

THE MODERN APPROACH TO MANAGE INSTITUTIONAL INFORMATION

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ABSTRACT

Every day, educational institutions deal with a vast amount of data and information, yet handling all of this data by hand takes a lot of time from any employee. As a result, all educational institutions must have an ideal data management system. Due to the technology's streamlined functioning, numerous industries are embracing it, as digitalization spreads to all facets of the economy. The adoption of this technology in the education sector is happening just as quickly as it is in many other industries. This research shed some light on how modernised management systems can aids the schools and colleges in many ways, including time savings for the faculty, data storage and analysis for academic and administrative purposes, student engagement through fostering a digital culture, improved communication, etc.

Keywords: Management Systems, Institutional Information, Data monitoring, Campus Solutions.

I. INTRODUCTION

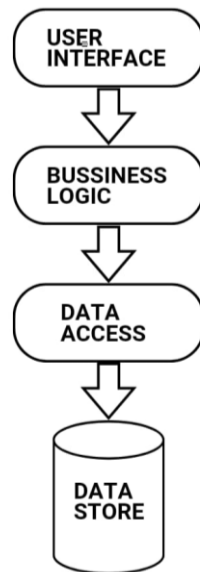
Institute Management System is a software for education establishments to manage institute data. The everyday activities of educational institutions have been automated by management systems, commonly referred to as campus management solutions. The college management system is an example of cutting-edge technology that has all the features built-in to assist students and everyone else linked to the school. The easiest approach to keep track of every student according to their academic curriculum is using a management system, which also significantly reduces paperwork.

The college management System is a one-time investment and has the flexibility to accommodate several modules. because it provides total automation and facilitates improved decision-making. The college management System assists in helping to save their time, money, and resources by removing a lot of manual effort and repetitive chores. It enables all of the participants—students, instructors, parents, and staff to maintain contact and become knowledgeable about a variety of facts of an educational institution. By lessening the monotony and challenge of handling routine tasks, it helps to raise the standard of an educational institution.

The College Management Software includes the various modules such as Admission Module, Enquiry Management, Student Registration, Student Information, Course Management, Fees Management, Attendance Management and Timetable Management.

Use Cases of College management system as follows:

- Management of Student Registration and Admission: The System simplifies the student registration and admission process. Additionally, it retains information on student education from previous years, uploads each student's photo for quick identification, creates a unique ID for each student, and provides statistics and reports about students, which include transfer certificates, family backgrounds, etc.
- Management of Student Inquiries: The System enables the college administration to quickly reply to questions from students who contact them by phone, email, or in person.
- Management of entrance exams: The System makes it easier to verify students' eligibility criteria for exam.
- Fees Collection Management: The college management software provides a simple and safe method for processing fees from all students. The software assists in keeping track of payments received, creating billing heads, entering the amount owing, and creating and editing fee structures.
- Student Attendance: The software tracks students' attendance across different classes in real time, eliminating the need for paper attendance records.
- Examination Management: The software enables the authority to create subject-specific examinations or tests, as well as generate admit cards and date sheets for each exam. Furthermore, it facilitates the generation of results based on a percentile or grading system.

**ABSTRACT VIEW OF CMS**

II. LITERATURE REVIEW

In [1] Mukherjee et al proposed an application for resolving day to day official work of college, that is being suggested in this paper is among the simplest to use and emphasises the hassle-free work that is done at the institute on a regular basis. Through this application, the movement toward digitization is used perfectly. The main priority when developing this programme was comfort. It takes very little time to access vital documents, files, and of course newspapers with just a click. This application for the College Management System offers a self-sufficient remedy for paper-based labour.

In [2] Dhiman et al developed an application, giving college students a standard, user-friendly platform for easier interaction with teachers, staff, and administration. This work has a special and beneficial function called inquiries, where students may post their queries and anybody can respond to them. Admin is in charge of this and keeps an eye on it. Using these types of applications reduces the amount of labour.

