



UNIVERSITY MANAGEMENT SYSTEM

A Project Report of Capstone Project - 2

Submitted by

SHIVAM S RAWAT

(1613101692/16SCSE101368)

in partial fulfillment for the award of the degree

of

Bachelor of Technology

IN

Computer Science and Engineering

SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

**Under the Supervision of
MR. AMIT KUMAR
Assistant Professor**

APRIL / MAY- 2020



**SCHOOL OF COMPUTING AND SCIENCE AND
ENGINEERING**

BONAFIDE CERTIFICATE

Certified that this project report “**UNIVERSITY MANAGEMENT SYSTEM**” is the bonafide work of “**SHIVAM S RAWAT(1613101692)**” who carried out the project under my supervision.

SIGNATURE OF HEAD

Dr. MUNISH SHABARWAL,
PhD (Management), PhD (CS),
Professor & Dean,
School of Computing Science
& Engineering

SIGNATURE OF SUPERVISION

Mr. AMIT KUMAR,
M. Tech (CS),
Assistant Professor,
School of Computing Science
& Engineering

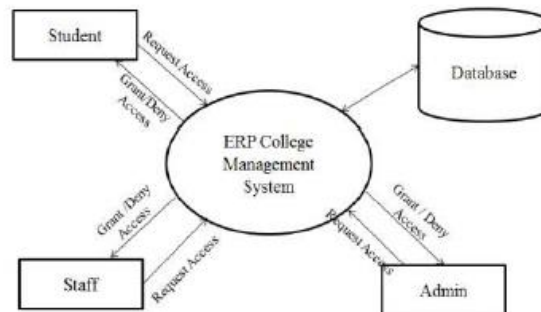
Abstract

The management of student related information in an educational institute gets more tedious and takes a lot more elbow grease with every passing year as all systems in today's world are being computerized. When the number of records increased, it is a tedious job to maintain the information of each student in the existing manual system. Maintaining the records manually leads to error prone and required more manpower and it consumes more time for processing the records. So there is a need for an automated system for managing such information. University Management System provides a simple interface for maintenance of student information. It can be used by educational institutions or colleges to maintain the records of students easily. It deals with all kind of student information, academic reports, college details, course details, curriculum, batch details, score management and other resource related details too. This system may be used for monitoring attendance for the college. Students as well as staffs logging in may also access or can be searching any of the information regarding college. This system (UMS) is being developed for an engineering college to maintain and facilitate easy access to information. For this the users must be registered with the system after which they can access as well as modify data as per the permissions given to them. For a given student/staff (technical/Non-technical) can access the system to either upload or download some information from the database.

TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
	Abstract	iii
	Lists of Figures	iv
1.	Introduction	1
1.1	Overall Description	1
1.2	Purpose of the System	2
1.2.1	Existing System	2
1.2.2	Problems in Existing System	3
1.2.3	Risks involved in Existing System	3
2.	Proposed System	4
3.	Literature Survey	5
4.	Technologies Used	6
5.	Conclusion/Future Enhancements	7
	References	xiv

Lists Of Figures



Proposed System Architecture

Admin Module: In this module the admin is responsible for the management of the information related to students and faculties as it has the highest level of power in the college department.

Student Module: It's a known fact that student plays a vital role in the education system. So in this module the student gets a unique id through which he can login to the college website and can update or check their personal details, admission details etc.

Staff Module: In this the staff/faculties are registered by the admin. The faculties have all the access to manage their data of their respective classes. They can perform various operations like maintaining student attendance, generating student report etc.

Database Module: The proposed system uses MySQL as the database due to its simplicity and flexibility. It stores every valuable information regarding the students, faculties and model their data on specified operations like student attendance, result generation, authentication credentials etc.

1. Admin will login to the system. Admin might be head of the department.
2. He can send the notice of events conducted in department to all students. Also he can create the reports of the feedback and vote given by students.
3. Next stage is login of student. Students have to visit to the website and will registered to the system.
4. When admin activate link of voting then student get login to the voting module an they can see the list of nominees, can vote to particular nominee. Events , workshops, industrial visit, guest lectures etc.
5. They can see the notices of events that will be happen in the department such as technical.
6. After login to the system student can give feedback and vote. It contains four modules Feedback module, Newslines, Voting module, Event module. End user will be going to login to the system. There are two types of users are created based on the access criteria. They are Admin and Student.

- Admin have responsibility for storing student data, can activate link. Admin users can create report of feedback and votes.
- .Admin can send notice to students. Admin users will have all the permissions and access to the application. Admin user is a root user; he is having complete control over the application.

Students are responsible for viewing their own page. They can give feedback for the subjects and guest lectures. Voting is conducted to choose GS, LR, and CR for the department. After particular user is positively registered in, if logged in user is student then he is not authorize to manipulate the detail.

INTRODUCTION

University Management System is being developed to fulfill all the needs and requirements at department level. It is integrated with the all department daily operations including activities, feedback, voting. It is a web based system that facilitates the running of elections, events or activities, feedback of each event and displaying the achievements of department.

A.) OVERALL DESCRIPTION

The user will login in the system with login id and password. Users are individuals who interact with the system. All user interaction is performed through the user's web browser. Users are provided with an online registration form before voting user should fill online form and submit details these details are compared with details in database and if they match then user is provided with username and password using this information user can login and vote. If conditions are not correct entry will be cancelled. It contains two level of user's administrator level and voter level where each level has different functionality. Department management System software manages complete department working system. It will have all the basic modules and also it makes have all the basic modules and also it makes working fully computerized which is very fast and efficient. College Department Management System is a software application which maintains records of the students, Candidates, Users. This software is planned for voting purpose which saves lot of time and money, the event creation to take feedback from students for any event happen in the department. It is a complete online project, for a firm to run it successfully. It is compulsory to take feedback from clients. The

front-end will be HTML pages . Java code will be used for validation and processing of user input and database it will act as a middle layer. Third layer of database will be interacted with these layers, which would be MYSQL database. The web server would be Apache Tomcat.

