



**School of Information Technology and Engineering (SITE)**

**M.Tech(Software Engineering)**

**Course Project Report**

**SCHOOL MANAGEMENT SYSTEM**

**Submitted for the Course SWE 1014: Enterprise Resource Planning**

**Offered by Krithika L.B during WIN 2018-19**

**By**

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**VIT<sup>®</sup>**

**Vellore Institute of Technology**

(Deemed to be University under section 3 of UGC Act, 1956)

**School of Information Technology & Engineering**  
**M.Tech (Software Engineering) WIN 2018-19**  
**SWE 1014: Enterprise Resource Planning**  
**A Report on the Course Project**  
**School management system**

**1. Abstract:**

Nowadays people are addicted to digital world even the 5 or 6 years old children are using mobile phone to access the data or gaming purpose. On the analysis of current situation, we are going to introduce a new ERP software. The proposed ERP software should reduce the use of paper mode to manage the school information. There was many problems behind the using paper to manage the school or finding the details of a student, staff, and payment details. It will take time to access the above details and it is not efficient way to maintain the details. Whereas while using the online application for a school without integrating the departments like Finance & Accounting, Human Resource Management, Supply Chain Management, we will face conflicts between the departments. So, that the proposed method will integrate the departments to reduce the conflicts between the departments.

**2. Key words:**

TS school, ABC analysis, School Management, Suppliers, Client

**3. Introduction:**

It is very difficult to make the records of every students and parent details in offline. It is very time consuming process. In case any problems occurs like missing the records, which are saved in offline then major, cause will occurs. Using offline is not safe. To avoid these problems we can integrate the various fields of the institute, making use database systems to make the data secure and consume less time to process. This can make the schools management more secure and easy to handle. By using this we can make Strong, sophisticated, elegant and quality education systems for future.

This project is mainly aimed to obtain the latest technologies in to the educational sector those are prevailing in real world. In order to maintain the records of the students like attendance, marks, personal information and make to upload assessments. This software gives the faculty to upload marks, materials for assessments, seeing student details and uploading attendances etc. Parents can view the details of their children including their marks attendance and the messages or the notifications from either the faculties or the principle. This whole software is managed by admin who can enquire the software and can make the necessary changes as well as the add-on to the software, like adding and deleting students, teachers and parents, etc.

## **4. Overview and Planning :**

### **4.1.Problems with Existing ERP system:**

Present competition world there are some school ERP system are available but only some schools are using that service because of low budget of the schools or the features of existing ERP system is not full fills the schools requirements. Fedena or TS school are existing ERP systems with fulfills the maximum requirements of school but it is a free version software where they are lagging with registration, custom report generation, inventory, assessment uploads, online lecture etc., In order to overcome those problems and maintain the data in a cloud with less cost we introduce a new school ERP software.

### **4.2.Proposed System Overview:**

This system consists of following modules. The following are the some of the main features of the system under the light of four different kinds of users.

#### **ADMIN**

- Login
- Adding and deleting users
- Event updates
- Dashboard
- User Personal Information
- Edit user information

#### **STUDENT**

- Login
- Personal Information
- View Attendance
- Upload assessment
- Dashboard
- View Events
- Course page
- Edit profile

#### **TEACHER**

- Login
- Personal information
- View student details
- Upload marks
- Upload attendance
- View events
- Upload files
- View assessment

## PARENT

- View Children profile
- View attendance
- Dashboard
- Mark view
- Messages

### **4.3.Challenges:**

Maintaining large records under any circumstances makes more usability. Security is primary issue in any software. Maintaining records of management with high security. Maintenance records in high secure. Running applications when high load performance happens.

### **4.4.Assumptions:**

This software was developed in view of the real world aspects in view. Henceforth, the system has very less assumptions. They are as follows: 1. The marks pattern 2. The academic pattern followed like fall and winter.

### **4.5.Architecture Specifications:**

The architecture of the system uses the following: 1. MySQL database 2. Bootstrap 3. Php

### **4.6.Hardware Requirements:**

PROCESSOR : 64-bit

ROM : 2GB

RAM : 4GB

### **4.7.Software Requirements:**

OPERATING SYSTEM: WINDOWS 8/10

FRONT END : Any Internet Browser(Internet Connection)

BACK END : MYSQL, Php

## 5. System Design: Use Case Diagrams

### 1. Adminmodule:

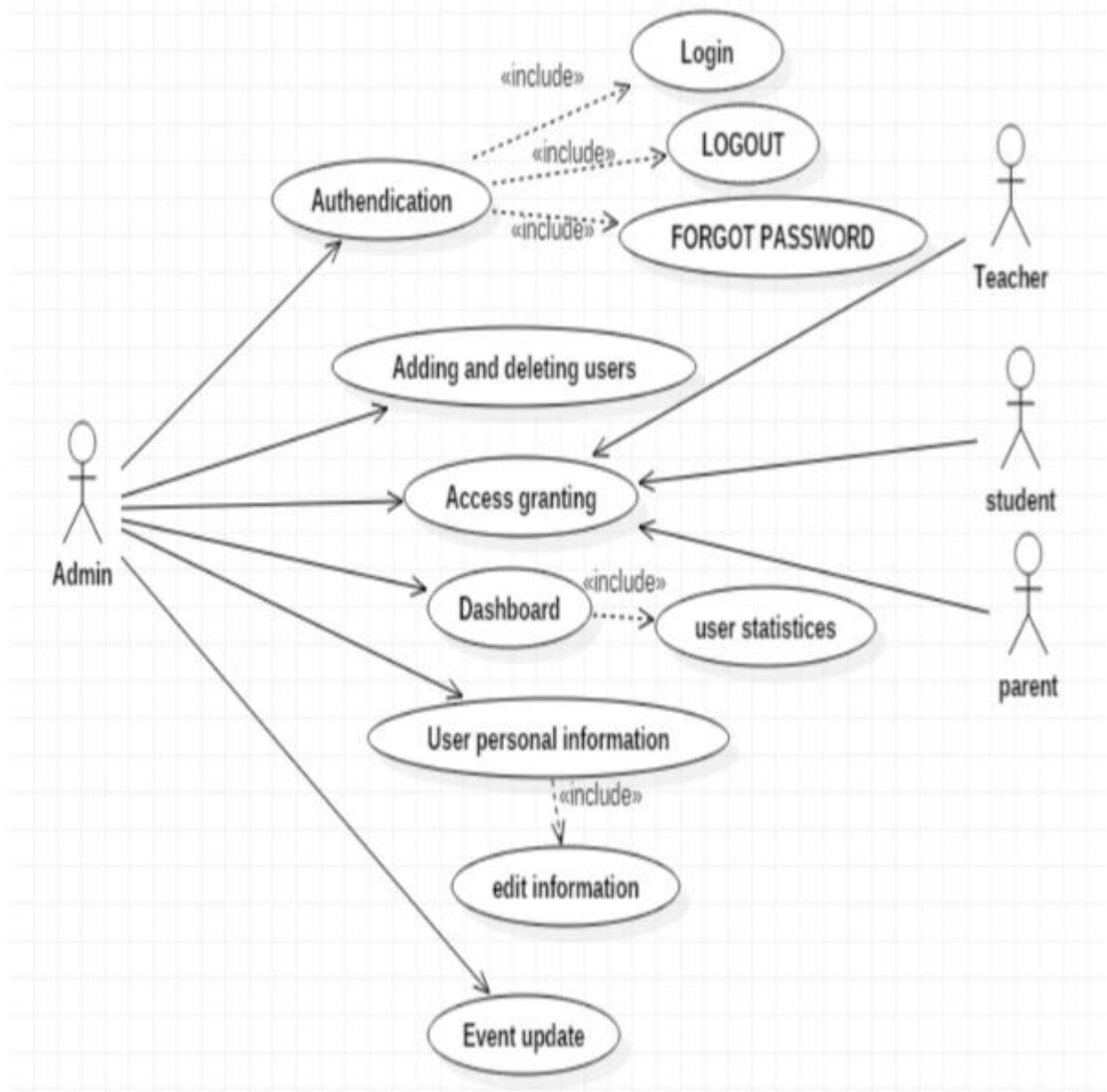


Fig .1.

2. Teacher module:



Fig .2.

