

International Journal of Computer Science and Mobile Computing



A Monthly Journal of Computer Science and Information Technology

ISSN 2320-088X

IMPACT FACTOR: 5.258

IJCSMC, Vol. 5, Issue. 4, April 2016, pg.118 – 122

Online College Management System

Kartiki Datarkar

Kartikidatarkar02@gmail.com

Sonali Kawle

snlkawle@gmail.com

Neha Hajare

nehashajare@gmail.com

Vaibhav Suryavanshi

ybhavx@gmail.com

Nidhi Fulzele

nidhiflz116@gmail.com

Dipeeka Radke

radke_dipeeka@gmail.com

Dept. Of CSE, Priyadarshini Bhagwati College of Engineering, Nagpur
Rashtrasant Tukdoji Maharaj Nagpur University, India

ABSTRACT: *Online College Management System (OCMS) provides a simple interface for maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. The creation and management of accurate, up-to-date information regarding a students' academic career is critically important in the university as well as colleges. Student information system deals with all kind of student details, academic related reports, college details, course details, curriculum, batch details, placement details and other resource related details too. It will also have faculty details, batch execution details, students' details in all aspects, the various academic notifications to the staff and students updated by the college administration. It also facilitate us explore all the activities happening in the college, Different reports and Queries can be generated based on vast options related to students, batch, course, faculty, exams, semesters, certification and even for the entire college The placement officer is responsible for updating the placement related information like eligible criteria for a particular company, arriving date for the company which is coming for recruitment, the list of students who are eligible for attending the recruitment process. E-Library (also referred to as digital library) is a special library with a focused collection of digital object.*

INTRODUCTION:

The design and implementation of a comprehensive Online College Management System and user interface is to replace the current paper records. College Staff are able to directly access all aspects of a student's academic progress through a secure, online interface embedded in the college's website.

The system utilizes user authentication, displaying only information necessary for an individual's duties. Additionally, each sub-system has authentication allowing authorized users to create or update information in that subsystem. All data is thoroughly reviewed and validated on the server before actual record alteration occurs. In addition to a staff user interface, the system plans for student user interface, allowing users to access information and submit requests online thus reducing processing time. All data is stored securely on SQL servers managed by the college administrator and ensures highest possible level of security. The system features a complex logging system to track all users' access and ensure conformity to data access guidelines and is expected to increase the efficiency of the college's record management thereby decreasing the work hours needed to access and deliver student records to users.

OBJECTIVES:

- Providing the online interface for students, faculty etc.
- Increasing the efficiency of college record management.
- Decrease time required to access and deliver student records.
- To make the system more secure.
- Decrease time spent on non-value added tasks.

DATA FLOW GRAPH:

The detailed flow graph is shown in Fig.1 .The design of the Online College Management System includes the design of the home page which provides the way for all students and other user to access the OCMS. Every user of the OCMS has a unique username and password. The home page mainly contains a login form through which a new user can register, or an existing user can login to the system by entering the username and password.

