International Journal of Intellectual Advancements and Research in Engineering Computations

ERP system software for college management

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ABSTRACT

The primary purpose of the "ERP System Software For College Management" completely used for schools and colleges to manage their daily activities which include the management of,timetable, results, reports, exams, events, attendance, timetables, fees, assessments and internal marks. A transparent and user friendly ERP for College that empowers students and minimizes the efforts of teachersto ease up the admission process, examination process, attendance management, and announcements orprovide updates on campus activities. Hence, manual errors can be minimized and a strong teacher-studentcommunication can be established via the software. The College Management ERP software provides adminrights to the head of the institution wherein the functioning of all operations can be monitored on onedashboard. Our Project is designed using modern web technologies in order to enhance user experience.

Keywords: ERP SYSTEM, monitored on one dashboard, modern web technology.

INTRODUCTION

The objective of College Management ERP software is to allow the administrator of any organization the ability to edit and find out the personal details of a student and allows the studentto keep up to date his profile. It'll also facilitate keeping all the records of students, such as their id,name, mailing address, phone number, DOB etc. So all the information about a student will be availablein a few seconds. Overall, it'll make Student Information an easier job for the administrator andthe student of any organization.

The main purpose of this project is to illustrate the requirements of the project College Management ERP software and is intended to helpany organization to maintain and manage personal data. It is a comprehensive project developed fromthe ground up to fulfill the needs of colleges as they guide their students. This integrated information management system connects daily operations in the college environment ranging from Attendance management to communicational means among students and teachers. This reduces data error and ensures that information is always up-to-date throughout the college. It provides a single source of data repository for streamlining your processes and for all reporting purposes. It has a simple user interface and is intuitive. This ensures that the usersspend less time in learning the system and hence, increase their productivity. Efficient security features provide data privacy and hence, increase their productivity.

The system will be used by four people, which are Admin, Teacher, Librarian and Student. Managing a school, university, college or any educational institution without a perfect software solution in the present times is painful, same in thecase of any enterprises or business. Hence an appropriate solution is required which can ensure the smooth functioning of the organization as a whole, and with ERP college Management Module,this problem can simply be solved.

EXISITING SYSTEM

While it is a step towards automating the collegeactivities, it comes with its own set of problems. This project is designed to implement a college ERP system to eradicate some of these problems and add some features of our own that would add value to the system.

Now a day, in school and colleges, it is verydifficult to manage each and everything manually. Supervising and maintaining the whole database ofa school or college can be time consuming. Thetask is challenging especially if it's done on regularbasics.

PROPOSED SYSTEM

To solve this problem ERP (Enterprise Resource Planning) is used. ERP software makes iteasy to track the progress of every department of school and automate different functions. With ERPeverything can be seen on a single dashboard. The administrator can manage the college from anywhere. The possibilities of maintaining the whole database of a college with ERP software are endless. Its helps in long-term management and planning of all departments of college, Eliminates the need for having multiple management softwarefor each department, Daily activities like attendance can be digitized and automated and leave module for teachers can be automated.

SYSTEM ARCHITECTURE

In the college ERP software, the database stores the data of all the students and faculties and the stored data is updated, added, deleted or modified. So it exhibits the data centric architectural style. In this architecture different components communicate with the shared data repository. The components access a shared data structure and are relatively independent. The ERP software requires the architectural design to represent the design of the software. Herewe define a collection of hardware and software components and their interfaces to establish the framework for the development of this software. There exists a number of components of the systemwhich are integrated to form a system. The set of connectors will help in coordination, communication, and cooperation between the components. The ERP software is built for computer-based systems. It exhibits the data centric style of architecture.

SYSTEM ARCHITECTURE
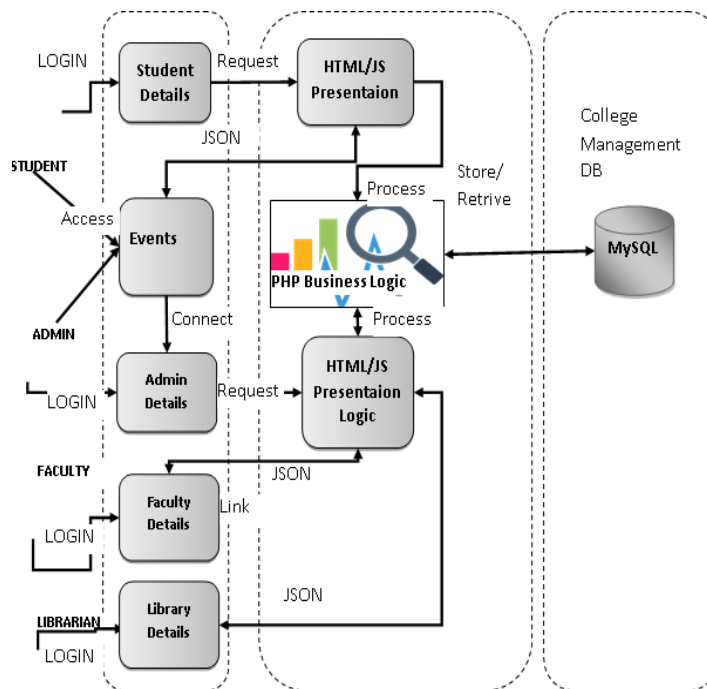
DATA FLOW DIAGRAM
Level 0:

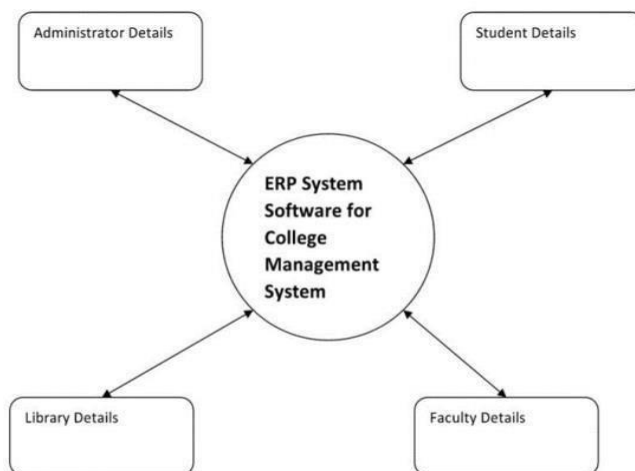

Figure illustrates that the main login details of ERPmodel logins which consists ofadminstartion details, Library details, Faculty
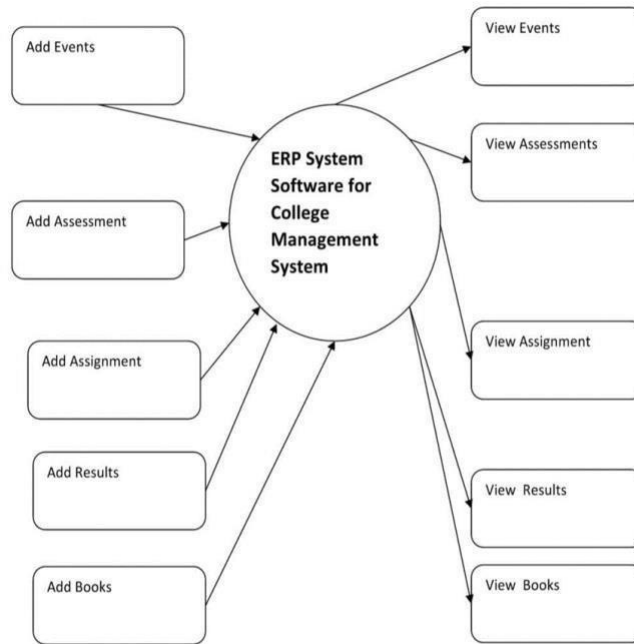
details and Studentdetails of level 0.