3. Student module:

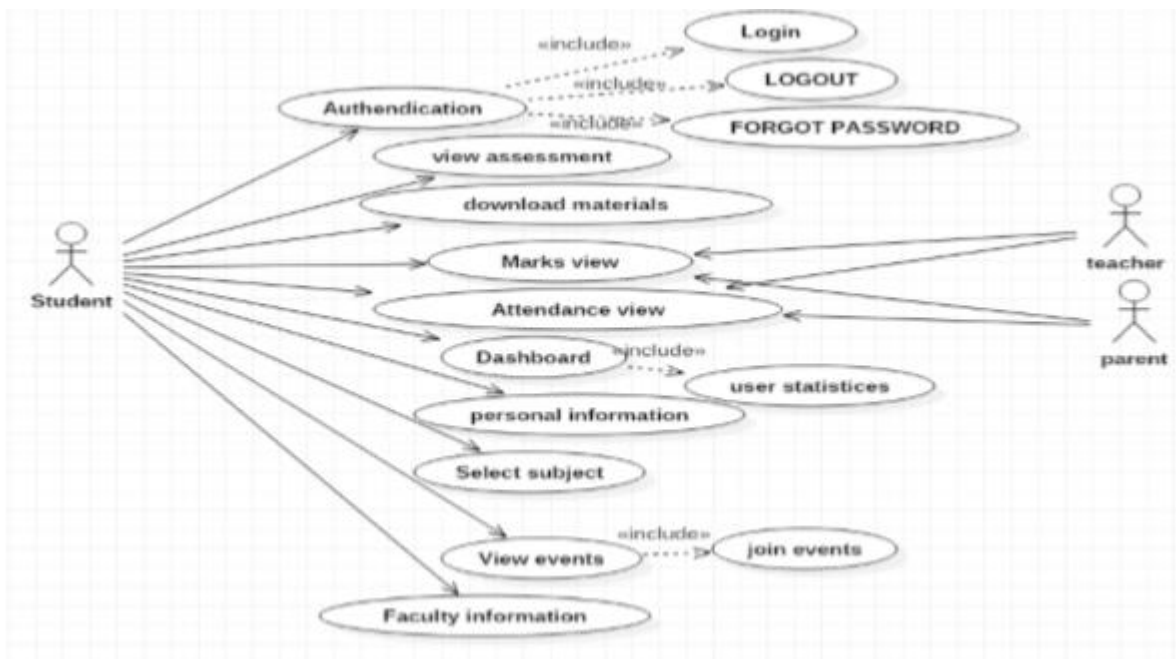


Fig .3.

#### 4. Parent module:

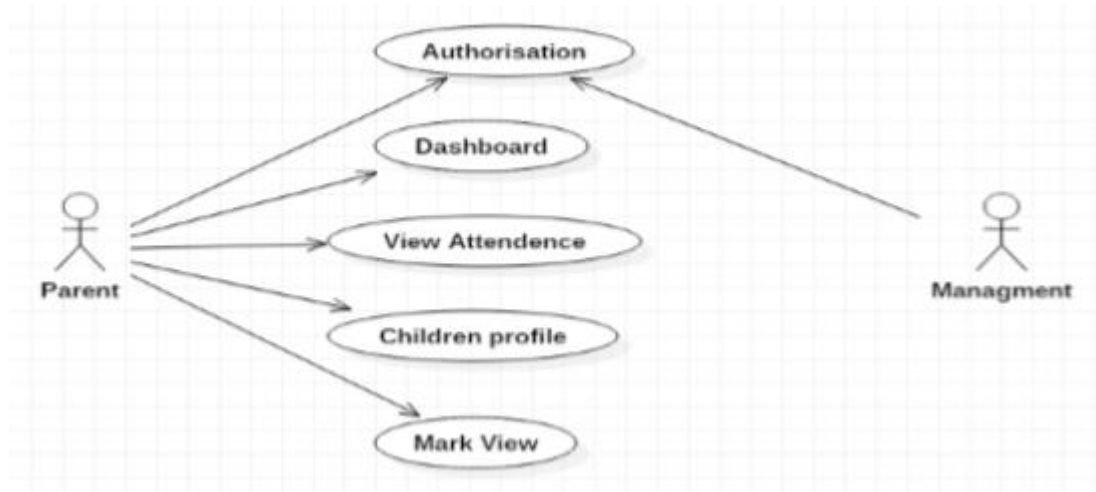


Fig .4.

#### Class diagram:

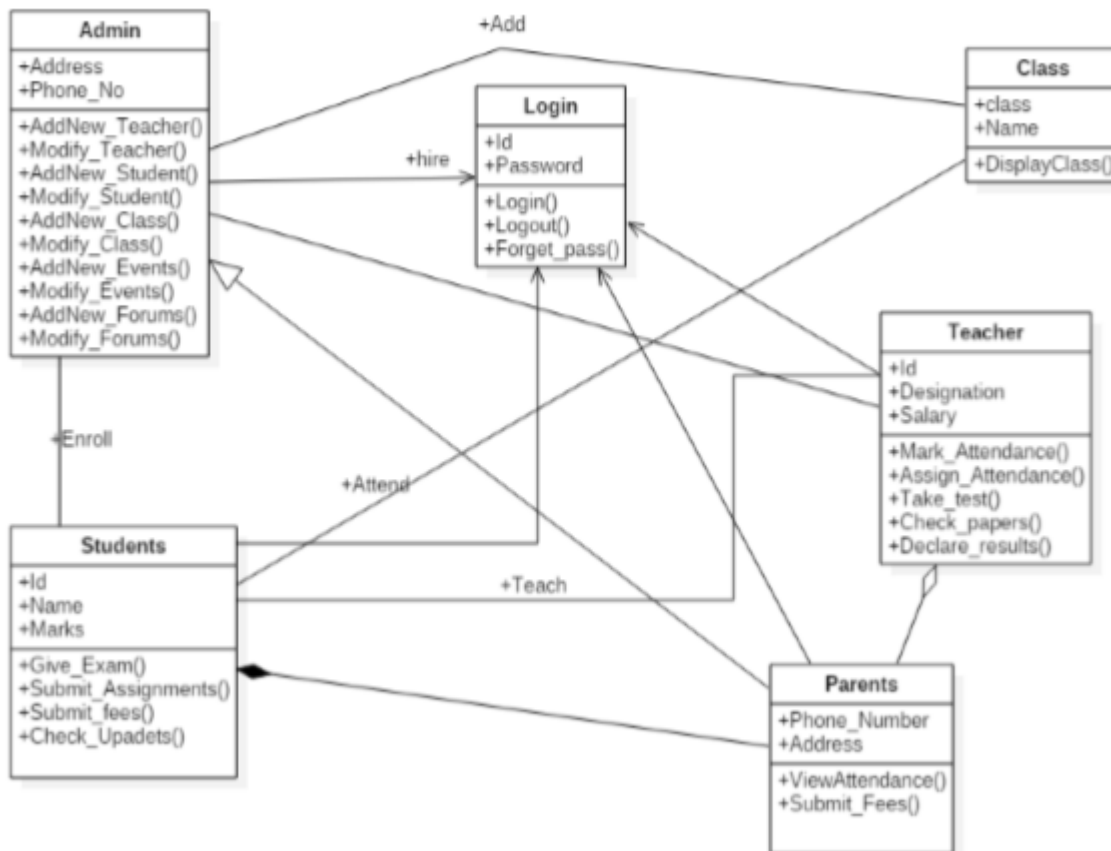


Fig .5.

### 5.1. Hierarchical Task modelling:

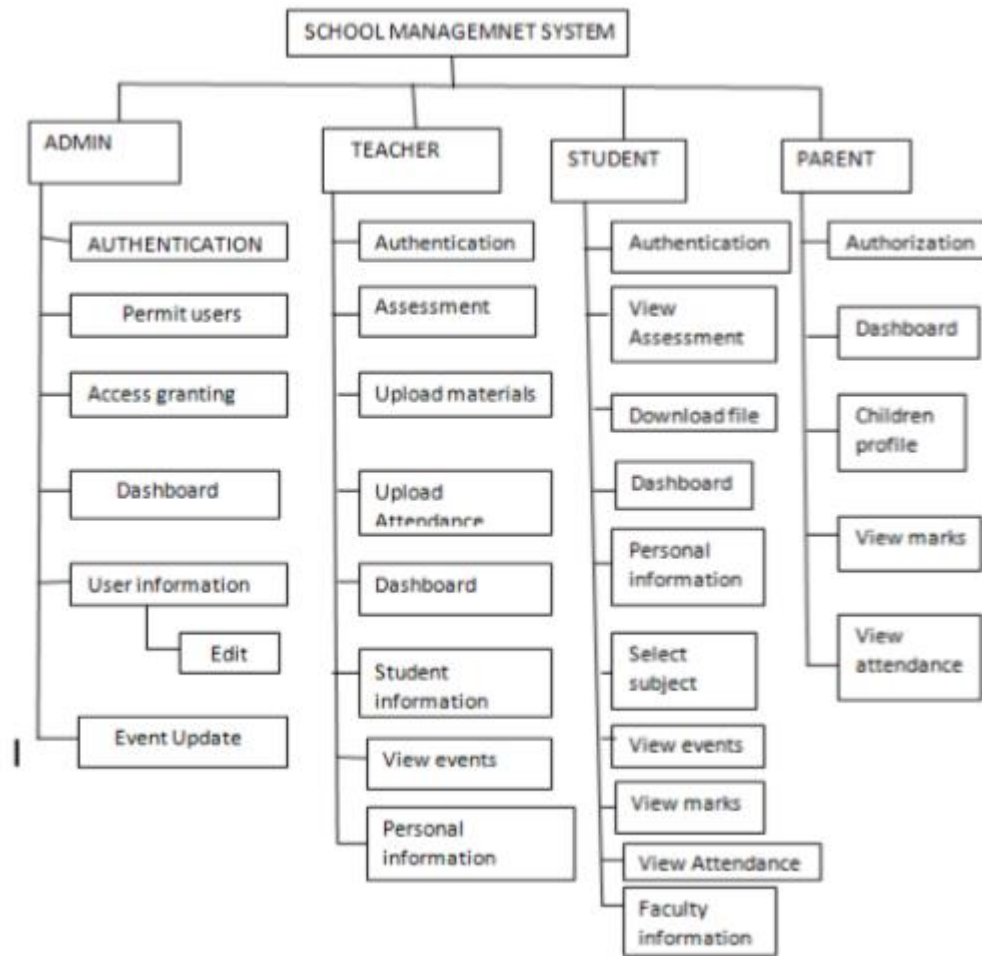


Fig .6.