B.)PURPOSE OF THE SYSTEM

UNIVERSITY MANAGEMENT SYSTEM [UMS] deals with the maintenance of university, college, faculties, student information within the university. This project of UMS involved the automation of student information that can be implemented in different college managements

The project deals with retrieval of information through an INTRANET based campus wide portal. It collects related information from all the departments of an organization and maintains files, which are used to generate reports in various forms to measure individual and overall performance of the students.

i.) EXISTING SYSTEM

The system starts with registration of new staff and students. When the subjects are to be allocated to the faculty, the Head of the Department should enter everything in the Excel sheets. Then the staff enters corresponding subject's attendance and marks of a student then those must also be entered in the Excel sheets and validations are to be done by the user itself. So there will be a lot of work to be done and must be more conscious during the entrance of details. So, more risk is involved

ii.) PROBLEMS IN THE EXISTING SYSTEM

Storing and accessing the data in the form of Excel sheets and account books is a tedious work. It requires a lot of laborious work. It may often yield undesired results. Maintaining these records as piles may turn out to be a costlier task than any other of the colleges and institutions.

iii) RISKS INVOLVED IN EXISTING SYSTEM:

Present System is time-consuming and also results in lack of getting inefficient results.

Some of the risks involved in the present system are:

- During the entrance of marks and attendance, if any mistake is done at a point, then this becomes cumulative and leads to adverse consequences
- If there is any need to retrieve results it may seem to be difficult to search.

PROPOSED SYSTEM

UMS (UNIVERSITY MANAGEMENT SYSTEM) makes management to get the most updated information always by avoiding manual accounting process. This system has the following functional divisions.

- University Administrator
- College Administrator
- User (Students / Faculties)

University Administrator has the functionality of registering new colleges and courses.

College Administrator has the rights of creating department, allocating courses to departments, creating faculties, students and allocating subjects to faculties, and modifications in the data entered by the user can also be done by the college administrator.

User of this may be faculty or students. Faculty has the facility of entering the marks and attendance of the students. Students can check their marks and attendance but there is no chance of modifications.

Reports must be generated for the existing data i.e. for attendance and marks of the students, which are used to assess the performance of the students. These reports should be viewed by the in charge and user.

LITERATURE SURVEY

The system provides guidance to the admin to keep track of each student. The admin have the access to the database of system .In an educational institute management is crucial thing. So in order to reduce the efforts of staff we are introducing our system. The system comes on with much functionality like voting event details, feedback, news line etc. It provides a additional feature newlines that helps the student to get department newlines and reports (achievements, toppers).It also provide the voting feature so that manual work is reduced. This system is paperless system. System provides functionality for student to application where in admin can manage ,student can access uploaded notes, course details. Student will get the event details through sms. Overall manpower and reduces the time required.

TECHNOLOGIES USED

A. HTML: HTML is hypertext markup language that forms the backbone of every website. It is used for describing web documents. It is used to create visually engaging webpages. Most websites use HTML for creating user interfaces for web applications as well as mobile applications.

B. CSS: CSS stands for Cascading Style Sheets. It is used to beautify the web pages. CSS helps in separating the content of web document from its presentation. CSS helps in reducing the complexity in styling web pages. It is flexible and gives better content accessibility.

C. JavaScript: In order to create dynamic and interactive web pages, we use JavaScript. JavaScript is the most popular scripting language and is supported by all web browsers. It is very light weight programming language and is directly embedded into the HTML code.

D. SQL Server: SQL Server is a relational database management system that is used for storing and retrieving data as requested by software applications. The connectivity is applicable to the data stored on same computer or on different computers. Along with tables, one can also store views, stored procedures etc. using SQL Server.

E. JAVA: Java programming language is concise which makes it easy to use and learn. Java Virtual Machine (JVM) enables java to be executed in any environment and platform making it portable. Web applications and applets can be accessed in a secure way using Java. It is object oriented and supports multithreading. Java

supports cross platform optimized code called bytecode which are faster to execute. Hence it gives high performance.

CONCLUSION:

The University Management System is about automating the existing manual system. This research paper assists in modifying the existing system to site based online system.. The amount of time consumption is reduced as well as manpower. It mainly focuses on presenting information with ease of access which provides facilities like online registration, updation of records etc. thus providing an automated system in an educational institution.

REFERENCES:

- A.** Krithi P1, Dr M Ramakrishna2,” student management system – a survey” Computer Science and Engineering, Vemana Institute of Technology,Bangalore-34 International Research Journal of Computer Science (IRJCS) Issue 05, Volume 4 (May 2017).
- B.** Srikant Patnaik1, Khushboo kumari Singh2, Rashmi Ranjan3, Niki Kumari4 “College ,management system”, International ResearchJournal of Engineering and Technology (IRJ Volume:03Issue:05/May-2016).
- C.** Lalit Mohan Joshi M.tech schola BTKIT Dwarahat, Almora, Uttarakhand “A Research Paper on College Management System” International Journal of Computer Applications (0975 – 8887) Volume 122 – No.11, July 2015.
- D.** S.R.Bharamagoudar et al , “Web-Based Student Information Management System ,International Journal of Advanced Research in Computer and Communication Engineering Vol. 2, Issue 6, June 2013.