

## Cloud Based College Enterprise Resource Planning (ERP)

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**Abstract:** Systems currently being used in the organization is manual and requires a lot of labor work. Our system aims to automate the entire admission process making it easy for students as well as staff. This will also provide a centralized database due to which the accessing of data at critical moments will be a walk in the park. Staff would be able to access and update each student's data with ease. Once the details are fed, there is no need for various persons to deal with separate sections. Only a single person is enough to maintain all the reports.

**Keywords:** Web application, Online Admission, ERP, Online Result.

### I. Introduction

What is an ERP? Think about all the core processes needed to run a institute: Admission, Academics, Examination. At its most basic level, ERP integrates these processes into a single system. The College ERP system is a web based system which manages the entire administration, campus operations, and academic management in an efficient way. It provides Centralized Data Management to keep details of various departments in the college, student admission details, faculty details, student details, exam marks details, internal marks details and so on. The system will not only benefit the students but also the teachers. It will accelerate the process of leave management and also help the teachers with their DPRs. It can also be used to showcase all the events happening in college. It will optimize the process of issuing, tracking & returning the books in our library. Students will be closer to the results than ever.

### II. Modules

Our system would be implementing following modules: Notices, Exam, Teaching Staff, Academics, Library, Events, T&P and Admission. Functional module design for these system is provided, in which three types of users are designed in this system, that is, students, staff and admin. The various modules to be implemented in system are discussed below

#### A. Admission

Every student will get unique on admission. The Unique ID is a combination of the admission year, branch, admission type and serial number. Each student irrespective of year, branch or class will have a completely unique ID.

Eg - ACE18CMPN001/ACE18CMPND002.

It allows to upload data & register multiple students at once by uploading CSV files. Get access to the complete profile of any desired user by directly entering the Unique ID of the user. On demand, data can be conveniently exported in a spreadsheet format (.csv). The entire student database can be exported in a systematic way with this feature.

#### B. Exam

Online result will provide visual proof of marks until Mark-sheets are given. It provides automatic generation of hall ticket. It also provides analysis for semester results.

#### C. Academics

Grade Management: Display of Internal marks to be done online. Faculty will be able to schedule of submissions with deadlines and time slots and track the student's pending or submitted files. Admin can assign faculty to each subjects (theory and practical).

#### D. Library

System for users to check availability of books online. User can issue books online. Online notifications for renewal/return of books.

### E. Events

Showcasing all the events of the college. Events also includes workshops organized in college. Removal of WhatsAppPublicity hierarchy. All the users can view this module(No authorization required).

### F. T&P

Detailed guides on how to answer frequently asked.

Common place for T&P notifications instead of having to create Facebook Groups. Mock Aptitude Tests for students to practice. Only Authorized students can apply for a college placements