The functionalities are gather through survey by spreading a google form to schools head masters, teachers. By using the google form we collected the needs of different schools based on that this project has been built. The following excel sheet shows the response



1	NAME of the Faculty/	SCHOOL NAME	LOCATION OF SCHO	Whether your School	If your School needed the online school management portal. Which among the features you needed for online portal?
2	Mahesh G	Sri prathyusha High sch	Pullampet	No	Attendance Info;Course Materials;Examination Details;Fees Paym;Faculty info
3	Dhinesh Babu k	A.p model school	Puthanavaripalli	No	Attendance Info;Course Materials;Hostel Details;Examination Det; Faculty and cultural activity info
4	Murali Mohan	Siva pravathi school	Rajampet	No	Attendance Info;Course Materials;Examination Details;Fees Paym;Cultural activities
5	K G N Naidu	Sri Nalandha High Scho	Rajampet	No	Attendance Info;Course Materials;Hostel Details;Library Info;Exam Extra classes and study hours details
6	Raju	Raju school	Rajampet	No	Attendance Info;Course Materials;Library Info;Examination Details;Nothing
7	Krishnaiah	Sri Krishna Devaraya Sch	Rajampet	No	Attendance Info;Course Materials;Examination Details;Fees Paym;Sports details
8	Chandra Sekhar R	Kakatheyia School	Rajampet	No	Attendance Info;Course Materials;Hostel Details;Fees Payment Nothing
9	Vidhyalakshmi	Vidhyalakshmi Hr.Sec Si	KV Kuppam	No	Course Materials;Library Info;Parent Messages;Updates/ Mails
10	Pramadha kumari mar	sri Harsha	Ramnagar colony, chi	No	Attendance Info;Course Materials;Fees Payment;Assignment Upload
11	Nadesh	Kings English medium s	Chittoor	Yes	Library Info;Parent Messages;Student Curriculum;Extracurricular activities
12	Ramesh Kumar	Rk vidyalaya	Chittoor	No	Course Materials
13	N Surendranath Reddy	Y V Rathnam high Scho	Pakala,Chittoor dist, /	No	Attendance Info;Course Materials;Examination Details;Fees Payment;Parent Messages;Student Curriculum;Updates/ Mails;T
14	Amar jukuntla	Vignan university	Vadlamudi	Yes	Attendance Info;Course Materials;Examination Details;Fees Payment;Student Curriculum;Faculty Info;Time Table;Extracurric
15	narasimha	saint ans	guntur	No	Attendance Info;Course Materials;Examination Details;Parent Messages;Faculty Info;Time Table
16	damodar	sidhardha high school	amaravathi	No	Attendance Info;Examination Details;Fees Payment;Parent Messages;Student Curriculum;Faculty Info;Updates/ Mails;Time T
17	santhinikethan high s	narisireddy	vijayawada	Yes	Attendance Info;Course Materials;Hostel Details;Examination Details;Fees Payment;Parent Messages;Student Curriculum;Fa
18	sathya prakash	vinuthna concept schoo	guntur	No	Attendance Info;Course Materials;Hostel Details;Library Info;Examination Details;Fees Payment;Parent Messages;Faculty Inf
19	rangarao	sri chaitanya	tenali	Yes	Attendance Info;Course Materials;Hostel Details;Library Info;Examination Details;Fees Payment;Parent Messages;Student Cu
20	kiran kumar	narayana techno school	ananthapur	No	Attendance Info;Course Materials;Hostel Details;Examination Details;Fees Payment;Parent Messages;Student Curriculum;Fa
21	geetha	saradha high school	bapatla	Yes	Attendance Info;Examination Details;Parent Messages;Student Curriculum;Faculty Info;Updates/ Mails;Time Table
22	srinivasarao	kennedy international s	guntur	Yes	Attendance Info;Course Materials;Hostel Details;Examination Details;Fees Payment;Parent Messages;Student Curriculum;Fa
23	sumanth chowdary	Aspire Academy	tirupathi	Yes	Attendance Info;Course Materials;Hostel Details;Examination Details;Fees Payment;Parent Messages;Student Curriculum;Fa

Fig 7. Response Sheet

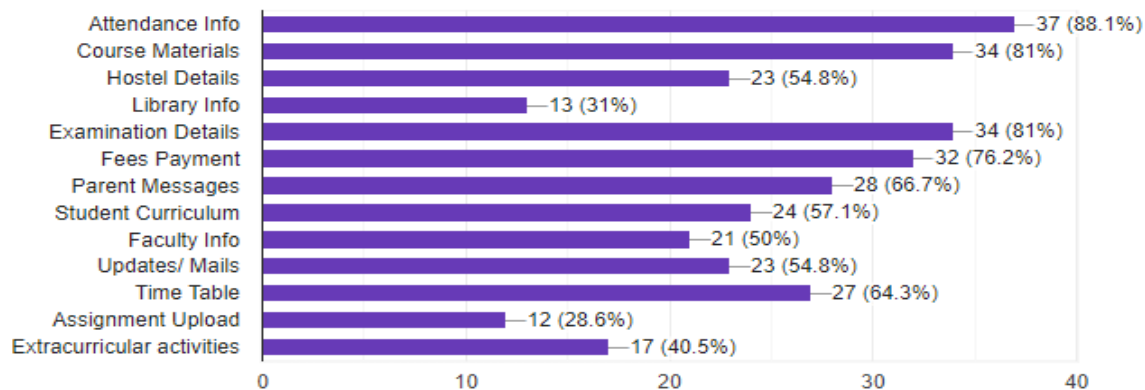


Fig .8. Describes the needs of different Schools in Andhra Pradesh. Based on the requirement of different schools we make a design Fig 1,2,3,4. In addition, Class diagram, Task modelling. This can be happen by using WIMP method. These diagrams are drawn using smart draw and Microsoft word.

## 6. About tools:

### 6.1. Identify a suitable for school management system

TS School, ABC analysis

TS school erp software provides the overall details of the school and it will stores the details about academics, payment, staff, student, parent details, messages etc., whereas the ABC analysis tool is useful for maintaining the supplier details, client details, ordered details, order fulfillment details.

### 6.2. Specify the modules decided for the ERP system

Admin

Student  
Parent  
Staff

### 6.3. Technology

#### Database

The data regarding the student academic details, fees details, extra curricular activities, staff salary, staff details etc., that will be stored in the database. The database is useful for the small organization. My future work is to implement the erp in cloud because we are going to offer the school management system to different school when we are going to increase our popularity or customer satisfaction. So, that if we store the data in a cloud, the schools in different locations also they can easily access the student academic details, staff details etc.,

### 6.4. Screenshots:

#### 6.4.1. Screenshots of TS School ERP System:

##### Login page:



Log In

 TS School

**HARSHA SCHOOL**

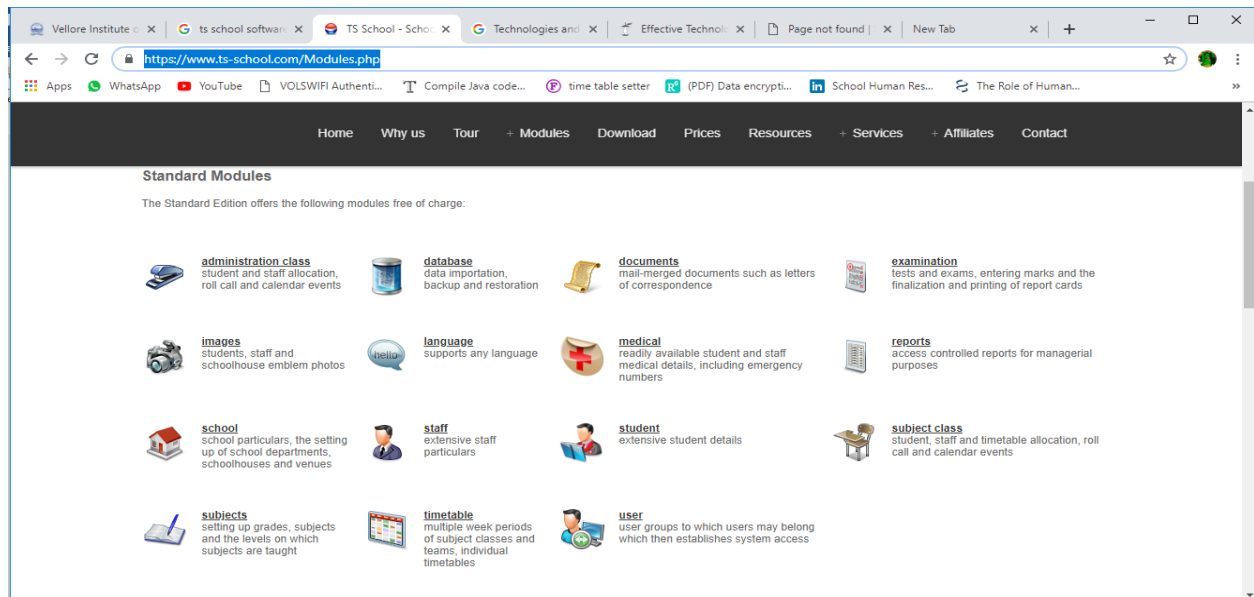
**Username:**  **Password:**

[Change Password](#)  
[Forgotten Login](#)



