

# Implementation of Online ERP System for Educational Institutes

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**Abstract**— This Online Enterprise Resource Planning (ERP) System is a modularized system which mainly saves paper by reducing the paper work and maintains huge amount of data. The system contains modules such as student, staff, account, training and placement where each module provides different privileges for its users. Online ERP system for educational institutes will help to get the entire organization under one roof. All the elements of the institute together, can stay connected and updated with the current affairs of the institute. The Online ERP system strives to eliminate data redundancy. The system will prove to be beneficial to the institute by making it faster and efficient as most of the work will be done by the online ERP system.

**Index Terms**— connected, Data redundancy, Efficient, Modularized, Privileges.

## I. INTRODUCTION

An Institute as a whole consists of a various departments where each department has to maintain its data. Keeping a track of all this data by the institute becomes difficult as there is a possibility of data redundancy and misplacement of confidential data. This online ERP system focuses mainly on reducing the paperwork and maintaining the confidentiality of data. The system keeps every member updated with its current affairs with by constant notifications. This system replaces the current manual system with an automated system which provides transparency and reliability.

## II. RELATED WORK

ERP is nothing but the Information system which actually combines with advanced management thoughts, methods and instruments. The National Informatics Centre (NIC) is developing a similar kind of database project for public and private schools which will include keeping a track of every student's personal details, aid and scholarships, progress report in terms of academics, fitness, achievements, attendance, family background, economic status and much more. This maintained database for every student would make it easier from schools to keeps a track of all the eligible students, students migrating or students dropping out of the school. Each student will have a unique id which will be maintained throughout till the student attains school. Parents and staff will be given a separate login id and password to check their wards performance. This student information will be only a click away from the department. The state educational department has planned to go paperless within the next two years, in an attempt to do so they will make the students mark sheets available digitally along with their photos. This will greatly help in preserving the records and

authenticating the candidates at the time of interviews and most importantly the admission process will be simplified.

## III. MOTIVATION

Motivation leads to greater achievements and improves quality. Corporates now-a-days have set levels of great competition even employees today go for the best company and best companies have been established only due great motivations. Motivation for developing the Online Enterprise Planning System is mainly to provide a smooth platform for the enterprise and keep each element of the organization connected.

## IV. METHODOLOGY

Keeping in mind the Agile Model and the Information Technology Infrastructure Library (ITIL) model the ERP system aims at providing dynamic support and real time communication. The ITIL methodology keeps a collection of best practices in project management. It covers a broad aspect of project management which starts from the organizational management level.

## Design

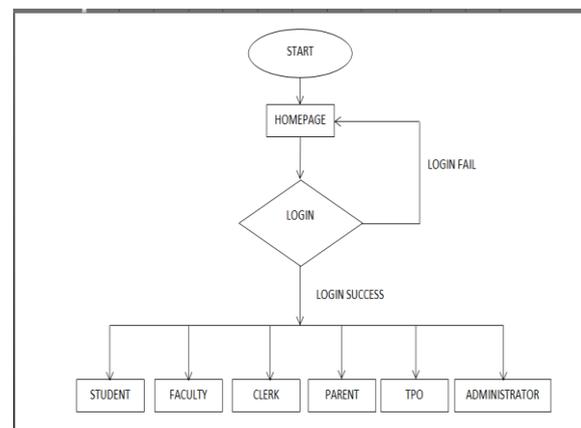


Fig.1 Flow Graph

### A. Technologies used

#### I. Asp.net:

We have developed our project using Microsoft.net. Microsoft.net is a programming language which enables the development for web applications. It provides with a framework which is easy to use and understandable to all.

#### II. HTML and CSS:

HTML stands for Hyper Text Markup Language and CSS stands for Cascading Style Sheet. HTML and CSS are both

languages used to describe web pages. Our project is developed using HTML and CSS for designing and styling the web pages. HTML has helped in making our system look more effective and attractive while CSS has provided with giving formatted layout.

**III. JavaScript:**

JavaScript is lightweight and most popular scripting language which can be embedded into our HTML code. Our system needs constant interaction and updating between its elements, JavaScript provides features such as dynamic functionality adding to web pages and to add client side scripting .we have used JavaScript to make our system more interactive.

**IV. SQL:**

Structure Query Language is used for handling data stored in the database. Our system has used stored procedures for performing operations over database for inserting records into database, retrieving data from database, updating records and delete records from database

**V. EXPERIMENTAL RESULT ANALYSIS**

Our Online ERP system keeps every member in the institute to be updated. In the existing system the problems that were faced are being overcome in the proposed system. This System is fully modularized and role based system. There are mainly three roles that on login they perform their functionalities. Following roles are:

- **Student:**

In our Online ERP system Student can edit his/her own profile. Student is provided the facility of viewing the posted notifications, attendance, events held in institute. The student plays an important role in the ERP system.

- **Staff:**

In Online ERP system the staff can edit his/her profile. The staff generates the attendance record of students, posts notifications; maintain student's record, requests for leave, etc. The staff also appoints a staff member as a teacher guardian for batch wise students.

- **Admin:**

In Online ERP system the Admin plays an important role as he adds the staff member, students. He can also add the newly introduced subject in the university. The admin keeps the track of fees structure according to the categories of students in an institute.