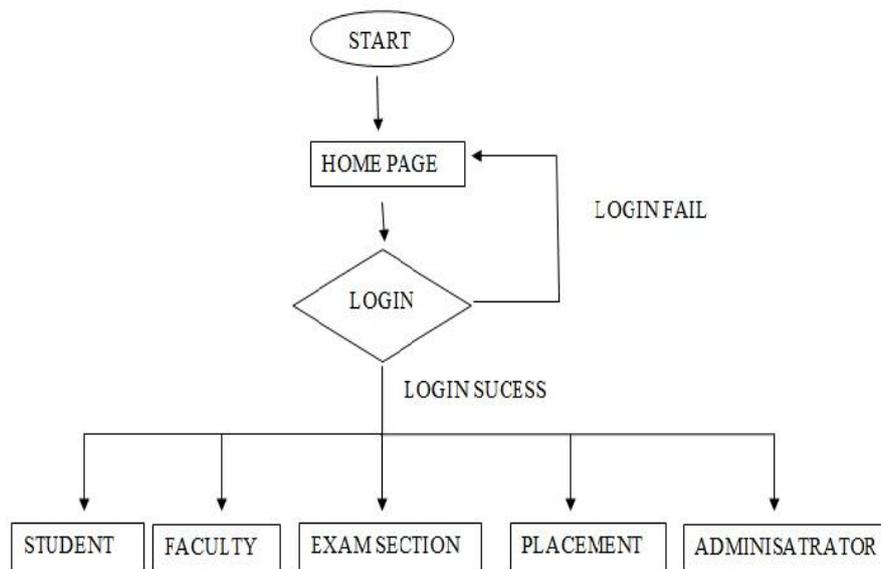


Fig. 1 Data Flow Diagram

1. ADMINISTRATOR

The administrator is responsible for entering the new student and managing the student Accounts. The administrator also manages the faulty accounts like entering a new faculty assigning the faculty to the subjects. The Administrator also updates the college related information about events that occur in the college. The Administrator also updates placement related information and manages E-Library. The administrator will check all the updates i.e. student updates faculty, updates, exam updates etc. The administrator has the highest level of power in the college management system.

2. FACULTY

The staff can update the information regarding the students attendance, internal marks of the students and any information regarding the subjects they handle. They can also view the student details for better understanding the student performance and improving the efficiency of the student. The staff also gets the updates from the college regarding any events occurring in the college.

3. STUDENT

The student is of center focus, because in every college student plays the very important role. Student can access the information of the college, subject details, training and placement cell information and exam section information. The course details include information regarding branch he is studying, the academic curriculum of the college, year wise subject offered by the branch, the subject details include the syllabus of the subjects, information regarding the staff handling the subjects, the subjects he presently registered for the semester he is presently studying, attendance and internal marks of the subjects, he can also ask any queries to the staff

regarding the subjects. The placement details include the information about the companies, the eligibility criteria for attending recruitment of the companies, the process of recruitment, the date and time of the recruitment. The placement section updates the student information who got selected for a company. The exam section details include the internal and external time table it also contains the semester end results.

4. EXAM SECTION

The examination section is responsible for updating internal and external examination time table. And they are responsible for the checking and approving the internal marks details updated by the staff.

5. PLACEMENT SECTION

The placement officer is responsible for updating the placement related information like the list of student who got placed in a company and the placement officer can access the student information from the student database.

6. E-LIBRARY

E-Library (also referred to as digital library) is a special library with a focused collection of digital objects that can include text, visual material, audio material, video material stored as electronic media formats(as opposed to print, microform, or other media),along with means for organizing, storing and retrieving the files and media contained in the library collection.

REQUIREMENT ANALYSIS

The basic requirements for the design of the OCMS are:

- Every user should have their own identityLogin facility.
- User can update his/her personal information and can view the notice, results ,placement and exam section updates etc
- Faculty, placement and exam sections can update any of the information.

DATABASE DESIGN PROCESS

It is fair to say that database play a critical role in almost all areas where computers are used, including business, electronic commerce, engineering, medicine, law, education, and library science. A database is collection of a related data.

A database has the following implicit properties:

A database represents some aspect of the real world, sometimes called the mini-world or the Universe Of Discourse (UOD) changes to the mini world are reflected in the database.

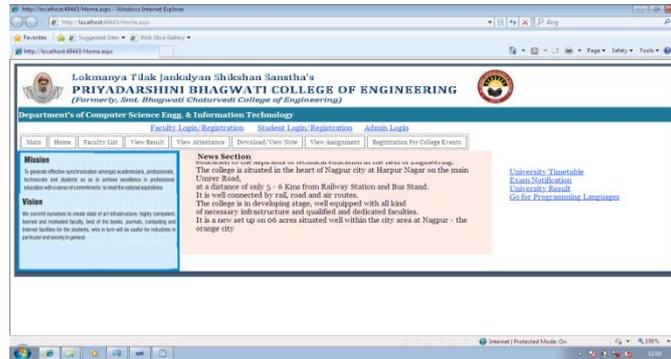
- A database is a logically coherent collection of data with some inherent meaning. A random assortment of data cannot correctly be referred to as a database.
- A database is designed, built, and populated with data for a specific purpose. It is an intended group of users and some preconceived application which these users are interested.