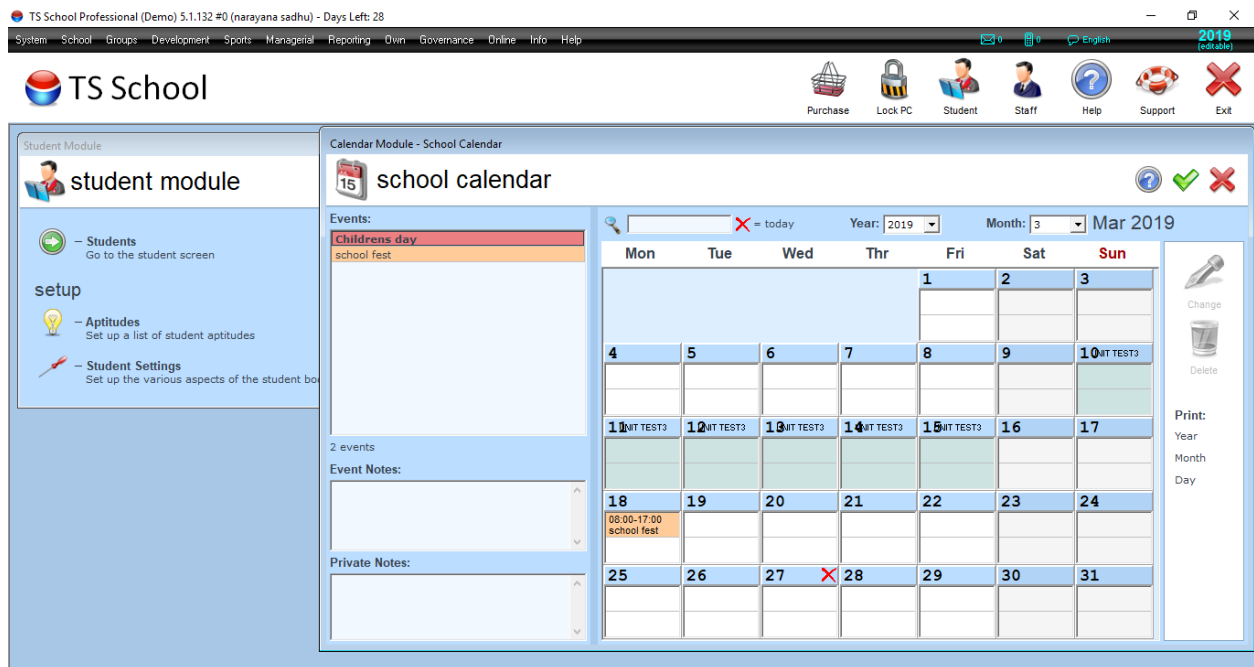
Tel: +27 11 615 6734  
[info@ts-school.com](mailto:info@ts-school.com)

**Fig. 9. Login module of TS School ERP System**



**Fig .8. functionalities of TS School ERP System**

## School calendar page:







**Fig.9. School calendar of TS school ERP system**

## Students module:

Student Module - Students

students

Quick Entry ☐ Current ☒ Past ☐

		965 ian k, ravi : 9573599256 ass : None	Gender : Male Age : 20 Grade : None
	<b>muppuri, deepu (2)</b> Mobile : 9182026895 Guardian : father muppuri, mc naidu Guardian Mobile : Administration Class : None		Gender : Male Age : 19 Grade : None
	<b>sadhu, narayana (1)</b> Mobile : 7092606529 Guardian : father sadhu, subbarayudu Guardian Mobile : 9705186813 Administration Class : None		Gender : Male Age : 20 Grade : None

3 students

Activate Windows  
Go to Settings to activate Windows

New  
Change  
Delete


Fig.10. Student of single school in TS school ERP System

## Staff module:

Staff Module - Staff Members

staff members

Quick Entry ☐ Current ☒ Past ☐

	<b>sadhu (admin), narayana naidu (01)</b> Mobile : 7092606529 Roles : Coach User Groups : Full Access
---	--

1 staff member





Activate Windows  
Go to Settings to activate Windows

New  
Change  
Delete

Fig.11. Staff member details in TS School ERP System

### School details:

School Module - School Details

 **school details**   

Name:

**School Details** | Payer Details | Banking Details | School Web

Street Address:   
  
  
  
Code:

Postal Address:   
  
  
  
Code:

District:   
State:   
Country:





Tel:   
Fax:

Email:   
Internet:

Fig.12. School details in TS School

### Subject Module:

Subjects Module

 **subjects module**   















-  **Grades**  
Set up grades
-  **Subjects**  
Set up subjects
-  **Levels**  
Enter the levels on which subjects are taught
-  **Combinations**  
Set up allowed combinations of subject, grade and level
-  **Courses**  
Set up the courses which students may take
-  **Assign Courses**  
Assign students to courses
-  **Phases**  
Set up school phases
-  **Subject Order**  
The order in which subjects will appear on documents







Fig.13. Subject Module in TS School ERP System

## Subjects:

Subjects Module - Subjects

 **subjects**    



	<b>ENGLISH</b> subject Department : Higher section Applicable Grades : S, A, B, C, D, E, F, N Color : #FFF8F1	 New  Change  Delete
	<b>Maths</b> subject Department : Higher section Applicable Grades : S, A, B, C, D, E, F, N Color : #FFF8F1	
	<b>Physics</b> subject Department : Higher section Applicable Grades : S, A, B, C, D, E, F, N Color : #FFF8F1	







3 subjects


Activate Windows  
Go to Settings to activate Windows

Fig.12. Subject details in TS School ERP System

## Student Time table:

Timetable Module - Student Timetable

 **student timetable**     

  Student:  Shift:

MON	TUE	WED	THR	FRI	SAT	SUN
English lecture 08:00 - 09:00	English lecture 08:00 - 09:00	English lecture 08:00 - 09:00	English lecture 08:00 - 09:00	English lecture 08:00 - 09:00	English lecture 08:00 - 09:00	English lecture 08:00 - 09:00
	IETE 08:00 - 17:00				IEEE 08:00 - 12:00	


2 events

Activate Windows  
Go to Settings to activate Windows

Fig.13. Individual Student Timetable in TS School ERP System

## School time table:

Timetable Module - School Timetable

 school timetable

Shift: **Extra Hours On Week**

Subject Classes | Educators | Students | Teams | Coaches

MON	TUE	WED	THR	FRI	SAT	SUN
English lectu 08:00 - 09:00	English lectu 08:00 - 09:00	English lectu 08:00 - 09:00	English lectu 08:00 - 09:00	English lectu 08:00 - 09:00	English lectu 08:00 - 09:00	English lectu 08:00 - 09:00
	IETE 08:00 - 17:00				IEEE 08:00 - 12:00	

0 subject Classes

Available Staff:

Title	Surname	First Name	Employee #
admin	sadhu	narayana	01


2 events

1 staff member

**Fig.14. School Timetable in TS School ERP System**

## Hostel details:

Hostel Module - Dormitories

 dormitories

Class: **H Block**

Layout | List

☐ Vacant ☐ Occupied ☐ Does not exist

(1,1)	(2,1)	(3,1)	(4,1)	(5,1)
(1,2)	(2,2)	(3,2)	(4,2)	(5,2)

Students : 0/25

Attendance

Calendar

**Fig.15. Hostel Details in TS School ERP System**

## Examination module:

Examination Module - Tests

tests

Subject Class: English

OVERRIDES TEMPLATE

Structure:

Year

2018-19 (1)

Reset  
Reset test groups

Calculation:

Year =  
( ( English \* 10 ) / 10 )

Tests:

English

subject  
Date : 3/12/2019  
Time : 10:16 PM-10:16 PM

Marks (weight) : 100 (10)  
Test Group : 2018-19  
Location : Assessment results

New  
Change  
Delete

1 test

Reset  
Make tests identical to those of the exam template

Activate Windows  
Go to Settings to activate Windows.

