separate login credentials. Admin can only able to add or edit students and faculty member login credentials. Admin can post the upcoming events in Events tab, and it will be displayed in push notification.

A. SYSTEM ARCHITECTURE

In this system, the student can go to their login page mentioned as student login. They use their registration number and date of birth to login into their account. Then they can view their attendance percentage in attendance module. They can view their course accouterments for subjects separately. They can also view their lab materials. Furthermore, they can also able to view the college event circulars. The ultimate feature of this system is exam hall seating details. The students can also request their queries using the request button. The faculty member can use their ID card number and separate password as login credentials. Then the faculty member can post the course accouterments, attendance percentage, and lab materials. They can view timetable and college event circulars in events tab. The administrator can use their separate login credentials to log in to their account. They only can create classrooms and post college event circulars. All these things were stored and managed in a centralized database.

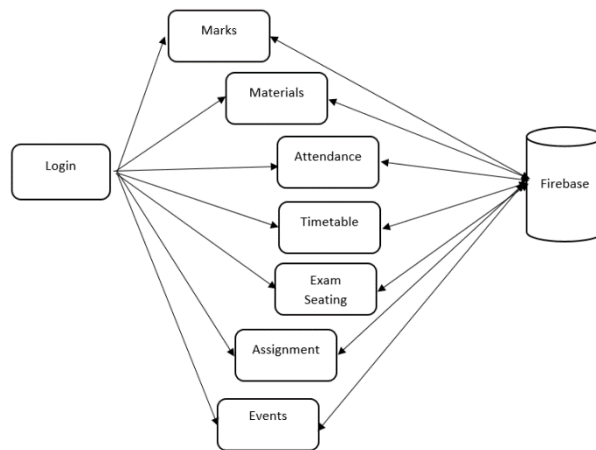


Fig. 1 proposed system architecture

B. MODULES AND DESCRIPTIONS

LOGIN / LOGOUT:

There are three logins in this module – Student, staff, Admin. The student can login into their account using registration number and date of birth. The faculty member can login into their account using their ID card number and password. The administrator can login to their account using username and password.

FILE TRANSFER MODULE:

In this module, the students can upload their scanned copies of assignments posted by faculty members. They can able to download the course accoutrements and lab accoutrements. The faculty members can post the assignment questions and course accoutrements and lab accoutrements. The Administrator can able to post the college event circulars and exam hall seating details.

NOTIFICATION MODULE:

In this module, the students able to instantly view the college and academic related event circulars with the help of push notification. This eliminates the need for students to constantly check the college website for updates, by providing them instant notifications right on their smartphone.

QUERIES MODULE:

In Queries module, the students can post and discuss the queries with the faculty members. This will be very helpful in for the students to clear their queries at any time anywhere.