## III. System Structure

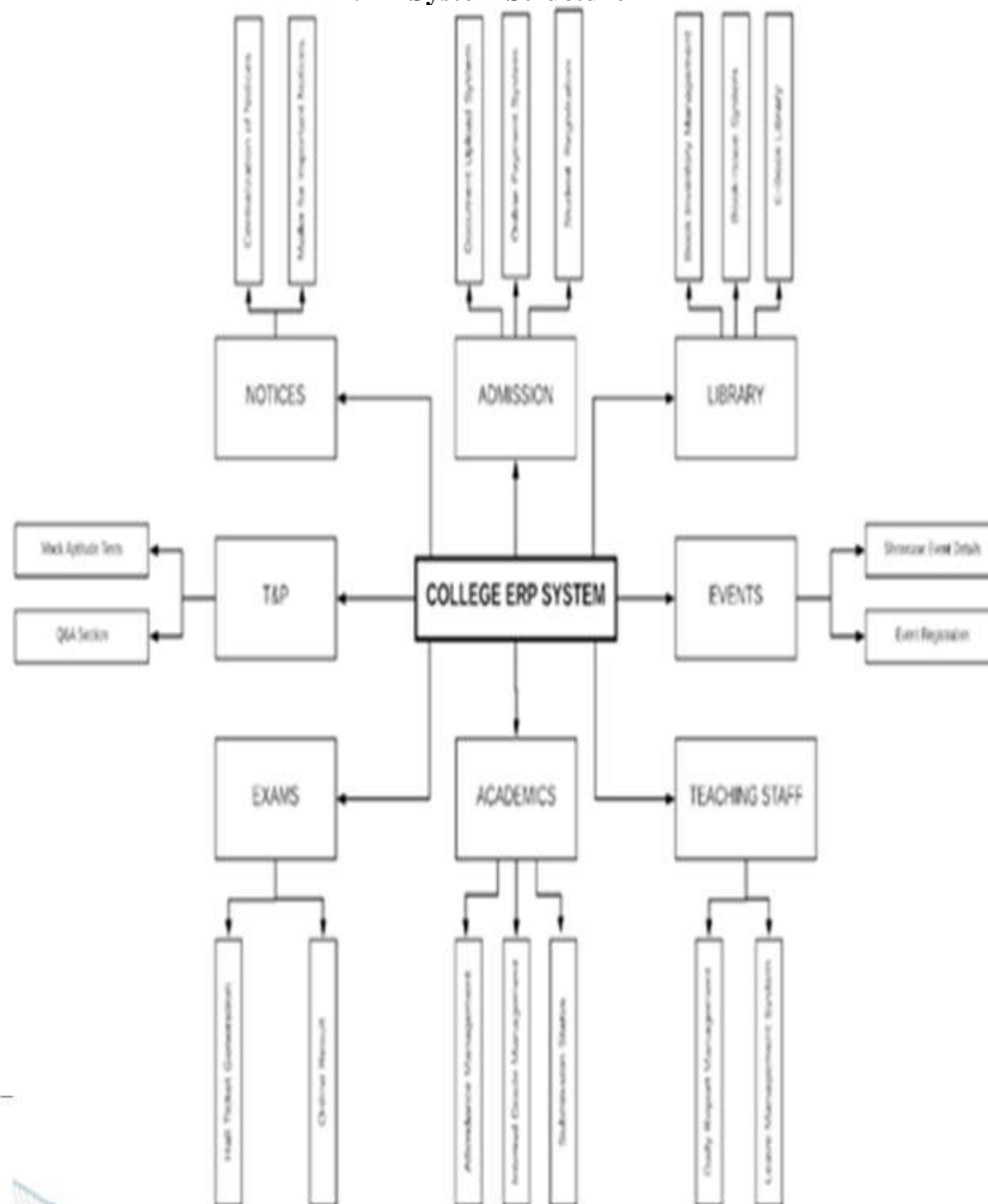
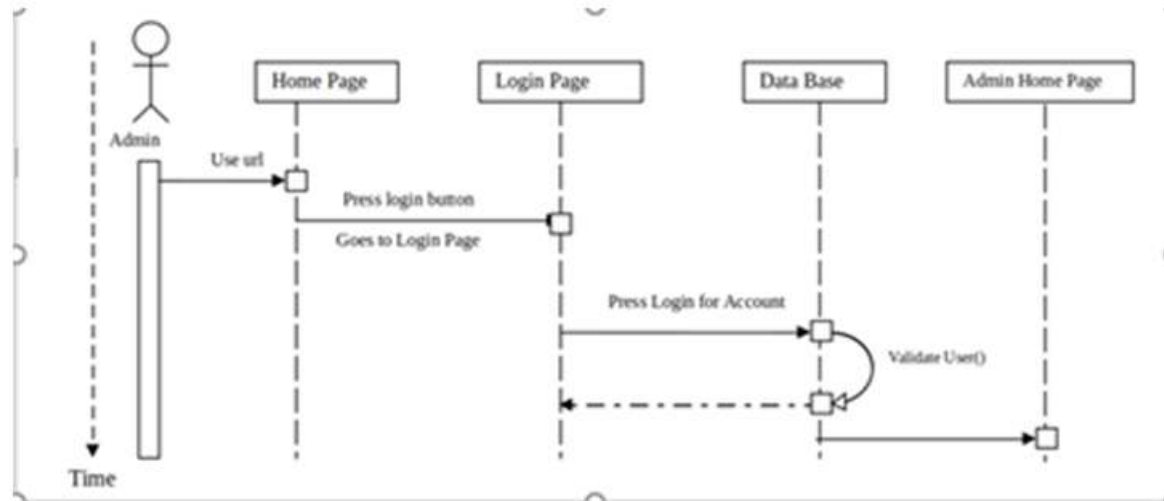


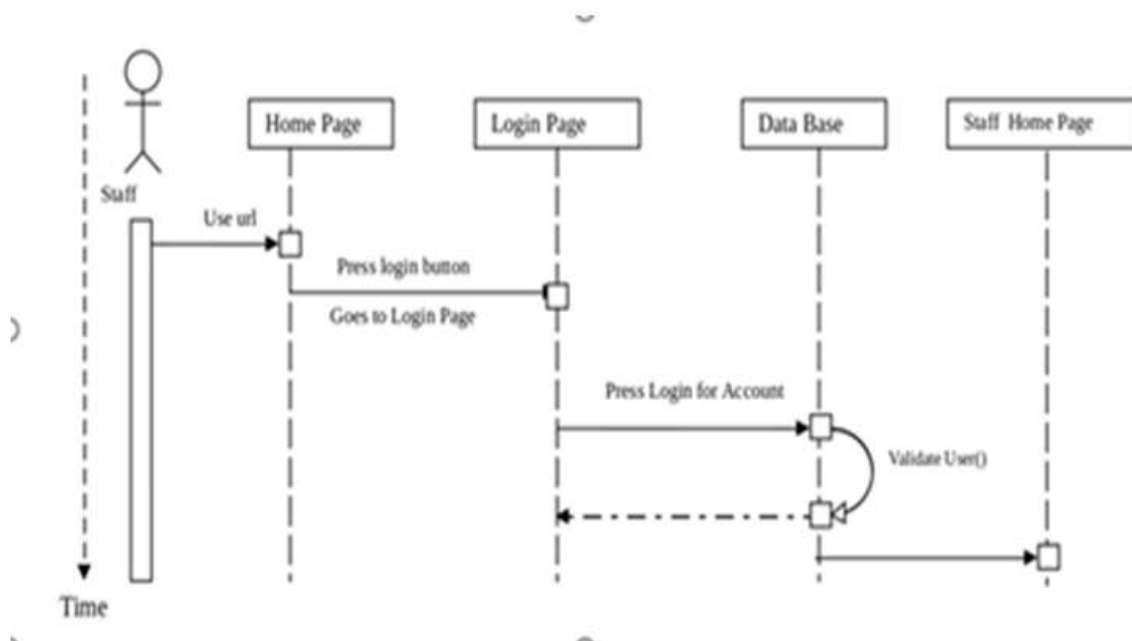
Fig.1 Overview of the functioning of the system

### A. Sequence Diagram

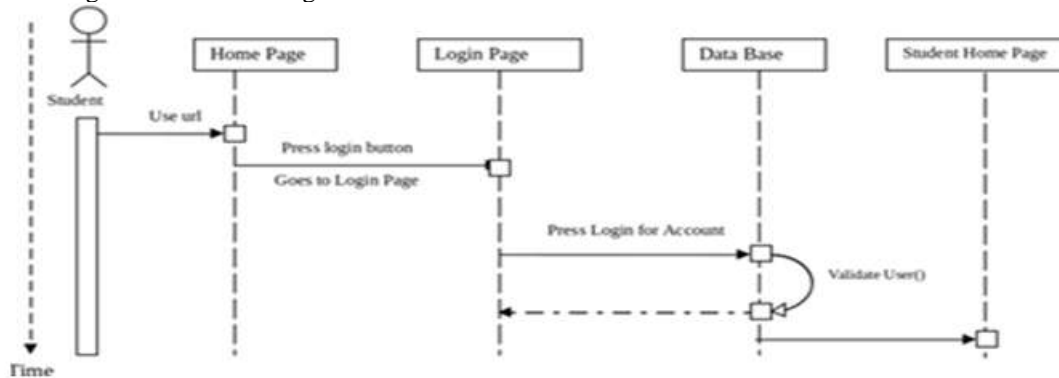
Sequence Diagram for Administrator Login



