DEPARTMENT MANAGEMENT SYSTEM FOR A PARTICULAR DEPARTMENT IN THE COLLEGE

KIRUBA NANDHINI T*1, SUMEKA A *2, JEEVITHA R*3

*1Student, Department of Information Technology, Bannari Amman Institute of technology, Erode, Tamilnadu, India
*2Student, Department of Information Technology, Bannari Amman Institute of technology, Erode, Tamilnadu, India
*3Student, Department of Information Technology, Bannari Amman Institute of technology, Erode, Tamilnadu, India

---***---

Abstract - *The "Department Management System" is of importance to a particular department of a college. The system is a web-based application that can be accessed throughout the department of an organization. This system may be used for monitoring the overall activities as well as the performance of the students. This work is being developed for engineering to preserve and facilitate smooth admission to records. For this, the customers need to be registered with the machine and then they are able to get admission in addition to altering statistics as in step with the permissions given to them. DMS is an internet primarily based totally software that pursues at offering records to all of the degrees of branches in an organization. Faculty and pupils can get admission to the system to both to add or download a few records from the database. Such a framework will perceive essential properties that a stable and dependent online department operating system needs fulfill to lessen discovery redundancy and it will permit us to assess in addition to examine the merits of present and destiny candidates in the branch. DMS is vital for a group or to a school or a university, which makes use of computers, additionally which reduces manpower. For the users of this site, the administrator creates login IDs and respective passwords from which students/staff can easily access the system. This work is basically a website that includes attractive designs and proper arrangements of links and images.*

Keywords: Admin, Student, Faculty, Visual Studio.

1. INTRODUCTION

The project is titled Department Management System (DMS). A DMS is a web-based application that is beneficial for distributing information around a department. The administrator creates login IDs and corresponding passwords for users of this system so that students and staff can readily access it. This project consists primarily of a website with appealing designs and thoughtfully placed links and photos. Every notice and future event is displayed in this system, from the department library to the yearly magazine, from staff evaluations to student comments. The system also keeps track of placement and records for rooms and labs. The Information System literature strongly suggests that planning for distributed information systems should be centralized. The planning activity should be a top-down process developed from the business planning and information system planning activities. A model of information system architecture should be developed which would serve as the basis for the management and control of information systems resources throughout the organization. The information system architecture is an enterprise-wide design or plan of the collective information systems and technologies used by the firm, it serves two purposes. It is the basis of planning for the future development of the information systems of the Department Management and it serves to document the current state of the information systems. In actuality, an organization should maintain a set of models of information system architectures. One model should document the current state of the firm's information systems. One model should be the target architecture for the organization. Models which are intermediaries between those two models should exist which serve to define the planned progress of the organization toward the target architecture. A decision support system which could serve as the basis for the development and evaluation. of such models is needed. A model base suitable for this environment must first be developed. In order to evaluate modeling, and frameworks that might serve as a model base for such a system? Department Management software is prepared to maintain the dayto-day operations of a leading college. They are able to keep the staff and student records thanks to this program. Consequently, maintenance is simplified. College Information Management System Estimate for Several Subjects There are very particular methods for each of the categories that must be present in an information system architectural model. Measurement scales are created to track whether or not the model satisfies the requirements in each category. There is a natural scale that can be used to measure certain circumstances. A binary scale is

applied in all other situations. A zero on the binary scale means the model does not satisfy the criteria, while a one means the condition is satisfied.