Fig.16. Examination Module in TS School ERP System

## Library details:

Library - Issues / Returns

issues / returns

Students  
Staff

Guardians  
Spouses

Financiers  
Public

muppiri, deepu (L-2)  
Out on Loan : Nothing

sadhu, narayana (L-1)  
Out on Loan : Nothing







2 library members


Fig.17. Library Details in TS School ERP System



### Attendance module:

Attendance Module - Subject Class Attendance

 **subject class attendance**     



Register Absent Individual Absent Total





Subject Class	2019-20	Total
English		0
Maths		0





2 subject classes

Fig.17. Attendance Module of each subject in TS School ERP System

### Awards:

Awards Module

 **awards module**   

-  **Assign Student Awards**  
Manually assign student awards
-  **Assign Staff Awards**  
Manually assign staff awards
-  **Student Certificates**  
Print student certificates
-  **Staff Certificates**  
Print staff certificates

**setup**








-  **1. Awards**  
Set up awards
-  **2. Certificates**  
Set up award certificates
-  **3. Award Ceremonies**  
Create award ceremonies

Fig.18. Awards of students, faculties in TS School ERP System

## Finance Module:

Financial Module - Debtor Invoice Templates

 debtor invoice templates


  

Page








Size:   
☒ Portrait ☐ Landscape

Sample

Invoice:

 Refresh

Sample Header Detail Footer

       Zoom:  %

harsha school


chittoor  
517001




Tel: 7643757843  
Fax:  
Email: harsha@gmail.com  
Web:


INVOICE


Page 1/1

Financial Module - Account Expenses

 account expenses







 **supplier (384795)**  
Contact : admin govardhan muppiri  
Mobile : 7092606529 Tel(w) : Tel(h) : Fax :

1 creditor

Fig.19. Finance Module in TS School ERP System

### Message module:

Messages Module - Send Message

 send message   


Group: Creditors

Affected: ☐ All

Business Name	Code	title	Surr
<input type="checkbox"/> supplier	384795	admin	mup

**Creditors**

Wishing you a birthday filled with joy and a year filled with success. Happy Birthday!

 Send

0/1 creditor

Module: (Select Module)

☐ Recent





**Birthday (Creditor)**  
Creditor birthday greeting  
Module : Financial

1 message

Fig.20. Message Module in TS School ERP System

### Language Module:

Language Module - User Language

 user language   

Your Own Language:

English

Fig.21. User Language Module in TS School ERP System

## 6.4.2. ABC ANALYSIS TOOL Screenshots :

Warehouse Appointments

ID: R00002 Filter by client: Status: Open

Appointment Header Line Items Instructions Dates/Charges/Route Consignee Containers Custom

Warehouse: CLASS 1 Reference:

Client: SAI Process No:

Carrier: MAC\_GRI\_PUB Packing List:

Created: 28-Mar-19 Client invoice: 74783

Est. Delivery: 09-Apr-19 Invoice Date: 28-Mar-19

Received: Terms: Net 30

Vessel Name: Commercial Invoice: 74783

Bill Of Lading: Comm. Invoice Due: 08-Apr-19

Total Boxes: 15 Comm. Invoice Paid: 09-Apr-19

Total Pallets: 200 Received: ☐

Total Weight: 1,000.0 Canceled: ☐

Receive Copy Print Attachments (0) Exit

Fig.22. Order Details in ABC analysis ERP system

Sales Orders

ID: S000001 Filter by consignee: Status: Open

Order Header Line Items Instructions Invoice/Totals

Warehouse: CLASS 1

Consignee: NAR Final destination: NAR

Address: NARAYANA andhra Address: NARAYANA andhra

Ship By: MAC\_GRI\_PUB Created: 28-Mar-19

Shipping Type: Best Way Ship by Date: 29-Mar-19

Consignee acc: 3748548 Shipped On:

Consignee po: 9874583495 Approved: ☒

Consignee po due: Approval Date:

Process No: 12 Salesperson:

Contact Name: NARAYANA Tracking (Waybill):

Attention: Completed: ☐ Canceled: ☐

Priority: Order Picker:

Reference:

Issue Copy Work Order Print Attachments (0) [Default] 1 Exit

Fig.23. Sales Order Details in ABC analysis ERP system



Bill To/Ship To Address

Consignee id: NAR Filter: Customer Bill to

**Header** Shipping Addresses Credit Notes More Notes/Status History Custom Credit Card

Company Name: LIBRARY\_harsha school  
Address: andhra  
  
 Telephone: 6734849834  
 FAX:  
 Email:  
 Web Site:  
 Account #:  
 Contact 1: riari  
 Contact 1 Title:  
 Contact 2:  
 Contact 2 Title:

Is a Customer: ☒ List Top: ☐  
Location Of: NAR  
Ship To Addresses: Ch1  
 Price Level: \$ Level 1

<functions> Report Attachments (0) Exit

Record: 1 of 1 No Filter Search

**Fig.26. Consignee details in ABC analysis ERP system**

Clients

Client id: NAR List Top: ☒ Filter:

**Supplier Header** More Notes/Status Custom Socioeconomic Status RFQs

Company Name: narayana  
Address: kadapa, adhra  
  
 Telephone: 8744574854  
 FAX:  
 Email:  
 Web Site:

PO Salesperson:  
 PO Attention:  
 My Customer Account:

Contact 1: narayana  
 Contact 1 Title:  
 Contact 2:  
 Contact 2 Title:

This record is a "Pick from" location of this company (supplier): NAR

<functions> Report Attachments (0) Exit

Record: 1 of 2 No Filter Search

**Fig.28. Client Details in ABC analysis ERP system**

### 6.4.3. PROPOSED SCHOOL ERP SYSTEM screenshots:

SCHOOL ADMIN

Sign In Here

Sign Up

Username

admin

Password

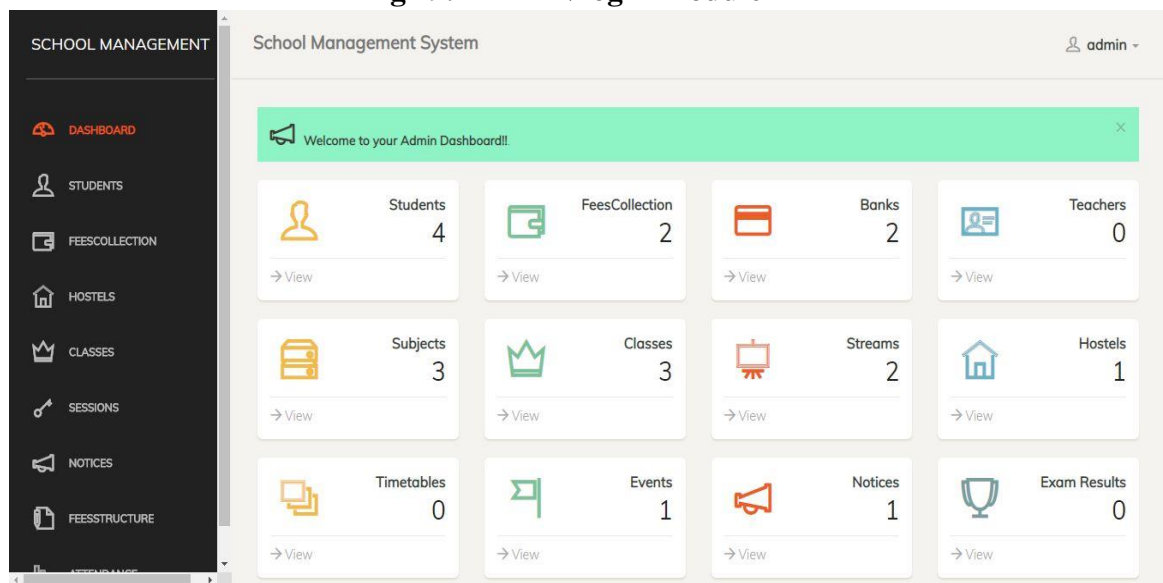
\*\*\*\*\*

Forgot your password? Click here

☐ Remember me

Sign In

**Fig 29. ADMIN login Module**



**Fig. 30. Proposed School ERP System Home Page**

SCHOOL ADMINJump to ...Admin AreaSigned in as adminSign Out

Students

Quick Search

Add NewPrint PreviewSave CSVFilterShow All

	FullName	Gender	Death Of Birth	Photo	RegNo	Class	Stream	Hostel	DOJ	Category	AcademicYear	TotalFees	AdvanceFees	Balance	Parent
	SAI DEEPU	Male	01/18/1999		12	Form One	Central	Reez	05/02/2018		2019 :Term 2	15000.00	10500	4500	
	sai sanjeev	Male	05/27/2000		567	12			04/05/2019		2019 :Term 2	15000.00	2000	13000	
	NARAYANA NAIDU	Male	07/10/1998		9	12			04/01/2019		2019 :Term 2	15000.00	2000	13000	
	HARI KRISHNA	Male	11/18/1999		123	12			04/03/2019		2019 :Term 2	15000.00	2000	13000	

Records 1 to 4 of 4

Previous

Next

**Fig.31. Student Details in Proposed School ERP System**

SCHOOL ADMIN

Jump to ...

Admin Area

Signed in as admin

Sign Out

Teachers

Quick Search

Add New

Print Preview

Save CSV

Filter

Show All

Name	Gender	Age	Phone	Email	StaffNumber
Krithika I b	Female	30	9877654331		123

Records 1 to 1 of 1

Previous

Next

**Fig.32. Staff Details in Proposed School ERP System**



SCHOOL ADMIN

Jump to ...