In [3] Baviskar discussed about an student club application which is a typical chat application in which college students can also converse with one another about their studies, assignments, and work. This project's primary goal is to keep track of all the information on user streams like information technology and computer science, as well as their most current activity. It offers a first-rate user experience that can be completely customised through the integration of various APIs, and it has a welcoming setting that links consumers voluntarily. This web application was successfully developed, and it successfully saved all the data and conversations of each user in the database.

In [4] Information Management System a tool for teachers to take and keep track of attendance in their classrooms. It is a real-time response system that has been implemented to increase student involvement in a class by monitoring attendance and participation. And get all information regarding college like staff members details, time table, exam details, library details all the curriculum details access by student tech and non-tech staff.

In [5] Barmare et al discussed about a more advanced management systems that can even manage large food courts such as college canteens. Nowadays, quick food is more popular at universities than traditional home-cooked cuisine, which makes it difficult to run the canteen system efficiently. Therefore, we suggested this canteen management system, which would assist both students and cafeteria owners in operating effectively. While the college administration is not involved, this solution essentially combines an android application with a web application to offer efficient services to both students and the cafeteria.

In [6] Liu et al proposed an application to manage the complete registration and admissions process for students. Additionally, it saves information about students' academic history, uploads each student's photo for simple identification, creates a unique ID for each student, and produces, stores, and uploads information about

students. An educational institution must regularly retain a large amount of data and information. The requirements of data consistency, data integrity, data security are ensured based on the requirement analysis of this system. The programme enables saving all the data on the cloud by reducing the need for repetitive paperwork and manual storage. It is the most shrewd method of storing and utilising a lot of data.

In [7] the planned system, called "Android Based Campus Solutions," primarily uses mobile phones to link the institution with students, staff, parents, and alumni. The staff may record student absences, score internal exams, share comments, etc. The students may occasionally receive reminders concerning examinations, activities, etc. Anytime, a parent may check on their child's performance and attendance. College students' accomplishments are communicated to their parents. The app's standout feature is that students and graduates may use it to obtain certificates and concession forms. When their paper is prepared, they are informed. On the app, college periodicals and journals may be shared, saving money on paper and printing. On the app, the institutional holiday schedule may be shared. The various circular notices may be forwarded rapidly. The schedules of the various activities may be shared with the students, and reminders can be issued.

III. CONCLUSION

The study came to the final conclusion that Management Systems provides colleges to perform all the functions in an effective and efficient manner. Overall, a college management system helps in streamlining the administration of a college or higher education institution, making it easier to manage student and staff records, course schedules and one of the key findings of this research paper are that students are more likely to use software that is easy to use, students are more likely to use software that is fun, etc.

IV. REFERENCES

- [1] Ishani Mukherjee, Aman Bansal, Mokshada Patra, Rahul Pal, Md.Khaja Mohiddin "An Android Application Student Helper for Engineering student", Department of Electronics & Telecommunication Engineering Bhilai Institute of Technology, Raipur Chhattisgarh, India,(2018).
- [2] Ritika Dhiman, Ayush Basral "A New Android Application (Breeze) for College Management System", Dept of Computer Science, Degree Wing, Chandigarh College of Engineering & Technology, Chandigarh, India,(2019).
- [3] Akshay Anil Baviskar "Students Club" Dept Of Information Technology, MIT ADT School Of Engineering, Maharashtra, India,(2022).
- [4] Lalit Mohan Joshi "A Research Paper on College Management System" BTKIT Dwarahat, Almora, Uttarakhand (2015).
- [5] Misbah Dalal, Zaid Barmare, Zehra Rizvi, Dr Ashfaq Shaikh "Android Based Canteen Management System" Department of Information Technology, M.H SabooSiddik College of Engineering, Maharashtra, India (2015).
- [6] Ying Liu , Fuxiang Gao , Yaqin Liu "Design and Implementation of Student Registration System for Universities", College of Information Science and Engineering, Northeastern University, Shenyang, China (2012).
- [7] Ms. Niharika Dedhia, Dr. V. C. Kotak "Android Based Campus Solution For College Management System" Dept. of Information Technology, Shah and Anchor Kutchhi Engineering College, Mumbai, India (2017).