2. LITERATURE SURVEY

S.R.Bharamagoudar et al [1] stated the application has developed a number of functions for educational institutions to manage attendance, grades, and other aspects of college life as well as track students' development. The students benefit from knowing about their attendance without having to ask the professors whenever necessary. Google Firebase is where all student-related data is kept. It offers numerous capabilities, including user authentication, real-time database access, cloud messaging, and storage on the cloud. A web-based information system is developed to make it simple for faculty to upload and update student information on a web portal and for administrators to easily access student information Jhanvi Agarwal et al [2] said that School Management a system that is introduced mainly for a school. This system includes functionality like holidays, classes, accounts, reports, etc. On the other hand, it lacks a library management feature where staff and students can borrow books that interest them. The introduction of A.V. Sinhasane et al [3] is made to lessen the strain on staff members and pupils alike. This system has features including a Newsline, polling event information, and feedback. Students can primarily benefit from this system because they receive SMS notifications about events. However, there are no fundamental modules that are essential to both staff and students, such as grades, assignments, notes, etc. Kartiki Datarkar et al [4] said that Software called the Attendance and Feedback System was created for everyday pupil attendance in educational institutions like schools and colleges. It enables access to a specific student's information in a certain class. The best course of action is determined to be a tiered approach to result monitoring, with sanctions only being used as a last resort. Software for tracking daily student attendance has been created for use in schools, universities, and institutes. Alit Joshi et al [5] researched the College Management System, International Journal of Computer Applications, and referred that the system utilizes user authentication, displaying only information necessary for an individual's duties. Each subsystem also contains authentication, which enables authorized users to add to or edit data in that subsystem. Before any record alteration really happens, all data is carefully examined and verified on the server. The system plans for a student user interface in addition to a staff user interface, enabling users to obtain information and make requests online to speed up processing. A.I Juhi Jainaf et al [6], introduce an e-academic wallet for students' mobile apps built on the Android platform. The program provides dependability, time savings, and simple control. Through this tool, internal grades can also be viewed by students and their parents. Additionally, students have access to details and

notifications at all times. It has significantly decreased physical error. High security is offered, along with a system that requires less effort and resources than a conventional method does. The suggested system offers a fresh approach to computing and shows an operation with an engaging user interface. On actual devices, the application has been tested and put into use.

3. METHODOLOGY

DMS is a comprehensive system that addresses all functional requirements that can be implemented in the operator of department management. This is of generic type software, suitable to all departments. This software has all the modules to manage the college department. Separate divisions are provided to maintain the admission process like Student management, Employee management, etc. Below are modules, which scope the entire operational requirement of any Department Management System.

3.1. MODULES

We modulated the work according to the users for this system:

1. ADMIN - The person who administers the system's database also creates, updates, and deletes data in it.

2. STUDENT - In this module students can log in and can get various information and events through the notification module, Staff availability, can also ask the query related to the subject to teachers through the Query module, download notes, and assignments provided by teachers, can also download and read the departmental news or events available.

3. STAFF - In this module, the faculties update the attendance of the students on daily basis through the attendance module, and uploads notes and assignments through the upload document module.

Existing System

All records are currently maintained manually in the department. Each year, thousands of new students enroll. The staff's job of maintaining all of these students' data is highly laborious and time-consuming as the year progresses and the number of pupils grows. Student information and his leave status. To accomplish department management needs to hire additional personnel, thus attendance, notes, and other tasks must be completed promptly. This project, which enables the management to accurately retain the records, is created to address this issue.

Proposed System

Every parameter is taken into account in the suggested method to keep tidy and simple solutions. To keep all

student records, the college needs extra staff and a location to store the records. Even when well maintained, they are not available when needed. This program is created to address this issue. It helps to keep track of student information and his leave status. attendance, questions, notes, etc. This document's objectives are to provide standards and recommendations for the creation of the mentioned project. It provides instructions on how to prepare the aforementioned project in specific. This article is meant to serve as a helpful manual for those who are creating this software. The application's primary objective is to keep track of a department's records. The department can handle student and employee management with the aid of this program.
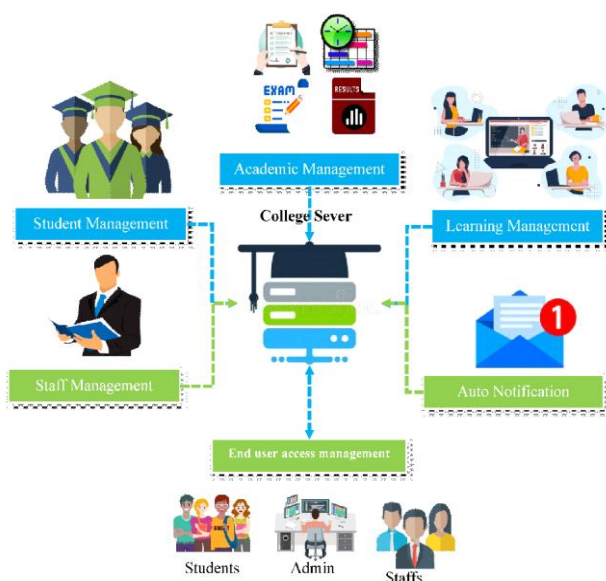
3.2 SYSTEM ARCHITECTURE