- **Training and Placement Officer:**

The placement officer i.e., the TPO of an institute provides placement to all the deserving candidates. Our Online ERP System makes the TPO's task easier by providing the facility of adding the companies that are interested in recruitment. The task of maintaining the eligible students list becomes easier as this list can be provided to the interested companies. The TPO can keep the students well informed with the upcoming drives through notification.

- **Attendance System:**

The attendance functionality in our ERP system is automated. It makes the task of the faculty easier by generating an RDLC report i.e., attendance report weekly and monthly.

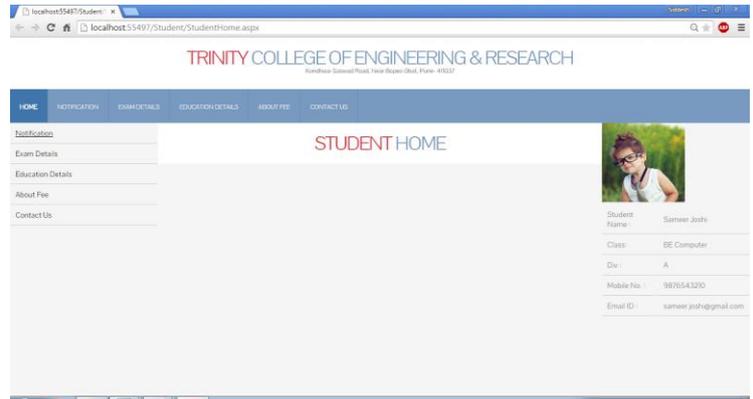


Fig.2 Student Module

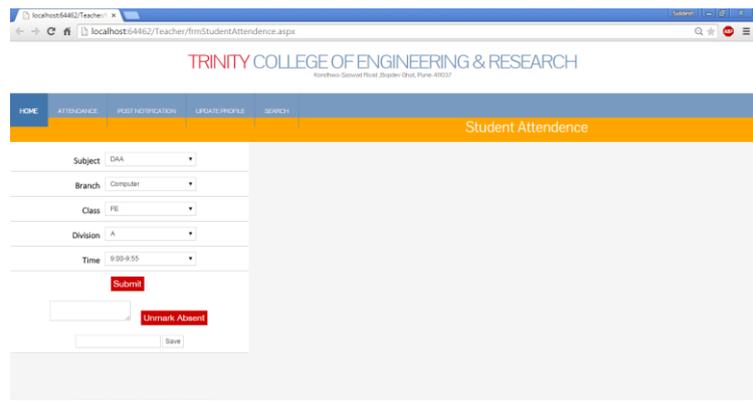


Fig.3 Staff Module with Attendance System

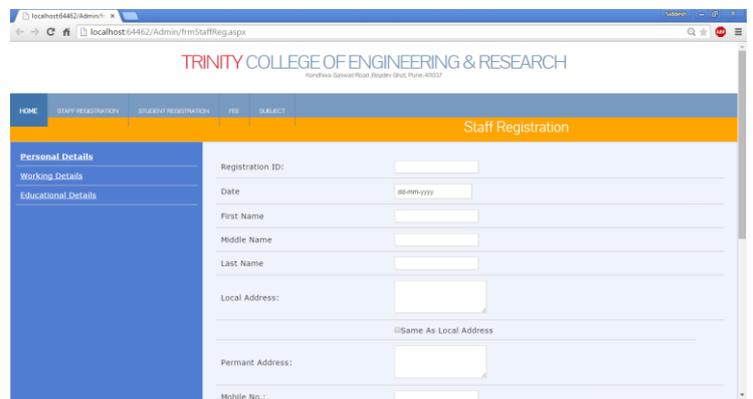


Fig.4 Admin Module

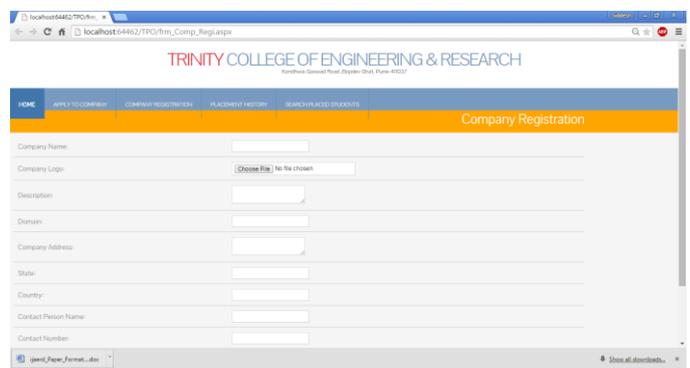


Fig.5 TPO Module

## VI. CONCLUSION AND FUTURE WORK

The fundamental problem in managing and maintaining the work by the administrator is hence overcome. Prior to this it was a bit cumbersome for maintaining the time table and also keeping track of the daily schedule. But by developing this web-based application the administrator can enjoy the task, doing it ease and also by saving the valuable time. The amount of time consumption is reduced and also the manual calculations are omitted, the reports can be obtained regularly and also whenever on demand by the user. The effective utilization of the work, by proper sharing it and by providing the accurate results. The storage facility will ease the job of the operator. Thus the system developed will be helpful to the administrator by easing his/her task.

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