

## ERP System for College Management

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### Abstract:

The college ERP system has a user-friendly interface for updating student, department, faculty, library, and other information. Every college has a number of departments and educational modules, such as courses, seminar halls, and so on. Managing all of these departments and other modules by hand is a tough, time-consuming, ineffective, and costly endeavor. As a result, we suggest a college ERP system. All of the information concerning information is stored in our college ERP system. The admin can add students, faculties, and other events to the students, teachers, events, libraries, departments, and other systems. Our technology allows a faculty member or a student to enter their attendance into a database, which can then be viewed by students and faculty members. Students enter and view their attendance on a computer. a separate login for each student for test preparation, the administrator can post timetables for several departments. The timetable is then posted on the web portal for faculties and students to view. These systems offer a simple user interface and a robust data management mechanism, making them extremely helpful.

*Keywords* — Admin, College, Database, Faculty, System, Students.

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### I. INTRODUCTION

ERP college web application is a set of web application that integrates all of the modules and features of a college system into a single system that can be managed by the administrative head and utilized by students and faculty with a valid user id and password. A college, as we all know is made up of various departments, such as course departments, fees management, library management, and event management, to name a few. In comparison to the past, the number of applications and uses of information technology has expanded, and each of these unique departments now has its own computer system to perform their own functions. They can interact

with one another from their own systems if they have a valid user id and password. The system major purpose is to create a user-friendly interface and a sophisticated data system that will make it more useful. The College ERP system computerizes all of the college details which are updated by the administration and can only be accessed by students and faculty. There is a module in each student page called Simple Chatbot Application that is a simple web application. There is a module in each student page called Simple Chatbot Application that is a simple web application.

## II. ALGORITHM

There is no main algorithm in an ERP system. There are literally tens of thousands of them. Each of the thousands of business processes that an ERP supports will have several algorithms per business process. For instance, inventory stocking will need to provide algorithms for FIFO, LIFO, periodic, continuous, batch, wave, zone, pick and pack. No one company will use all the picking strategies but an ERP vendor has to support multiple customers each of whom has their own methodology. Therefore, the ERP system has to provide algorithms for whatever process their customers choose to implement.

## III. PROBLEM STATEMENT

It takes a lot of paper work and effort to manage several modules in the existing system, such as the student module, administrative module, and Exam cell, for example. There are different things in the student module at the moment, including paper work such as admission forms, notice boards, revaluation forms, exam time tables, and feedback. Exam Form, Concession Form, Accounts and updating details, Profile views, Fees details, and ID card generation are all manual activities that involve a lot of time and paper work in the administrative module.

## IV. SOFTWARE REQUIREMENT

- 1) Operating System: Windows 7/8/10
- 2) Front End: HTML, CSS, Bootstrap Studio
- 3) Back End: PHP/Firebase/MySQL
- 4) Application server: Xampp Server/Apache Tomcat

## V. ERP BLOCK DIAGRAM

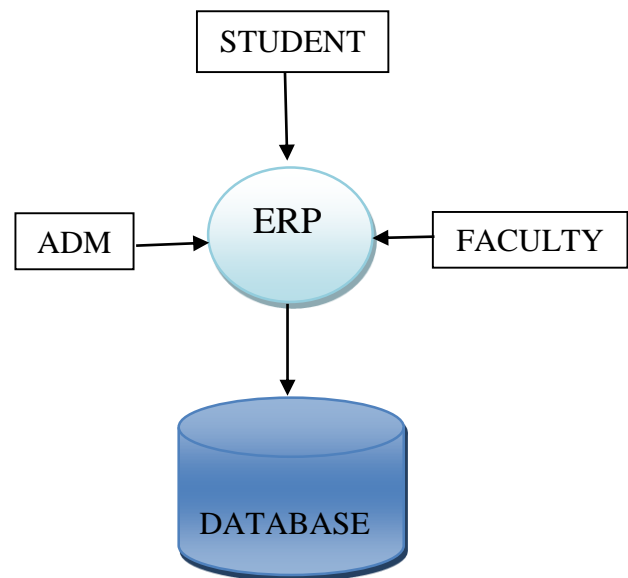


Fig. Block diagram of ERP system

## VI. SYSTEM ANALYSIS

The proposed system reduces paper work, manual work. It also helps in maintenance of data and records made easy. It helps in the analysis of placement of a student; it can also access the result database of the university for complete comparative result analysis. Uploading academic project reports for references to student. Student performance analysis for placement prediction. Thus it will reduce the time and preserves the workload and each student can able to see their report by just login profile.