Fig.1-System Architecture

Advantages:

• The new user can understand all the options in it very easily. It's made in a straightforward and speedy referential way.

• Security is maintained in the new system. Securities for all important data are maintained confidentially.

• Provides complete online web-based solution including student registration, book material sharing, timetable generation, attendance etc.

FUTURE PLAN

In the future can captures face biometrics from the video stream of participants and gathers the timely responses of students to Concept QA and UIN queries, at random intervals of time.

4. SOFTWARE REQUIREMENTS

• Front End : PHP

• Back End : MYSQL

• Server : WAMP

• Operating System : Windows OS

• System type : 32-bit or64-bit Operating System

• IDE : DREAMWEAVER

4.1 DATABASE STRUCTURE

Student Detail

Field	Type	NULL	DEFAULT
Id	Number	Yes	Null
Student name	Text	Yes	NULL
Address	Text	Yes	NULL
Phone number	Number	Yes	NULL
Date of birth	Date	Yes	NULL
Email	Text	Yes	NULL
Father name	Text	Yes	NULL
Mother name	Text	Yes	NULL
Mother	Phone no	Yes	NULL
Admission Date	Date	Yes	NULL
Student information's	Text	Yes	NULL

Batch Detail

Field	Type	Null	Default
Batch no	Number	Yes	NULL
Batch name	Text	Yes	NULL
Remarks	Text	Yes	Null
Status	Text	Yes	Null

Attendance Detail

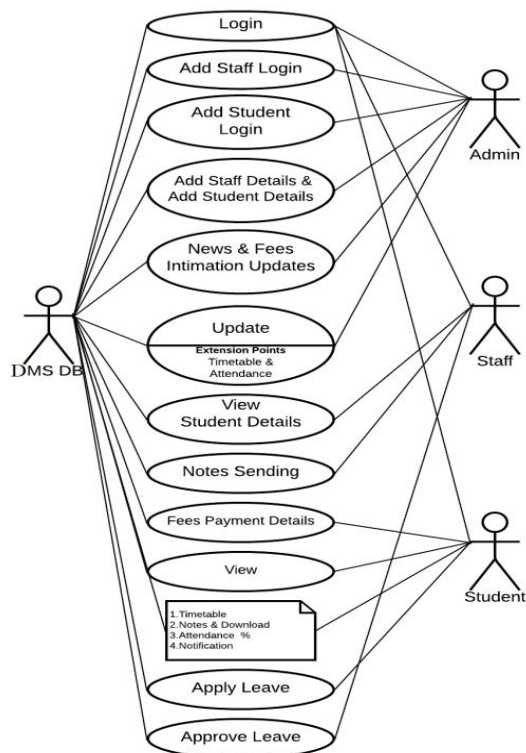| Field	Type	Null	Default
Batch no	Number	Yes	NULL
Student id	Number	Yes	NULL
Total days	Text	Yes	Null
Status	Text	Yes	Null

5. FLOWCHART

Fig.2-Use case diagram

Fig.3-Flowchart

6. CONCLUSION

This Department Management system is serving as a useful approach to maintain overall details in the proper management of the academic information and the administrative details in an organized way. This project assisted in identifying the main factors that impact the demand for the report system. The college administration can easily take care of the project's upkeep and development. The administration can work and maintain details efficiently with the help of this system. The major success of the project is to reduce the paperwork of the college. The procedure keeps track of all of the college's actions in a single window. The faculty and students are effectively addressed by this method in a variety of ways. It lessens the institution's workload associated with maintaining records manually and aids in the simplest possible information storage. The key benefit of this procedure is that it offers an intuitive application to the faculty, students, and college administration. It actually makes accurate information. Mistakes can be minimized. Information accumulated throughout the years can be preserved and retrieved at any time. The information kept in the repository aids management in making wise judgments. Therefore, a web-based information management system is preferable.