Level 1

Figure illustratesthat the after login into the system of ERP model which consists of Add and View Events, Assessments, Assignments, Results and Books.
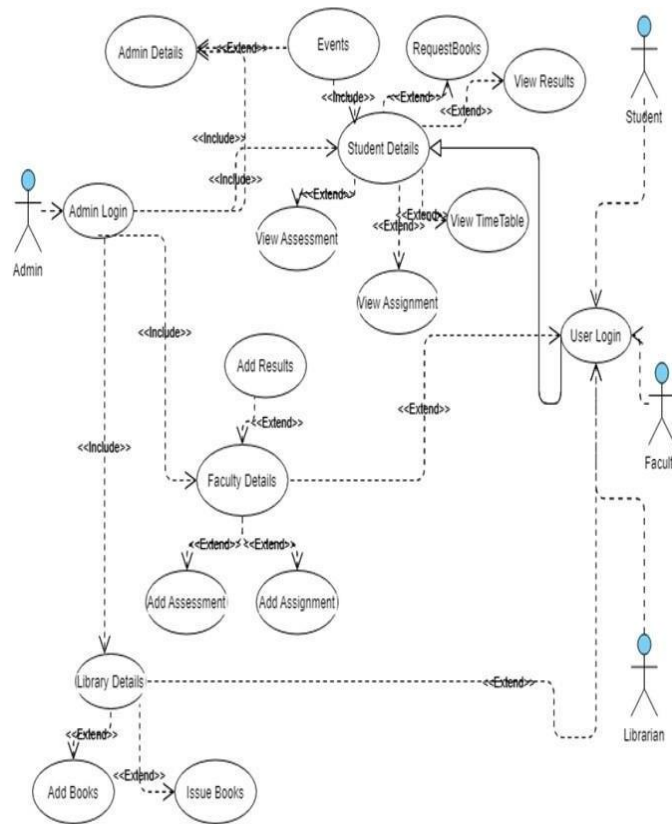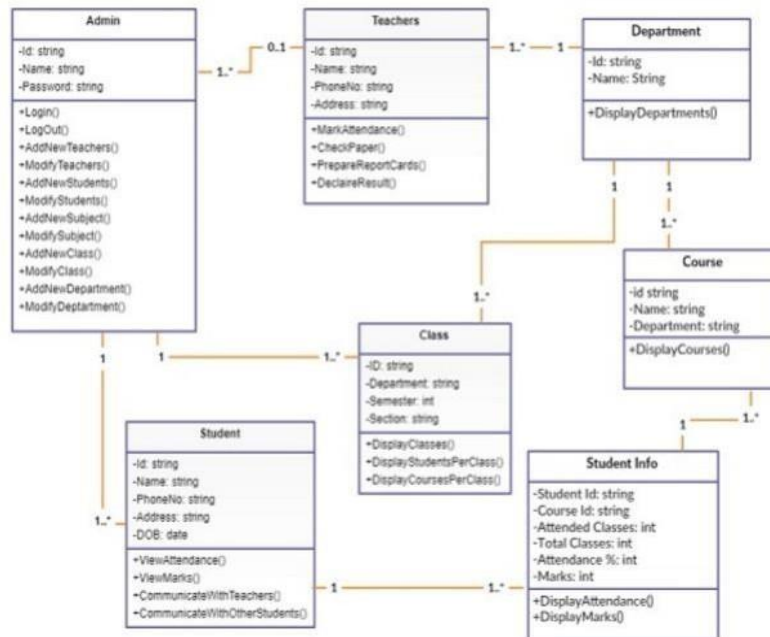
USE CASE DIAGRAMS

Figure describes the use case diagram at its simplest is a representation of a user's interaction with the system that shows the relationship between the user and the different use cases in which the user(actor) is involved.

CLASS DIAGRAM

Figure describes the class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of asystem by showing the system's classes, their attributes, operations, and the relationships amongobjects. The class diagram is the main building block of object-oriented modeling.