Database Management System (DBMS) is a collection of programs that enables users to create and maintain a database. DBMS is a general purpose software system that facilitates the process of defining, constructing, manipulating, and sharing database among various users and applications. Defining a database involves the specifying the data types, structures, and constraints of the data to be stored in the database. The database definition or descriptive information is also stored in the database in the form of dictionary; it is called Meta data constructing the database is the process of storing the data on the storage medium that is controlled by the DBMS.

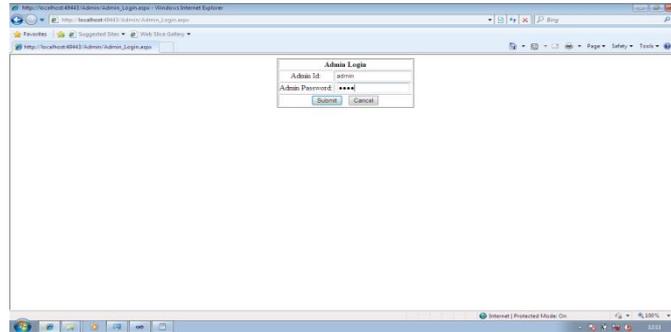
Manipulating a database includes functions such as querying the database to retrieve specific data, updating the database to reflect in the mini-world, and generating reports from the data. Sharing a database allows a multiple users and programs to access the database simultaneously.

Application program accesses the database by sending queries or request for data to the DBMS. A query typically causes some data to be retrieved; a transaction may cause some data to be read and some data to be written into the database.

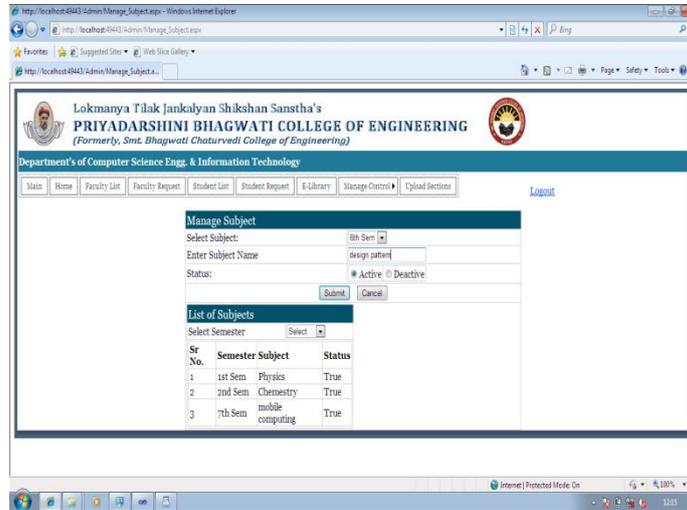
OUTPUT
Home page



ADMIN LOGIN



SUBJECT ADDED



STUDENT LIST



FACULTY LIST



STUDENT LOGIN



CONCLUSION

This paper assists in automating the existing manual system. This is a paperless work. It can be monitored and controlled remotely. It reduces the man power required. It provides accurate information always. Malpractice can be reduced.

All years together gathered information can be saved and can be accessed at any time. The data which is stored in the repository helps in taking intelligent decisions by the management. So it is better to have a Web Based Information Management system. All the stakeholders, faculty and management can get the required information without delay. This system is essential in the colleges/hostels and universities.

REFERENCES

- [1] Zhibing Liu, Huixia Wang, Hui Zan "Design and implementation of online college management system." 2010 International symposium on intelligence information processing and trusted computing. 978-0-7695-4196-9/10 IEEE.
- [2] Zhi-gang YUE, You-wei JIN, "The development and design of the student management system based on the network environment", 2010 International Conference on Multimedia Communications, 978-0-7695-4136-5/10 2010 IEEE.
- [3] TANG Yu-fang, ZHANG Yong-sheng, "Design and implementation of college student information management system based on the web services". Natural Science Foundation of Shandong Province(Y2008G22), 978-1-4244-3930-0/09 2009 IEEE.
- [4] M.A. Norasiah and A. Norhayati. "Intelligent student information system". 4th International conference on telecommunication technology proceedings, Shah Alam, Malaysia, 0-7803-7773-7/03 2003 IEEE.
- [5] Jin Mei-shan¹ Qiu Chang-li² Li Jing³. "The Design of student information management system based on B/S architecture". 978-1-4577-1415-3/12 2012 IEEE.