# **Educational Management System**

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Abstract- This Sun ERP product developed for automation of educational institutions. Currently the product is successfully implemented in many institutions across the country. As the technology develops there is need to migrate the product new technology due to sustain in the competitive business, to increase the scalability, to give better performance to our clients, to ensure the down time of application of as less as possible, to provide more security for sensitive data. The proposed work built a system to manage student information, exam rules, details of the staffs and information regarding courses offered by the college. The method presented system is built using Angular JS and Java Spring. The outcome of the work concluded that the performance is better when compared to the method built using Java Struct.

*Keywords*- Java Spring, Angular JS, Java Struct, Sun ERP product.

#### I. INTRODUCTION

This Sun ERP+ is professional educational institute management software which is designed to create an interactive web based application. It aims to simplify and integrate various levels of administration to provide an overall integrated solution where members within any management can communicate and collaborate in easy effective manner. Sun ERP+ is to maintain all the sections of the organization easily. The application should be able to store, monitor and access large amount of data with better performance and error free. Sun ERP+ includes following main modules

# A. Student Management System

Student Management System deals with all kind of student details, academic related reports, college details, batch details and other resource related details too. It tracks all the details of a student from the day one to the end of his course which can be used for reporting purpose.

# B. Course Module System:

Course Management System maintains course details, IA Rules, and course offered for different semesters, which should be approved from the Board of examination.

#### C. Human Resource Management System:

HRMS maintains personal details of employee, educational details, examination experiences and maintains leave details. All the modules is handled by admin. And all other employee or students can only view their details they cannot make any changes. If they have to change any of their information they have to inform it to admin who has only right to make changes.

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#### II. PROPOSED METHOD

An Sun ERP product is developed for the new student registration and for different department to maintain the records of new student. Due to this product it reduces the manual labour work and also saves the time of admin as well as student.

## A. Human Resource Management System

## 1. Employee Configuration

Admission category allows the admin to add / modify new courses, blood group, admission type and so on. This allows the admin to choose more options from the list while adding new employees.

# 2. Teaching Employee

It contains the information about all the teaching staffs in the organization. It contains following sub-modules:

# • Add Teaching Information:

It contains personal details, professional and examination experience, qualifications, designation in a department of teaching staffs.

# Modify Teaching:

If there is any changes in details of teaching staffs, Admin can make changes easily based on their unique Id.

#### • Promotion:

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Based on their experience staffs can be promoted to the higher designation from current designation,

#### • Employee Report:

Admin can generate overall report on the yearly based, department wise or of particular employee.

# • Non-Teaching Employee:

it contains the information about all the Non-teaching staffs in the organization. it contains following sub-modules

#### • Add Non-Teaching Information:

It contains personal details, qualifications, designation in a department of non-teaching staffs.

#### Modify Teaching:

If there is any changes in details of non-teaching staffs, Admin can make changes easily based on their unique Id.

#### • Employee Report:

Admin can generate overall report on the yearly based, department wise or of particular employee.

#### • Leave Details:

In this admin can add general leaves, maternity leave for particular employee, government holidays etc. With starting and ending date of leave.

#### • Leave Management:

Incharge HOD will manage the leave from particular start date to end date.

# • Leave Reports:

It generates the leave report on the monthly and yearly based of a particular employee.

#### B. Student Management System

#### 1. New Admission

This module contains admission of the new student of different departments such as BE, M.TECH, MCA etc.

Under this module it contains student details, qualified examination details, marks details, extra-curricular activities, club participation details, bank account details of new students from various departments.

#### 2. Student Details

It contains the basic information of the new students such as his application information, program information and his personal details.

#### 3. Qualified Examination Details:

It contains the detail information of his Previous Institute, examination board, year of passing, total percentage and details of the entrance test which he has attempted.

#### 4. Qualified Marks Details:

It contains the detailed information of his previous qualified examination marks.

#### 5. Extra-Curricular Activities:

It contains the detailed information of his achievements in different fields from his Previous Institution.

#### 6. Club Participation Details:

In this module it shows the participation of student in various social Activities.

#### 7. Bank Account Details:

It Contains the Bank Information of the Student.

# 8. Modified Admission:

In this module Admin can make the changes or modify the details related to student personal information, marks, extra-curricular activities, Bank Account information etc.

# 9. Student Reports:

Admin can generate overall report of particular student.

# C. Course Management System

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The admin will add respective courses for each semester, the admin will add the rules for the evoluvation of marks.

# III. RESULT AND DISCUSSION

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# IV. CONCLUSION

In this system we have introduced Sun ERP+ to overcome problems of existing system so that the organization can use this system more smoothly and easily. It is a combination of all the management system of an organization at one place. The objective of this product is to provide security and anyone can easily adapt to this system and loading of data becomes faster as compared to other software.

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