Implementation of Information Management System

S.P. Mahajan[1*], P.B. Khare[2], S. W. Kedare[3]

[1]Dept. of CE, Late G.N. Sapkal College of Engineering (Savitribai Phule Pune University), Maharashtra, India
[2]Dept. of CE, Late G.N. Sapkal College of Engineering (Savitribai Phule Pune University), Maharashtra, India
[3]Dept. of CE, Late G.N. Sapkal College of Engineering (Savitribai Phule Pune University), Maharashtra, India

Corresponding Author: mahajan.sangita1994@gmail.com, Mob.: +91-9527575634

Abstract **—** Developing an Online Information Management System (MIS) that is of importance to either an educational institution or a college. The system is an Intranet based application that can be accessed throughout the institution or a specified department. This system may be used for monitoring attendance for the college. Students as well as staffs logging in may also access or can be search any of the information regarding college. Attendance of the faculty and students as well as marks of the students will be updated by staff. This system (M.I.S.) is being developed for an engineering college to maintain and expedite easy access to information.[1] For this the users must be register with the system after which they can access as well as modify data as per the permissions given to them. MIS is an intranet based application that aims at providing information to all the levels of management within an organization. This system can be used as a knowledge/college management system for the college. For a given student/staff (technical/Non-technical) can access the sdftware to either upload or download some information from the database.

Keywords— PHP, SQL Server, HTML, Javascript, Broowser, College Management, Information System, Document Management System

I. INTRODUCTION

Management information system (IMS) refers to the action towards of data through computers to manage and support managerially decisions within an organization. The concept may include systems termed transaction processing system, decision support system, expert system, or executive information system. The term is often used in the educational study of businesses and has connections with other areas, such as information systems, information technology, and information, e-commerce and computer science; as a result, the term is used interchangeably with some of these areas[7,9].

Management information systems as an academic discipline studies people, technology, organizations, and the relationships among them. This definition relates exactly to "MIS" as a course of study in business schools. Many business schools (or colleges of business administration within universities) have an MIS department, alongside departments of accounting, finance, management, marketing, and may award degrees (at undergraduate, master, and doctoral levels) in[7] Management Information Systems.MIS professionals help corporations to increase the benefit from investments in personnel, equipment, and business processes.

Currently, organizations are in the race for becoming their capability in order to survive in the competitions of the new century global market. Therefore, organizations are attempting to advance their alertness level by improving the decision making process to be more efficient and highly effective to meet the successive fluctuations of the market. In an effort to achieve this, many modern organizations, either mid or large sized, have concerned with a cycle of progressive investments in and adopted new management information systems workings. During last year's, a high percentage of financial organizations frequently used Management Information Systems to facilitate the provision of services; and that the speed of the adoption is expected to grow further as the technology [8] expands. Information is an arrangement of people, data, process, and information technology that interact to collect, process, store and provide as output the information needed to support an organization, which indicates that information system is an about of groups, data, processes and technology that act together to accumulate, process, store and provide information output needed to enhance and speed up the process of decision making. In a Bank's information system, there is always a potential crisis which makes the bank endure an insufficiency; thus, an advanced information system supported by a superior mechanism control is required to

make certain that an information system has achieved the required processes.

If the relevant information required in a executive process or an organization planning is not available at the appropriate time, then there is a good change to be a poor organization planning, inappropriate decision-making, poor importance of needs, and defective programming or scheduling of activities. Information is essential for the endurance of a financial organization in the global and competitive market.

The nature of globalization and attractiveness in the market stress on the importance of developing an organization capability through better enhancing MIS. Accordingly, the stored information must then be recalled and distributed for the use of an organization leadership and top management as well as mid-level managers to take effective long term (strategic) and short term (Tactical) decision-making. MIS is believed to be a system which provides corporations top management and, even lower level management, with appropriate information based on data from both internal and external sources, to allow them to make effective and timely decisions that best achieve their organization goals and satisfy stakeholder requirements.[2]

The conception of information catches the attention of different professionals from different fields such as computer science, economics, business and management, political science, statistics, communication and information studies. However, the question is "what type of information"? How Information management can play an essential role in the decision making process? How can the coordination between different departments (internal and/or external) and sharing information at the real time accelerate and enhance the process of decision making and avoid decision making errors?

II. MODULES OF SYSTEM

1) STUDENT MODULE: – This module used to store students information. It contains the following information i.e. Students Profile details, Contact information, Educational details, etc. The Users can search the students from the database according to different criteria such as name, Course, Room number, etc.[8]

2) PLACEMENT MODULES: - This module includes details regarding the placement of students in which company they are placed and when they were placed.

3) NOTICES: - It includes information about various events which is currently going on and which will occur in the near course of time. Notices helps in quick capturing of any occurring event.

4) REGISTRATION MODULES.:-Report generation is also provided to view summarized detail regarding hostel fees and mess bill. It includes Hostel fees, Mess reports. Students can

check hostel fees and mess bill by entering their Unique Hostel ID.

5) HOSTEL MANAGEMENT MODULES: - How to manage hostel various room and food facilities come under hostel management system.
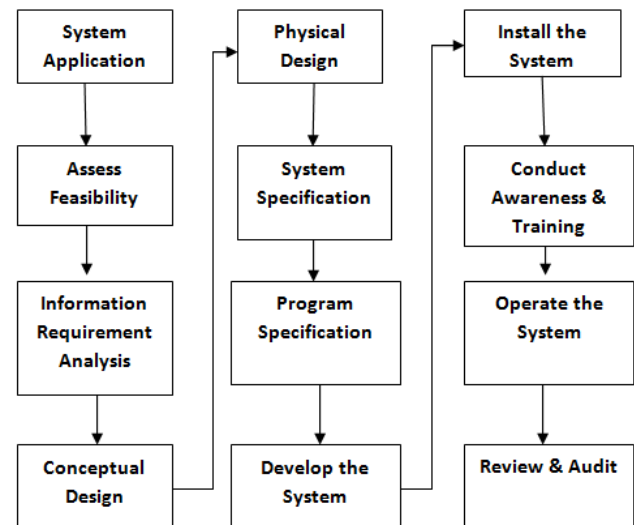

Fig 1- Lifecycle of MIS Development

6) ROOM ALLOTMENT MODULE: – This module will be allocated a room to students according to the student's education details, section either branch or course. A specific room will allocated to a student and an ID will generate for it. Even it displays module: – This module which displays room fee structure records. Student dues or refund status and balance amount status can be accessed here. This module also used to inform about students room rent every semester with allowed changes based on scholarship.

7) MESS MODULE: – This module keeps track of all the transactions related a mess. The mess item expenditure for each student in the hostel is calculated and the mess bill for each student calculated and displayed. [8]

8) ROOM FEES MODULE: - This module describes various fee structures of different years and the fee structure is different as on education qualification.

III. PRE-REQUITIES

1] JAVA: CMS requires Java JRE 1.5 or higher. Since it is written in Java, it can run on any platform that supports the Java environment 1.5 or higher. The compiled files are contained in Java Archives (JAR's) and have to be defined in the path environment variable.

2] HTML: HTML is a hypertext markup language which is, in reality, a spinal cord of any website. Any website can't be structured without the knowledge of HTML. If we make our web page only with the help of HTML, then we can't add many of the effective features in a web page, for making a web page more effective we use various platforms such as static and dynamics methods.[8] And here we are using this language to make our web pages more effective as well as interactive for users to understand. And to make our web pages dynamic we are using JavaScript and XML.

3] CSS: CSS in PHP Stands for (Cascading Style Sheet). Cascading style sheets are used to design the layout of Web pages. They can be used to define way of writing or style, size of various tables, and other aspects of Web pages that previously could only be defined in a static page's HTML. The main work of CSS is to separate content of a web document (written in any markup language) that is written using Cascading Style Sheets. There are lots of benefits that one can extract through this like improved content accessibility, better flexibility and moreover and hence gives a level of control over various presentation characteristics of the document.[8] It also helps in reducing the problems and helps in saving access time. It gives the option of selecting various style schemes and rules according to the necessity.

4] JAVASCRIPT: JavaScript is the most famous scripting languages of all time. JavaScript is a Scripting Language of World Wide Web. The main usage of JavaScript is to add various Web function, validations, detections, a creation of cookies and so on. JavaScript is the best scripting languages and that is why it is adopted by almost all browsers. JavaScript is considered the most powerful scripting languages in present use. It is used for the client -side web development. JavaScript is used to make pages more interactive. It is a light-weight programming language and it is embedded directly into the markup syntax. JavaScript, as the name defines, was affected by many languages, especially Java.

IV. SYSTEM ARCHITECTURE

Aim of College Management System for a College (CMS) Design Document is to describe the design and the architecture of CMS. The design is expressed in sufficient detail so as to enable all the developers to understand the underlying architecture of CMS[6]. Logical framework of JDBC driver, Server, DML, DDL, Session and Data Store are explained.

The architectural design of a software project is simply the design of the entire software system. This includes the hierarchy of the modules and also which modules are present in the system. A good architectural design will create a clear and fair balance between cohesion (each module has only

one distinct purpose), coupling (no two modules depend completely on each other), abstraction (seeing modules in full and not in detail), hierarchy (logical modules stem from others) and partitioning (logically grouping modules together) of the software modules.
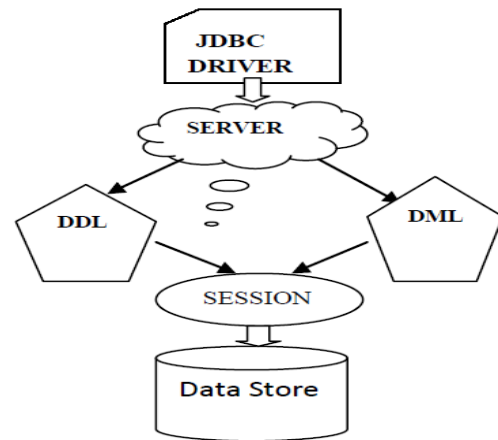

Fig 2- Query flow of System
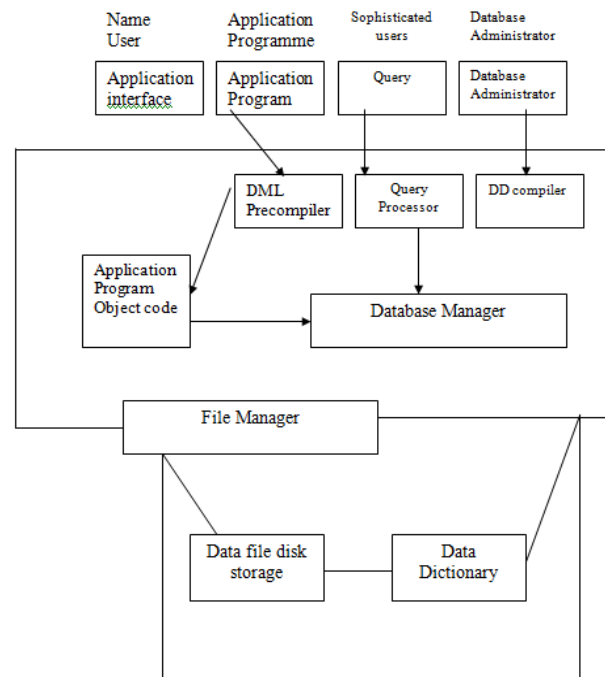
V. RESULT ANALYSIS

Fig 3-Architecture of System

System development cycle stages are sometimes known as system study. System concepts which are important in developing business information systems expedite problem solving and improve the quality of decision-making.

The system analyst has to do a lot in this connection. They are confronted with the challenging task of creating new systems and planning major changes in the organization. The system analyst gives a system development project, meaning and oversight. The typical breakdown of an information systems life cycle includes a feasibility study, requirements, collection and analysis, design, prototyping, implementation, validation, testing and operation.

VI. CONCLUSION

This paper assists in modifying the existing system to site based system. This is a paperless work. It can be monitored and controlled remotely. It reduces the manpower required. It provides accurate information always. Malpractice can be reduced. All gathered and extra information can be saved and can be accessed at any time. The data which is stored in the project helps in taking intelligent and quick decisions by the management. [5]So it is better to have a Web-Based Information Management system. All the stakeholders, Staff members can get the desired information without delay. This system is essential in the colleges/hostels and universities.

REFERENCES

[1]. N Bowker, K Tuffin, "*Users with disabilities social and economic development through online access*", Proceedings of the IASTED International Conference on Information and Knowledge Sharing, Canada, pp.122-127, 2002.

[2]. M. Durie, "*Ngākāhuipou: Launching Māori futures*", Huia Publishers, Wellington, pp.1-32, 2003.

[3]. T. Hazledine, J. Quiggan, "*Public policy in Australia and New Zealand: The new global context*", Australian Journal of Political Science, Vol.41, Issue.2, pp.131-143, 2006.

[4]. JS. Ackerman, "*Palladio's Italian villas*", Institute of Fine Arts (New York University), NY, pp.1-87, 1967.

[5]. PM. Lawther, "*Community involvement in post disaster re‑construction‑case study of the British red cross Maldives recovery program*", International Journal of Strategic Property Management, Vol.13, Issue.2, pp.153-69, 2009.

[6]. Tony Tanner, "*Jane Austen*", Palgrave Macmillan, US, pp.1-336, 2007.

[7]. CS. Freitas, JJ. Medeiros, "*Organizational impacts of the electronic processing system of the Brazilian Superior Court of Justice*", JISTEM-Journal of Information Systems and Technology Management, Vol.12, Issue.2, pp.317-32, 2015.

[8]. LM. Joshi, "*A Research Paper on College Management System*", International Journal of Computer Applications, Vol.122, Issue.11, pp.48-52, 2015.

[9] S. Mahajan, P. Khare, S. Kadare, M. Bhandare, "*Design and Develop Information Management System for Technical Institute*", International Journal of Computer Sciences and Engineering, Vol.4, Issue.10, pp.130-132, 2016.