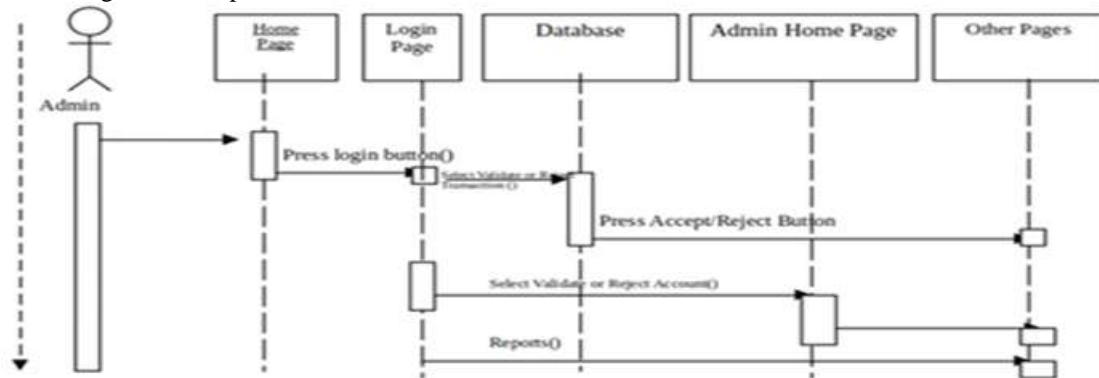
Sequence Diagram for Staff Login



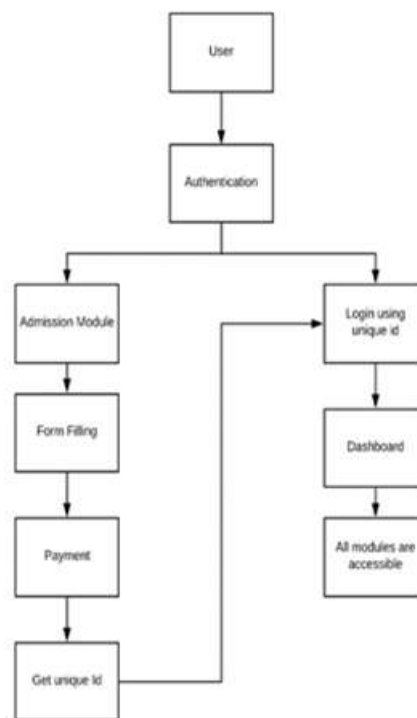
Sequence Diagram for Student Login



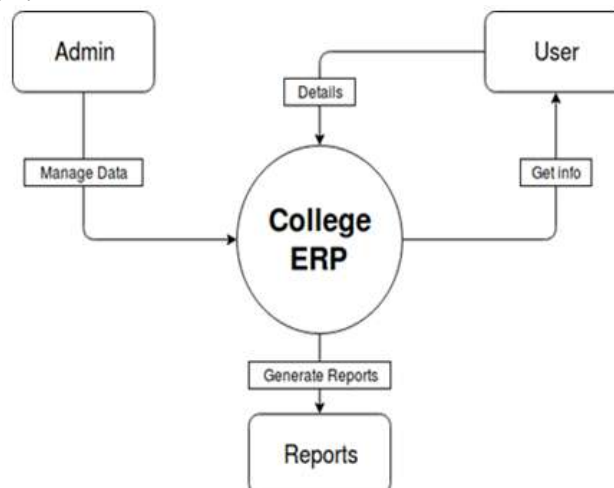
Sequence Diagram for Report Generation



B. Control Flow diagram



C. Context Level diagram:



#### **IV. Conclusion**

The benefits of a properly selected and implemented ERP system can be significant. The future of successful ERP implementation relies on bringing users up to speed on the appropriate use of ERP technology to fit their needs and objectives. Hence, every educational institute should use ERP for proper planning, management and to improve quality.

#### **V. Literature Review**

1. College Student Management System Design Using Computer Aided System[1] by Liangqiu MENG

This paper, we propose a design for college student management system utilizing computer aided system, which can play an important role in college management. Firstly, we organize our proposed college student management system via a hierarchical structure, which contains (1) Web display layer, (2) Business logic layer, (3) Data access layer, and (4) Database layer. Secondly, ER diagram of the college student management system is described, and several elements are included in it, such as teacher information, department information, major information, class information, student information, course information, manager, employment information, comprehensive score and course type. Thirdly, functional module design for college student management system is provided, in which three types of users are designed in this system, that is, students, teachers and managers.

2. E-College: An ERP for Educational Institute [2] by AvinashGutte, Nikhil Kate ,AjayrajHulikere andShrikantKokate.

ERP systems way from the manufacturing sector are entering rapidly into universities and colleges. ERP now is experiencing the transformation that will make it highly integrated, more intelligent, collaborative, and web-enabled. Reason for choosing ERP for education are accessing information from paper files is difficult task, lack of means to access old records, wastage of hundreds of hours by staff each month manually entering information or performing task that could be handled automatically like evaluation & generating results. E-college will solve these lacunas and help educational institutes to save their valuable time. This paper provides a limited set of modules and their implementation which are required by educational institutes to function smoothly.

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