DESIGN OUTPUT

A quality output is one, which meets the requirements of the end user and presents the information clearly. In any system results of processingare communicated to the users and to other systems through outputs. In output design it is determined how the information is to be displaced for immediate need and also the hard copy output. It is the most important and direct source of information to the user. Efficient and intelligent output design. When analysis design computer output, they should Identify the specific output that is needed to meet the requirements.
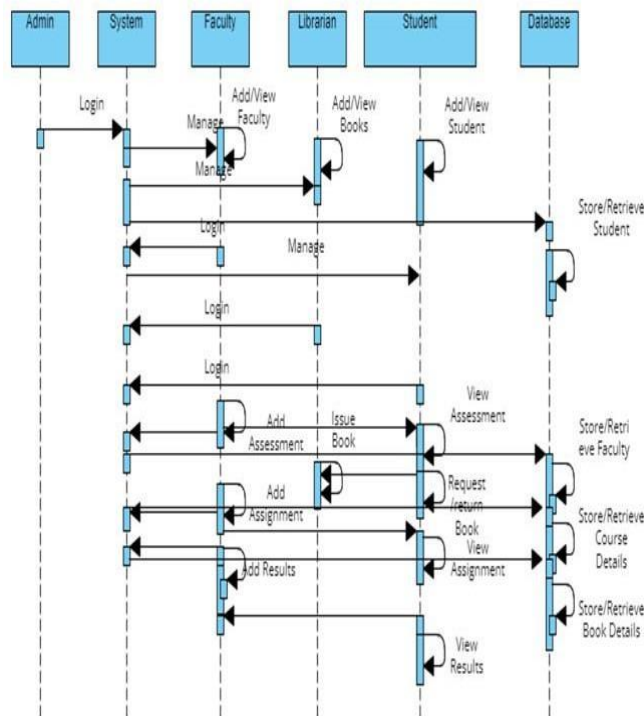
SEQUENCE DIAGRAM

Figure describes that the sequence diagram is aunified modeling language (UML) is a kind ofinteraction diagram that shows how processesoperate with one another and in what order. It is a construct of a Message Sequence chart. Sequencediagrams are sometimes called event diagrams,event scenarios, and timing diagrams.

CONCLUSION

The effective utilization of the work, byproper sharing it and by providing the accurateresults. The storage facility will ease the job of the operator. Thus the system developed will be helpfulto the administrator by easing his/her task. This System provides the automatic admissions no manual processing is required. This is a paperless work. It can be monitored and controlled remotely.It reduces the manpower required. It provides accurate information always. All years together gathered information can be saved and can be accessed at any time. The data which is stored in therepository helps in taking intelligent decisions by the management providing the accurate results. Thestorage facility will ease the job of the operator. Thus the system developed will be helpful to the administrator by easing his/her task providing the accurate results. The storage facility will ease thejob of the operator. This project is successfully implemented with all the features and modules of the college management system as per requirements.

REFERENCES

1. Hu X, Zhou M. The three-dimensional teaching mode of ERP course in colleges and universities. ICEE. 2011.p1-4. doi: 10.1109/ICEBEG.2011.5881661
2. Fan C, Zhang P, Liu Q, Yang J. Research on ERP Teaching Model Reform for Application- oriented Talents Education. International education studies. 2011;4(2):25-30. Available from: https://files.eric.ed.gov/fulltext/EJ1066448.pdf
3. Yang W, Liu Haoxue, Shi J, The Design of Printing Enterprise Resources Planning (ERP) Softwar. 2nd IEEE International Conference on Information Management and Engineering, 2010, pp. 151-154, doi: 10.1109/ICIME.2010.5478168.
4. PranabGarg Dr. HA, Comparative Analysis Of Erp Institute Vs Non Erp Institute. Teacher perspective, IJMBS-2011;1(3):32-40. Available from: http://www.ijmbs.com/13/pranab.pdf
5. Sun AYT, Yazdani A, Overend JD. Achievement assessment for enterprise resource planning (ERP) system implementations based on critical success factors (CSFs). Int J Prod Econ. 2005;98(2):189-203. doi: 10.1016/j.ijpe.2004.05.013.
6. Habhouba D, Cherkaoui S, Desrochers A. Decision-making assistance in engineering-change management process. IEEE Trans Syst Man Cybern C; 2010;41(3):344-9. doi: 10.1109/TSMCC.2010.2059013.
7. Nielsen JL. Critical success factors for implementing an ERP system in a university environment: A case study. Australian HES. Bachelor Project, Griffith University. 2002 Jun. Vol 189.