7. REFERENCES

[1] S.R.Bharamagoudar, Geeta R.B., S.G.Totad "Web Based Student Information Management System", International Journal of Advanced Research in Computer and Communication Engineering -June 2013, ISSN: 2319-5940.

[2] Jhanvi Agarwal, Renuka Singh, Mansi Singh, Mansi Raghav, International Journal of Engineering Applied Sciences and Technology, 2020,Vol. 5, Issue 2, ISSN No. 2455-2143, Pages 356-361 Published Online June 2020

[3] A.V.Shivasane, Feb-2018, College Department Management System, International Research Journal of Engineering and Technology (IRJET), Volume 05 Issue 02.

[4] Kartiki Datarkar, April 2016, Online college management system, International Journal of Computer Science and Mobile Computing, IJCSMC, Volume 5, Issue no. 4, April 2016, pg.118 – 122

[5] Lalit Mohan, June2015, College Management System, International journal of computer applications, volume 122 issue no. 1

[6] A.I Juhi Jainaf, k.Ponlakshmi, S.Gayathri, Mrs.S.Padma Devi, International Research Journal of Engineering and Technology,Volume: 05 Issue: 03 ,Mar-2018
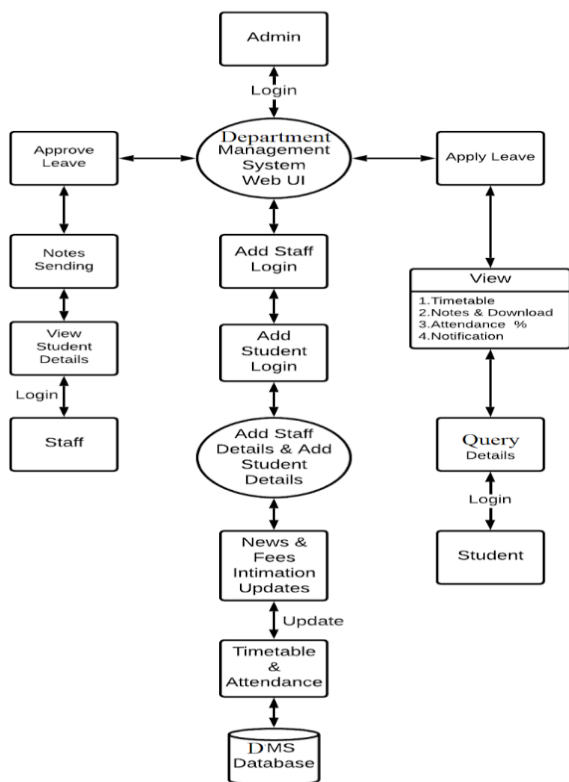
[7]N.Ratna Teja, P.Manogna, V.Ashok, T.Sai Chaitanya, Y.K. Viswanadham, 2020. Delivering a software to the department, it helps to monitor the activities that take place in the department and it reduces time, money on manpower and efforts, E-ISSN:1936- 7317.

[8] Dheeraj Menaria1, Dishant Vyas , Ganshyam Vyas , Jagdish Meghwal , Kalpit Shrimali(2020),ISSN: 2321- 9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 8 Issue IX Sep 2020,International Journal for Research in Applied Science & Engineering Technology.

[9] Radhika Bhanushali , Chaitanya Agarwal , Tejas Dongare, Dr. Sanjay Sharma,July 2022, ISSN: 2321- 9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume