Behavioural Aspect of ERP System for Organisation

Yadnesh Khatlane 1, Shyamal Kothaware 2, Chetna Mali 3, N.A. Suryawanshi 4

BE Student 1, 2, 3, Professor 4
Department of Computer & IT
GCoE Nagaon, Dhule, India

Abstract:
The main objective behind the ERP (Enterprise resource planning) is creating a central system while in traditional approach is to do a manual work in paper. So for that it’s very difficult to manage all the record and also difficult to analyze all the record in any departments. A manual work are to lengthy and its very time consuming for the entire department. So for that needs of central system is arising which gives the effective and efficient result within a few time. All departments can access the data with the system and also they can perform a desire task. With that all the data can easily manipulate and get easily whenever anybody wants. With an ERP system in place, people in different departments can view the same information about Student Information, making sure that every single interaction with student is based on accurate information. It also means that manual processes can be automated to free up people’s time and make internal processes more efficient. It’s all about how to manage the student record in a master file as well as how admin and faculty can manage the profile and keep information about the student. All the information regarding student can see and edit if necessary apart from that faculty can keep record of student and they can manage information like student profile, exam, reporting or other information.

ERP function involves:

- Manage new admissions
- Manage courses
- Student Basic Information
- Manage faculty
- Exam scheduling
- Result management

Keywords: ERP System, Database, Student Information System.

I. INTRODUCTION

The design and implementation of a comprehensive student information system and user interface is to replace the current paper records [1]. 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 subsystem 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. Previously, the college relied heavily on paper records for this initiative. While paper records are a traditional way of managing student data there are several drawbacks to this method. First, to convey information to the students it should be displayed on the notice board and the student has to visit the notice board to check that information. It takes a very long time to convey the information to the student. Paper records are difficult to manage and track. The physical exertion required to retrieve, alter, and re-file the paper records are all non-value added activities. This system provides a simple interface for the maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. Achieving this objective is difficult using a manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming. All these problems are solved using online student information management system. The paper focuses on presenting information in an easy and intelligible manner which provides facilities like online registration and profile creation of student’s thus reducing paper work and automating the record generation process in an educational institution.

I. PURPOSE

The project is about to handle all the information of the student regarding course an examination. Also it manages resources which were managed and handled by manpower previously. The main purpose of the project is to integrate distinct sections of the organization into consistent manner so that complex functions can be handled smoothly by any technical or non-technical persons.

The project aims at the following matters:

- To manage information of student, faculty and courses.
- Consistently update information of all the students reports.
• Assistance in decision-making.

2. OBJECTIVE

• View the all the record of the student and faculty.
• Student can interact with his basic profile which includes course details, personal detail.
• Student can download the appropriate document in the supporting document.
• Student can give the online exam and get the result on the spot time

3. SCOPE

• Different people, place from different departments can view the same information about Student Information.
• To enable the head and technical supporting group to access the system from anywhere.
• To enable the Student to view as well as raise suggestion from anywhere.
• To enable the student evolution with giving online exam and get the result on the spot.

II. SYSTEM DESIGN

This deals with data flow diagram, detailed flow graph, requirement analysis, and the design process of the front and back end design of the student information management system.

1. DATA FLOW DIAGRAM

A Data Flow Diagram (DFD) is a graphical representation of the “flow” of Student Information System. A data flow diagram can also be used for the visualization of Data Processing. DFD shows the interaction between the system and outside entities. This context-level DFD is then “exploded” to show more detail of the system being modelled. A DFD represents flow of data through a system. Data flow diagrams are commonly used during problem analysis. It views a system as function that transforms the given input into required output. Movement of data through the different transformations or processes in the system are shown in Data Flow Diagram.

![Data Flow Diagram](image1)

Figure 1. Data Flow Diagram

![Login Process](image2)

Figure 2. Login process

2. FUNCTIONAL REQUIREMENTS

Student information management system aims to improve the efficiency of college information management, and the main function is managing and maintaining information [3]. The administrator and students are two major functional requirements in the system. The Administrator will be given more powers (enable/disable/ update) than other users. It will be ensured that the information entered is of the correct format. For example name cannot contain numbers. In case if incorrect form of information is added, the user will be asked to fill the information again. Students use the system to query and enter their information only.

3. NON-FUNCTIONAL REQUIREMENT

i. Performance Requirements:
The proposed system that we are going to develop will be used as the Chief performance system for providing help to the organization in managing the whole database of the student studying in the organisation. Therefore, it is expected that the database would perform functionally all the requirements that are specified.

ii. Safety Requirements:
The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup.

iii. Security Requirements:
We are going to develop a secured database. There are different categories of users namely Administrator, Student who will be viewing either all or some specific information from the database. Depending upon the category of user the access rights are decided. It means if the user is an administrator then he can be able to modify the data, append etc. All other users only have the rights to retrieve the information about database.

4. 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.
• **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.

### III. REQUIREMENT ANALYS

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### IV. TECHNOLOGIES USED

**HTML**

HTML is a hypertext markup language which is in reality a backbone of any website. Every website can’t be structured without the knowledge of html. If we make our web page only with the help of html, than 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 CSS. So here we are using this language to make our web pages more effective as well as efficient. And to make our web pages dynamic we are using Java script

**CSS**

CSS Stands for "Cascading Style Sheet." Cascading style sheets are used to format the layout of Web pages. They can be used to define text styles, table sizes, and other aspects of Web pages that previously could only be defined in a page's HTML. The basic purpose of CSS is to separate the

**PHP**

Precisely, PHP is a very powerful server-side scripting language for developing dynamic web applications. Using PHP, one can build interactive and dynamic websites with ease. PHP script can be embedded straight into the heart of html code. PHP is compatible with various web servers like Apache and the Microsoft’s IIS as well. All the PHP scripts are executed on the server and it supports various databases like MySQL, Oracle, Solid, Generic ODBC etc; however, it is mostly used with MySQL.

**SQL**

SQL stands for Structured Query Language. SQL lets us access and manipulate databases. SQL is an ANSI (American National Standards Institute) standard. SQL can execute queries against a database, retrieve data from a database, insert records in a database, update records in a database, delete records from a database, create new databases, create new tables in a database, create stored procedures in a database, create views in a database, set permissions on tables, procedures, and views

### V. 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

### VI. REFERENCES


[3]. “A Study of Student Information Management Software” FU Yue Chongqing Institute of Technology E-mail: Chongqing, China flaomao@163.com 978-1-4673-7755-3/16/ $31. 00 ©2016 IEEE