Admin Area

Signed in as admin

Sign Out

Classes

Quick Search

Add New

Print Preview

Save CSV

Filter

Show All

<input type="checkbox"/>	Name
<input type="checkbox"/>	Form Two
<input type="checkbox"/>	Form One
<input type="checkbox"/>	12

Records 1 to 3 of 3

Previous

Next

**Fig. 33. Class details in Proposed School ERP System**

SCHOOL ADMIN

Jump to ...

Admin Area

Signed in as admin

Sign Out

Class Attendance

Quick Search

Add New

Print Preview

Save CSV

Filter

Show All

<input type="checkbox"/>	Subject	Student	RegNo	Class	Stream	Attended	Date
<input type="checkbox"/>	Tec 104	SAI DEEPU	12	Form One	Central	<input checked="" type="checkbox"/>	07/22/2018

Records 1 to 1 of 1

Previous

Next

**Fig.34. Class Attendance details in Proposed School ERP System**

SCHOOL ADMIN

Jump to ...

Admin Area

Signed in as admin

Sign Out

ExamCategories

Quick Search

Add New

Print Preview

Save CSV

Filter

Show All

<input type="checkbox"/>	Name
<input type="checkbox"/>	End Term 1

Records 1 to 1 of 1

Previous

Next

**Fig.35. Exam Categories in Proposed School ERP System**

SCHOOL ADMIN		Jump to ...	Admin Area	Signed in as admin		Sign Out
--------------	--	-------------	------------	--------------------	--	----------

Exam Results		Quick Search	Q	⊗
--------------	--	--------------	---	---

Add New	Print Preview	Save CSV	Filter	Show All				
---------	---------------	----------	--------	----------	--	--	--	--

Student	RegNo	Class	Stream	Category	Subject	Marks	Term	AcademicYear
NARAYANA NAIDU	9	12		End Term 1	Database	90	2019	2019 :Term 2
sai sanjeev	567	12		End Term 1	ERP	90	2019	2019 :Term 2
NARAYANA NAIDU	9	12		End Term 1	ERP	90	2019	2019 :Term 2
HARI KRISHNA	123	12		End Term 1	Database	90	2019	2019 :Term 2
HARI KRISHNA	123	12		End Term 1	ERP	90	2019	2019 :Term 2
sai sanjeev	567	12		End Term 1	Database	90	2019	2019 :Term 2

Records 1 to 6 of 6

Previous Next

**Fig.36. Exam Results in Proposed School ERP System**

SCHOOL ADMIN		Jump to ...	Admin Area	Signed in as admin		Sign Out
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Fees Structure		Quick Search	Q	⊗
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Add New	Print Preview	Save CSV	Filter	Show All				
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Class	Particulars	Total
Form One	All fees-15000	15000.00
Form Two	demo	15000.00

Records 1 to 2 of 2

Previous Next

**Fig.37. fees structure in Proposed School ERP System**

SCHOOL ADMIN		Jump to ...	Admin Area	Signed in as admin		Sign Out
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FeesCollection		Quick Search	Q	⊗
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Add New	Print Preview	Save CSV	Filter	Show All				
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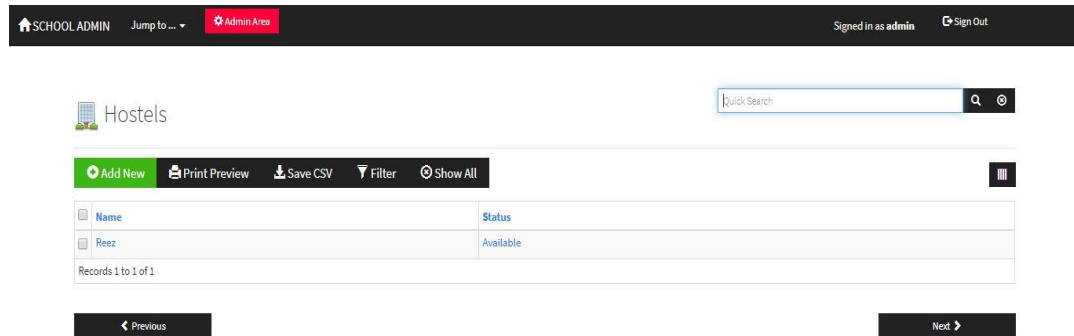
  

Student	Class	Session	PaidAmount (Ksh)	Balance (Ksh)	Branch	Date	Remarks
SAI DEEPU :RegNo: 12	Form One :Stream Central	2019 :Term 2	3000	4500	KCB Bank :Acc.No: 98262891719	05/03/2018	
SAI DEEPU :RegNo: 12	Form One :Stream Central	2019 :Term 2	1000	4500	Equity Bank :Acc.No: 351672718822	05/02/2018	

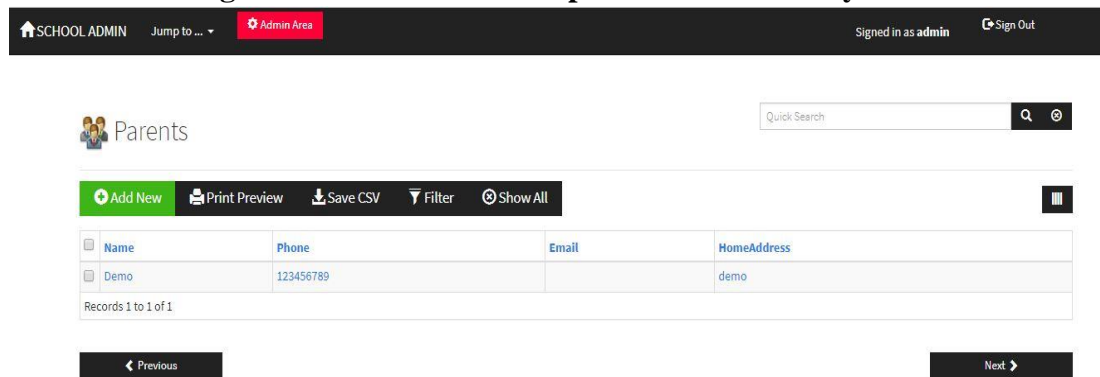
Records 1 to 2 of 2

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**Fig.38. Fees Collection Details in Proposed School ERP System**



**Fig.39. Hostel details in Proposed School ERP System**



**Fig.40. Parent Details in Proposed School ERP System**

## **6.5.FUNCTIONS AREAS ( HUMAN RESOURCE MANAGEMENT, ACCOUNTING AND FINANCE).**

### **6.5.1. HUMAN RESOURCE MANAGEMENT:**

Human resources management is the process through which you attract, train, motivate, evaluate, hiring, compensate and retain these important people. This is called SHRM (School Human Resource Management).

The human resource management system is one of the most critical functions. This is the reason that when selecting a perfect school ERP software, it is important to consider software that offers a combination of automated processes that connect human resource management and information technology in a seamless manner.

When selecting a School ERP software, it is essential to ensure that the School ERP has every feature you will ever need to run your institution efficiently. This also includes a fully-fledged Human Resource module that will help with the automation of repetitive and time-consuming tasks associated with human resources management using a multi-function human resource management system will help to free up some of the school staff's employees most valuable resource – time. It

will also ensure that the focus of the school HR team is shifted to creating a culture of excellent education, long-term employee retention, and other highly impactful areas that will help the productivity of the school.

Another advantage of using a human resource management system is the automatic management of attendance for the employees. This information can be captured with the assistance of a biometric device that the staff can use with minimum assistance. The system creates automatic reports that can be tallied easily at the end of the month for easy attendance calculation along with the school employees can easily apply for a leave on the school ERP software for payroll management. The leave applications can be easily approved by the manager when needed. The system also allows for easy leave calculations at the end of every leave cycle. By automating the process, not only does it save employee time, but it makes employee attendance and leave management a lot easier and faster.

#### **Employee data management:**

The human resource function in an educational institute includes the collation of many employee-related data such as financial information, health, addresses for communication, qualifications and salary details among other things. The school ERP software provides highly confidential data can be stored in the software in a safe and secure manner. All that the employees need to do is upload the quick and customizable employee admission form in one go. The software also allows for bulk employee import option so that all the details of the employees can be uploaded on the software in a few quick moments. And also using a school management software for payroll management ensures that this information can be updated accessed with the easy click of a mouse.

#### **Easy personnel Queries management:**

Another benefit of using a school ERP software for HR management is that it becomes easy to update any personal queries, complaints, and grievances on the software through private messages and emails to the administration staff. These queries or messages can be addressed in a confidential manner and helps assure the staff and the teams that there is support available to them when wanted.

One of the key aims of a human resource management system is to provide complete information and support to the administration as well as the employees for any queries or updates. Thus, supporting them and enabling them to function in a seamless and more effective manner.