There are 4 main modules including this system:

### **Admin:**

1. Login: Admin can login his personal account.
2. Add/View Student: Admin add student detail into a system.
3. Add/View Teacher: Admin add Teacher detail into a system.
4. Fee Paid/Unpaid: Admin enter fee detail into a system.

5. Add Event: Admin add event detail into a system.
6. Add lectures
7. Add Exams.

**Teacher:**

1. Login: Teacher can login in his personal account.
2. Add Assignment: Teacher can add as sign detail for the students.
3. Add Attendance: Teacher can add attendance detail into a database.
4. Add Result: Student can add result detail.

**Student:**

1. Login: Student can login his personal account.
2. View Profile: Student can see his profile.
3. View Books: Student can view book added by librarian.
4. View Assignment: Student can view all assignment detail added by teacher.
5. View Result: Student can view result.
6. View Attendance: Student can view attendance.
7. View Event: Student can view all event detail.
8. Attend lectures.
9. Interact with the chatbot for more un-provided information.

**Chatbot:**

1. Can change questions frequently.
2. Can change responses frequently too.
3. Students can get the available information quickly without need of

**VII. DFD FLOW DIAGRAM**

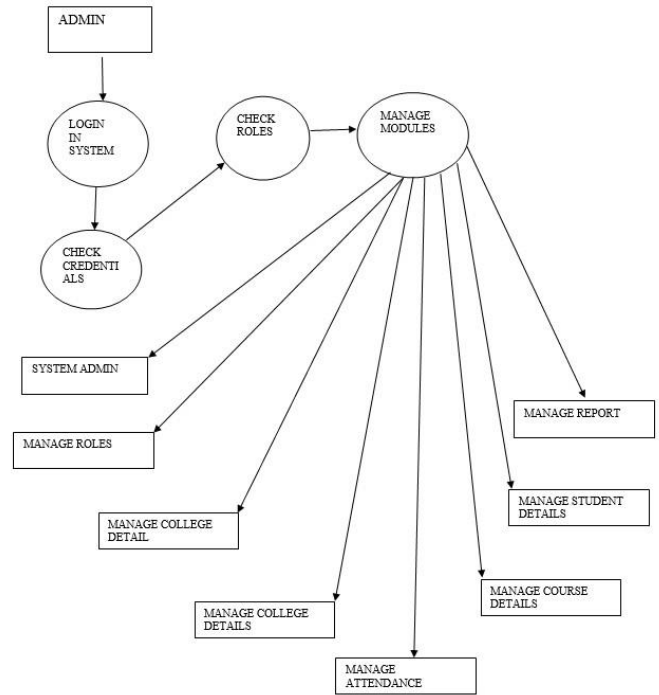


Fig. Data flow diagram of ERP

**VIII. CONCLUSION**

The program gives consumers the right information based on the service they have selected. The project was created with the day-to-day issues that a college has in mind. The college will save time by using our application instead of having to visit each department in person to get information, thanks to its deployment. Knowledge and accurate information about any college are crucial for both staff and student development. The amount of time consumption is reduced and also the manual calculations are omitted, the reports can be obtained regularly and also whenever on demand by the user. The effective utilization of

the work, by proper sharing it and by providing the accurate results.

As a result, the basic issue with the administrator's ability to maintain and manage their work is resolved. Previously, managing the timetable and keeping track of the daily schedule was a bit of a hassle. However, the administrator can enjoy the task by creating this web-based application.

## IX. ACKNOWLEDGEMENT

It is great satisfaction that we represent our real venture through this project work. We have successfully completed our project work on ERP system for college management. We are thankful of our guide Mrs. Prachi Waghmare for all support and guidance during entire project.

## FUTURE SCOPE

Integrating an ERP system into your manufacturing operations can be a crucial strategy for lowering costs, improving production processes, and considerably raising the chances of your company's long-term growth and evolution. The majority of companies are now prioritising "going digital" and everything that involves. ERP systems, on the other hand, must continue to evolve in order to meet the ever-changing needs of enterprises.

Core business processes, external data, IoT devices, and third-party applications can all benefit from IoT-enabled ERP. An IoT-enabled manufacturing ERP can connect and sync your office and shop floor with ease. There will be no looking back. API-enabled ERP systems can deliver real-time alerts

and receive data from further down the manufacturing line. This better communication is appreciated by our trailer manufacturing customers. A system like this can also handle inventory control, sending data in real time to the ERP backend and updating inventory balances and cost calculations to keep your figures accurate.

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