C. IMPLEMENTATION



Fig. 2 Home Page

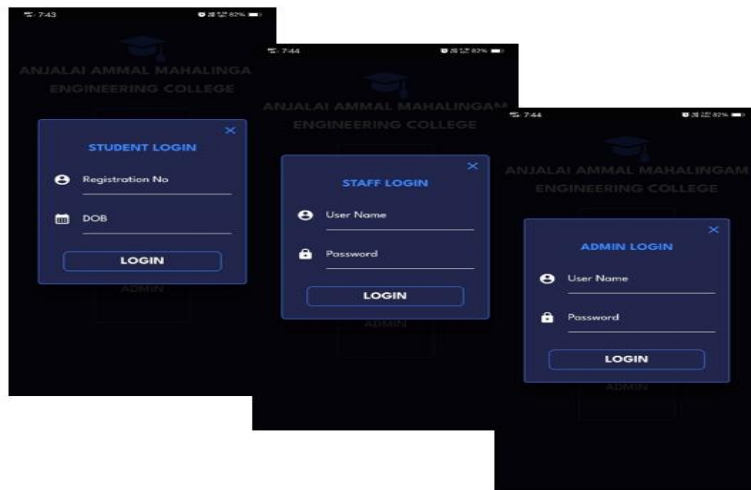


Fig. 3 Login Page



Fig. 4 Students Home Page

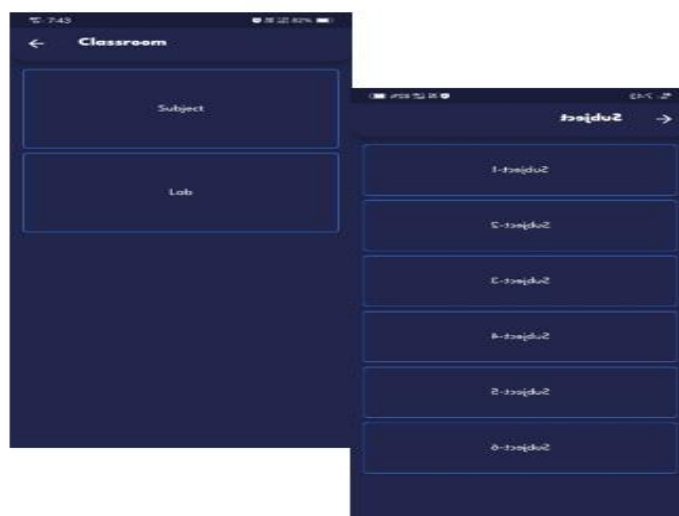


Fig. 5 Materials page

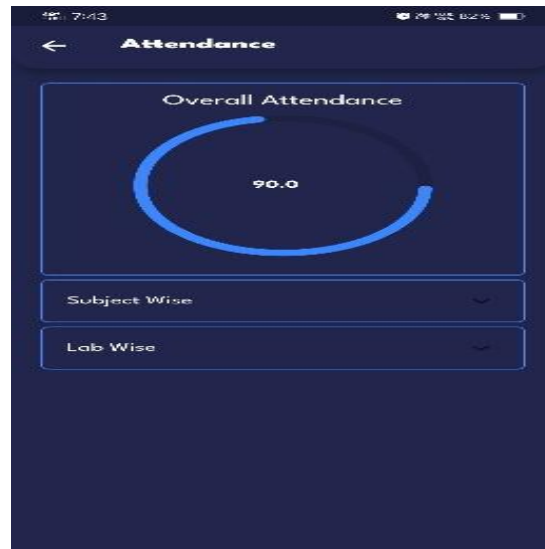


Fig. 6 Attendance Page

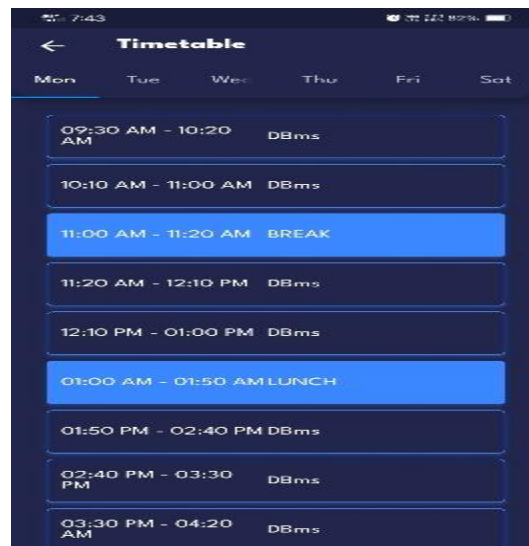


Fig. 7 Timetable Page

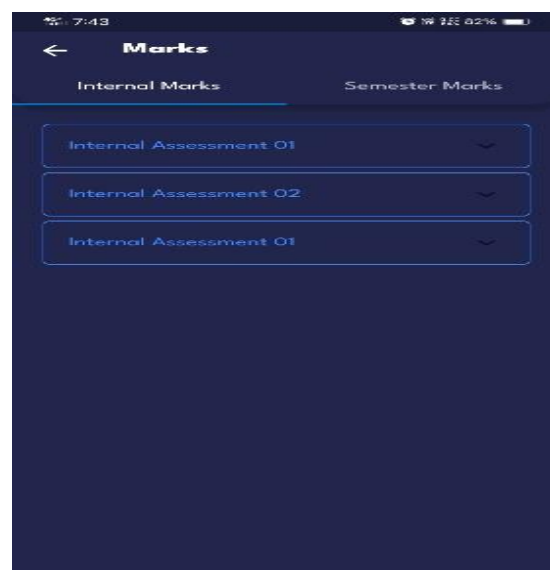


Fig. 8 Marks Page



Fig 9 Exam Seating Tab



Fig 10 Staff Home Page



Fig 11 Administrator Home Page

CONCLUSION

The Students Support System is was implemented successfully and it can be it can implemented in real platform. This system will reduce the workload of the faculty members. Though this system the students can access their course accoutrements at any time anywhere. Staff can easily verify the assignments at any place. During the pandemic period, many institutions struggles a lot to manage the student's data. This will be a wonderful solution for all the problems. Though the system was developed in Flutter framework, it will supports for both Android and iOS. The backend implemented in this system is Firebase. Therefore this system will be effective application for the institutions to manage the students' data in digital manner.

FUTURE WORK

The system was developed in Flutter framework. The future work of this system is we will enhance our system as in safe and secured cloud storage. This will make this system to next step. The students' data can be digitally managed without any fear.

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