Along with

- Job design and analysis
- Workforce planning,
- Recruitment and selection,
- Training and development,
- Performance management,
- Compensation (remuneration) and
- Legal issues

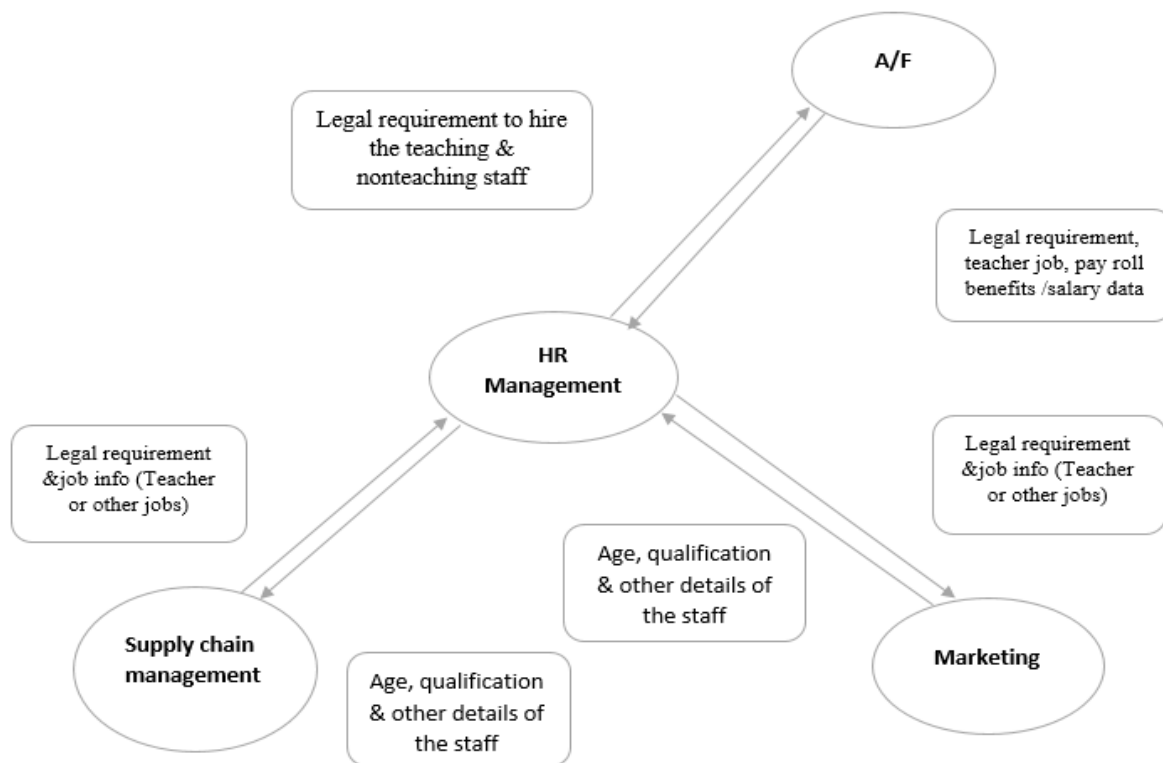


Fig 41. Information flow from HR to other functional areas

### 6.5.2. ACCOUNTING & FINANCE MODULE:

The Account module is an integrated package allows comprehensive management of accounts without the need of vouchers. Integrated with fee module, salary of staff and other expenses. This module automatically manages posting of fees into appropriate account heads.

This module enables effective management of complete account of school. All types of vouchers can be entered from single voucher entry screen.

Using this, we can create all types of accounting transactions and vouchers. It automatically prepares all accounting books like Trial Balance, Cash Book, Day Book, Income and Expenditure, and Balance Sheet.

Account module is interconnected with payroll system and fees management.

- Attendance of staff and 'Leave without Pay' subtractions
- Employees monthly pay slip bills, which include academic and non-academic staff
- Supplementary bills
- Monthly Salary Calculation of faculty and staff
- Income Tax calculation
- Provident Fund and loan management
- Fully customizable fee structure to change fees according to different conditions and standards.
- Carry out fee collection online with various methods.

- Carry out and manage details of fine management carried out on daily basis throughout the year.
- This module also has an integrated payroll system to manage the salaries of the staff and make pay-slips for all the staff members of the school.
- You can also manage the collection of the funds through some cause or participation fees for a particular event.
- Generate customized reports on daily basis for the accounts of the school and keep the record of the money flow throughout the year.

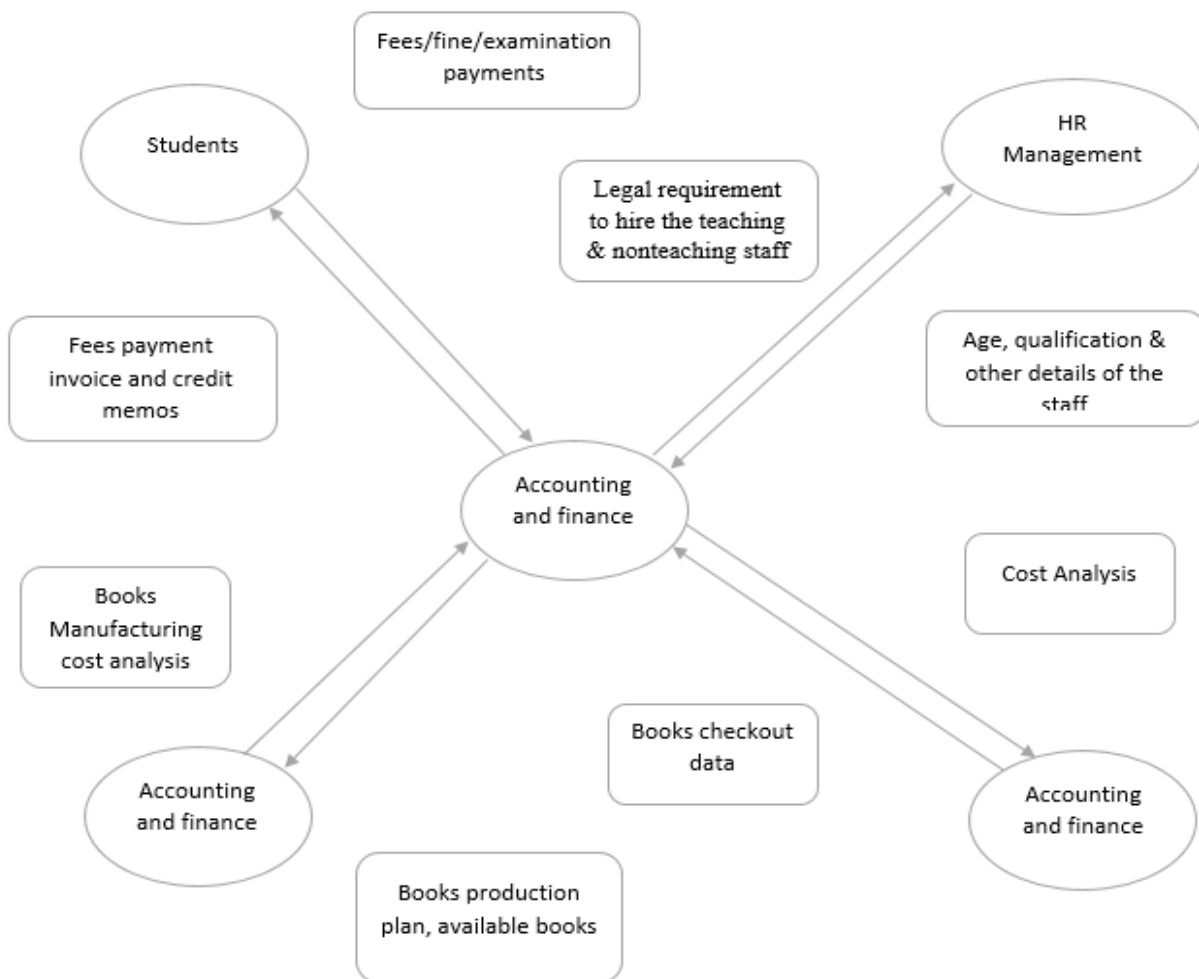


Fig.42 Integrating Finance and Accounting with other functional areas

Mode of Transactions done in the enterprise w.r.t staff salaries, student fees, examination fees etc., The main part of any organization or enterprise, accounts will be managed from the headquarters by the financial head in order to maintain the financial quarter sales. The financial manager gets the updates from the system database. They verify and validates all the transactions and accounts. Also based on the demands received from the HR department, the calculated pay roll will be transferred to the corresponding employee's bank account. The

money, which is collected as the charge from the customer, will be aggregated and deposited into the bank account of the organization.

### **6.5.3. Supply chain management:**

In the TS School Management System(TSSMS) supply chain management involves obtaining resources, managing supplies and delivering goods and services to students and staff. To complete the process, and information about various goods and services usually go through a number of independent stakeholders, including manufactures, providers, group purchasing organizations and several agencies.

Through the supply chain management , the TS School Management System can reduce cost and gain many opportunities.

The supply chain management starts when the student joins the institution where items are ordered and delivered to the student. When the order from the sales and marketing is received for the items/ stationary needed by the student which includes the books, stationary stuff, uniform, shoes etc.... And when the students are increasing because of the HR department and Marketing sales there is a need to order or manufacture the infrastructure(like desks for students, necessary accessories).

Generally , the infrastructure and other materials are imported from various vendors/ organizations in most of the educational institutions. In our institution we can link up with some of the agencies to get the necessary items.

Since supply chain goals are not always aligned within the organization, the supply chain management process can be inefficient and fragmented. The agencies must take into account numerous requests and viewpoints to settle on specific product budgets. The students also have a voice in the supply chain management process. The institutions maybe regularly able to regularly order correct the sizes of uniforms and keep them stocked, but some students may need more customized products, such as cotton or silk or some other depending on their needs.



Fig . 43 Information flow from supply chain to other functional areas

#### 6.5.4. Marketing & sales

Marketing and sales needs to interact with Human Resources to exchange information on hiring needs, legal requirements, etc.

A school management system can tell your institution's story, which is what students want to hear about. They want to know what your school can offer them, and hearing its marketing story is how they want that information delivered. With a school management system, you can tell that story in a way that clicks with prospective students.

Your school has its story, which may involve its history, core values, areas of research, etc. That story is part of the school's brand. You want to deliver the message of your brand to your potential students in the same way a retail brand would use their message to attract customers. Students want to know what will interest and engage them about your institution, and telling your brand story in a compelling way through a school management system can help convey that message effectively.

One tool in the student management system is drip marketing, which offers a visual workflow builder to set out the paths to conversion you can create with your students. When an event sets off your recruiting department's workflow, an admissions officer can send out a welcome



email and then send it out with a different subject if it goes unopened. Another option is to update the lead to warm if the potential student opens the email. You'll have the ability to see where any given recruit is in the application process and get a quick idea of how they're feeling about potentially engaging with the school more. This allows an admissions officer to use different methods of reaching out to them if the student seems receptive.

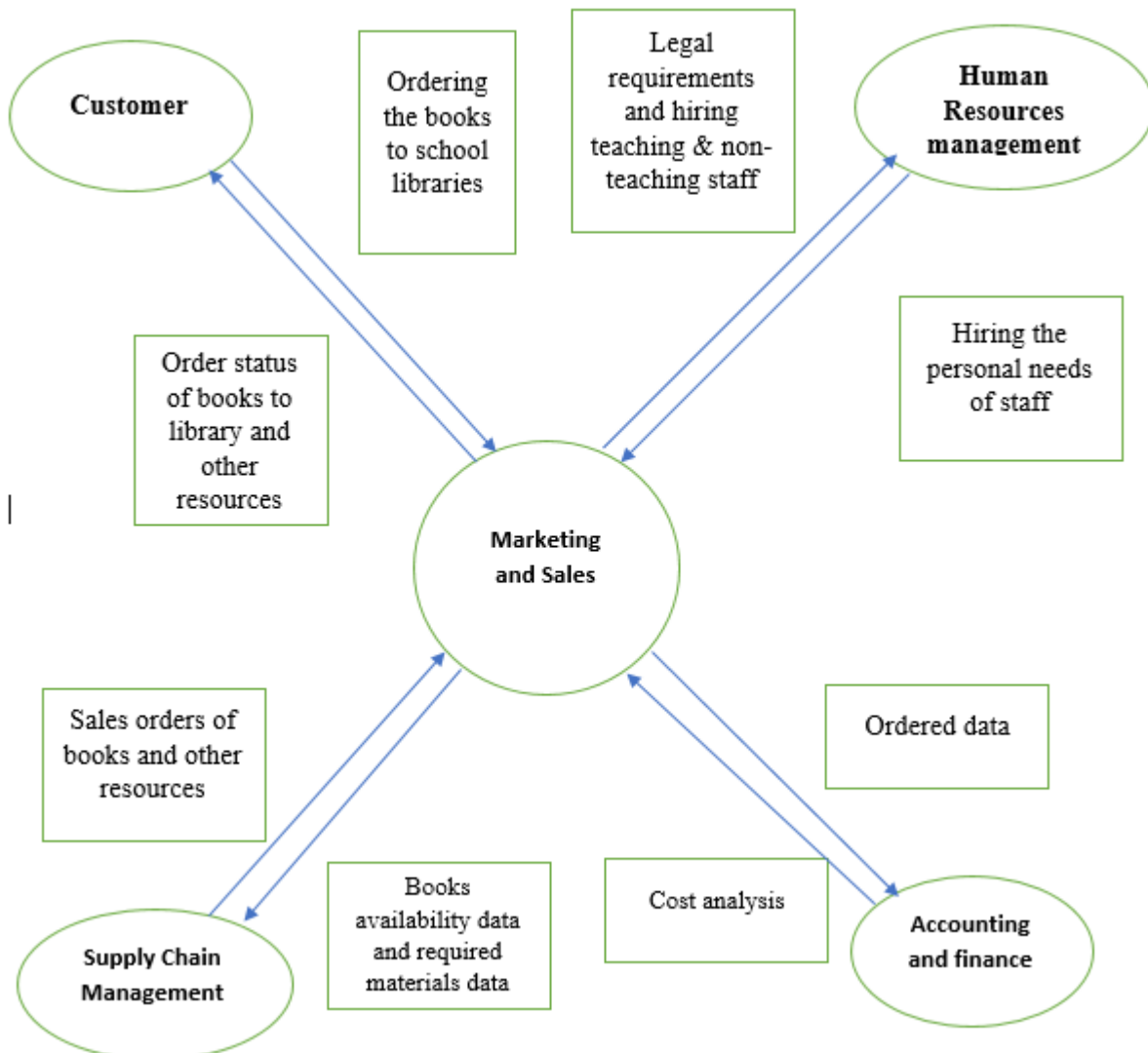


Fig 44 describes information flow from marketing & sales to other functional areas

## 7. Improvements in Existing School ERP system:

Present competition world there are some school ERP system are available but only some schools are using that service because of low budget of the schools or the features of existing ERP system is not full fills the schools requirements. Fedena or TS school are existing ERP systems with fulfills the maximum requirements of school but it is a free version software where they are lagging with registration, custom report generation, inventory, assessment uploads, online lecture etc., In order to overcome those problems and maintain the data in a cloud with less cost we introduce a new school ERP software. Will provides the following benefits.

1. **End-to-End solution**

Whether it's the enrollment of a new student or calculation of salary for the staff, School ERP provides you a fully integrated end-to-end solution to manage all the functions and activities required for your education institution. It ensures that offices, faculty and students have access to timely and up-to-date information. It manages high volumes of critical information with hundred percent of accuracy helping you to run your institution more smoothly and efficiently. It creates a foundation for new processes that can yield significant returns on investment.

2. **N-Tier Architecture**

School ERP is designed on an N-Tier architecture allowing multiple users to work simultaneously from multiple locations on a single database. This helps in sharing information between different departments and users on a real-time basis.

3. **Automates important functions**

Manual work most of the time is not accurate. Whether it's the collection of fees or generating mark-sheets, the information has to be accurate. School ERP automates these critical functions like fee collection, salary computation, time-table, Examination, mark-sheets etc. helping educational institutions to effectively improve productivity, efficiency and accuracy of their entire system.

4. **Increases productivity and efficiency of the staff**

Automation helps staff to work out things well in time helping them to give more time to take care of the other issues and problems. School ERP helps organizations to handle the same amount of work by less staff thereby allowing the rest of the man power to be deputed in other productive works.

5. **Saves lot of Man hour**

Saves lot of Man hours that directly means saving lot of money Automation of various critical tasks such as fee collection, salary management etc saves a lot of man hours that directly reflects to expenditure of the organization. 7. Reduces paper work School ERP has an in-built Document Management System that helps organizations to reduce their paper consumption to a great extent which is not just cost effective but is eco friendly as well.

6. **Completely organizes data with no redundancy** School ERP offers zero redundancy of data for managing the various aspects of your educational business needs. For example, you just need to add the name of student only once and it will automatically appear in rest of the modules like Fee, Courses, Examination and Promotion etc.

7. **User Friendly Interfaces** Interfaces of ERP play an important role to make it successful and a popular solution. School ERP is designed with easy to use, interactive and user friendly interfaces that help non-expert users to perform complex functions without any difficulty.

8. **Comprehensive Reporting System** Organizations around the world consider effective reporting system as a vehicle for evaluating and enhancing the performance of the entire system. Thus reports have become the most vital part of any application System. What so ever new features there may be in an application, the end user evaluates the quality of System by its quality of reports. School ERP offers a powerful mechanism to generate accurate and robust reports with a great deal of flexibility. Whether you want a report for

a single student or for the entire institute, it gives you plenty of options and flexibility to generate reports at multiple levels helping you to enhance the performance and productivity of your institution.

9. **Advance Printing Options** Advance printing options gives you the freedom to generate printouts on any size of paper that reduces printing expenses to a great extent.
10. **Easy Centralized Backup Options** Database Backup is the most critical part of any ERP solution. School ERP comes with easy to manage database-backup system. The database backup and restoration processes both are simple and easy and don't require any database expert to perform these activities.

## **8. Conclusion:**

The data regarding the student academic details, fees details, extracurricular activities, staff salary, staff details etc. that will be stored in the cloud. We are going to offer the school management system to different school when we are going to increase our popularity or customer satisfaction. So, that if we store the data in a cloud, the schools in different locations also they can easily access the student academic details, staff details etc. in this each and every data entry is monitor and maintain the date, time, data updated person name. Which provides data accurately. The proposed ERP system provides with low cost because we introduce cloud based concept.