

**E-SYSTEM FOR EDUCATION COMPANY**

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## **ABSTRACT**

E-System for Education Company (EEC) is an online based management system for the purpose of making management much more systematic, secure and efficient. There are three main users which are staff, admin and customer which are parents by Tan Educations. The system has total six modules which are login and registration, lessons module, staff management, student management, courses and classes management and billing management. The problem statement of this system which is the current system which are only filing system that able to record the students, payment, records by handwriting and there is no well documented data in the current system for managing student and staff information and the records are incomplete. The objectives of this system are to develop a computerized and systematic online education based company, and to store the kindergarten information in database for effective management of the data. Existing systems in the market that is similar with E-System for Education Company, programming languages and tools used are compared. Rapid Application Development (RAD) has been implemented to develop this system. There are four phases which are requirements planning, user design, construction and cutover.

## **ABSTRAK**

E-System for Education Company (EEC) adalah sistem pengurusan yang menggunakan internet untuk tujuan membuat pengurusan lebih sistematik, selamat dan cekap. EEC mempunyai tiga pengguna utama iaitu pekerja, admin dan pelanggan di Tan Education. Terdapat 6 module dalam sistem ini, iaitu daftar masuk dan pendaftaran, pengurusan pelajaran, pengurusan pekerja, pengurusan pelajar, kursus dan pengurusan kelas dan pengurusan bil. Masalah sistem yang digunakan oleh Tan Education sebelum ini ialah sistem fail untuk merekod dan tidak system yang sempurna untuk merekod maklumat kindergarten. Terdapat dua (2) objektif bagi tesis ini, iaitu untuk membina satu sistem yang bersistematik, selamat dan cekap dan untuk menyimpan maklumat kindergarten di database untuk pengurusan yang berkesan. Sistem yang ada di pasaran yang mirip dengan E-System for Education Company (EEC), pengaturcaraan bahasa dan alat yang digunakan dibandingkan. Rapid Application Development (RAD) telah dilaksanakan untuk membangunkan sistem ini. Ada empat tahap iaitu perancangan keperluan, rancangan pengguna, pembinaan dan cutover.

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## LIST OF ABBREVIATIONS

EEC	E-System For Education Company
PHP	Hypertext Preprocessor
ASP	Active Server Pages
.NET	Dot Net
VB	Visual Basic
SQL	Standard Query Language
HCI	Human Computer Interaction
HTTP	Hypertext Markup Language
RAD	Rapid Application Development
DFD	Data Flow Diagram
ERD	Entity-Relationship Diagram
ID	Identification Digit

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 System Overview**

Education in the largest sense is any act or experience that has a formative effect on the mind, character or physical ability of an individual. In its technical sense, education is the process by which society deliberately transmits its accumulated knowledge, skills and values from one generation to another.

Otherwise, Business is one of the most important economy generators for each country and since the dawn of the twentieth century, all business companies turned to technology to better improve their business chances and qualities. Thus, such is the reason of the development of this system.

TAN Educations, Penang is an education based company school. It includes tuition class and kindergarten class. E-system for Education Company (EEC) is developed as a platform for staff, admin and customer which are parents by Tan Educations. The system is developed for the purpose of making management much more systematic, secure and efficient.

Education system forms the backbone of every nation. As a matter of fact, a sound education system is a must to nurture young talents who in future will become global citizens and take their nation to new heights. In recent times, advanced technology is extensively being used to revolutionize school management by streamlining education-related processes. E-system for Education Company (EEC) is to provide online interactive community portal of stakeholders to enhance the efficiency of school administration and improve resource optimization, thus raise the standards of school.

The system and its functions will provide Tan Educations a computerized method of management which will help increase the efficiency and productivity of the company. Conclusively, once the system is developed and implemented it will increase the productivity of the business.

## **1.2 Problem Statement**

There are two main problem faced by TAN EDUCATIONS. The two problem statements shown are:

- i. The current management system is only filing system that able to record the students, payment, records by handwriting.

- ii. There is no well documented data in the current system for managing student and staff information and the records are incomplete.

### **1.3 Objective**

The objectives to create EES are:-

- i. To develop a computerized and systematic online education based company.
- ii. To store the kindergarten information in database for effective management of the data.

### **1.4 System Scope**

This system is design and developed for Tan Educations.

Target users of this system are

- i. Tan Education's staff and administrator.
- ii. Tan Education's customer who are parents.

This system is a web based application. This system contains of six (6) modules which are registration and login, lessons module, student management, staff management, courses and classes management and billing management. The system will develop by using Adobe Dreamweaver CS5, and MySQL. Capabilities of six (6) main modules are described in the Table 1.1.



**Table 1.1: Modules and function list**

<b>Module</b>	<b>Function</b>	<b>User</b>
Registration and login	- register and store clients, staff information securely. - Login to the system.	Admin  Staff , Parent
Lessons module	- as a platform for lessons teaching.	Admin, Staff
Student management	-manage the student information. -manage the student's result. -manage the student attendance.	Admin  Staff and parent view
Staff management	- manage the staff information include their salary. - manage the staff attendance and workflow.	Admin  Staff view
Courses and classes management	-display the course and timetable provide by Tan Educations. -manage the course details.	Admin  Staff and parent view
Billing management	- manage the payment/fees	Admin, Parent

## **1.5 Thesis Organization**

This thesis is divided into 5 chapters and each chapter is devoted to discuss different issue in the project. Below is a summary of the content for each chapter:

- i Chapter 1**  
Introduction to the project is presented along with the project's problem statement, objectives of the project and the scopes of the project.
- ii Chapter 2**  
Research and literature review related to the project is presented.
- iii Chapter 3**  
Project analysis, design and methodology are presented.
- iv Chapter 4**  
The testing result of the system and discussion on the result are presented.
- v Chapter 5**  
Summary of the project is presented.

## **CHAPTER 2**

### **LITERATURE REVIEW**

A literature review is a body of text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. [1] The ultimate goal is to bring the reader up to date with current literature on a topic and forms the basis for another goal, such as future research that may be needed in the area.

#### **2.1 Current System**

The current system using now in Tan Education is manually system, means that all the process on managing the company flow is written in paperwork. Tan Educations do not have any record on the student profile, and staff profile. If need to find out the information or data student, they have to check it one by one, so it take

quite a long time. Furthermore, Tan educations also using paper receipt and not printing receipt. If the staffs need to check back the payment record, they have to check it one by one and find the paper receipt manually.

Addition, for students register course. They still use the manual system to fill in the data information. Overall system flow for Tan Education is using traditional management system.

### **2.1.1 Apparatus**

Tools that are being used in this manual system by Tan Education include register form, receipt and pens. Register form which is staff use to help student register that written by pen. For the receipt, also is manually written by using pen. Appendix A is an outlook of the register form they are using now.

## **2.2 Analysis of Existing System**

Before you pick a content management system for your website, consider the scope and type of projects the content management system is supposed to manage. [2] In design or implementation EEC, I need to consider the scope and type of projects need. By analysis of existing system, I may get some idea about design and features need.

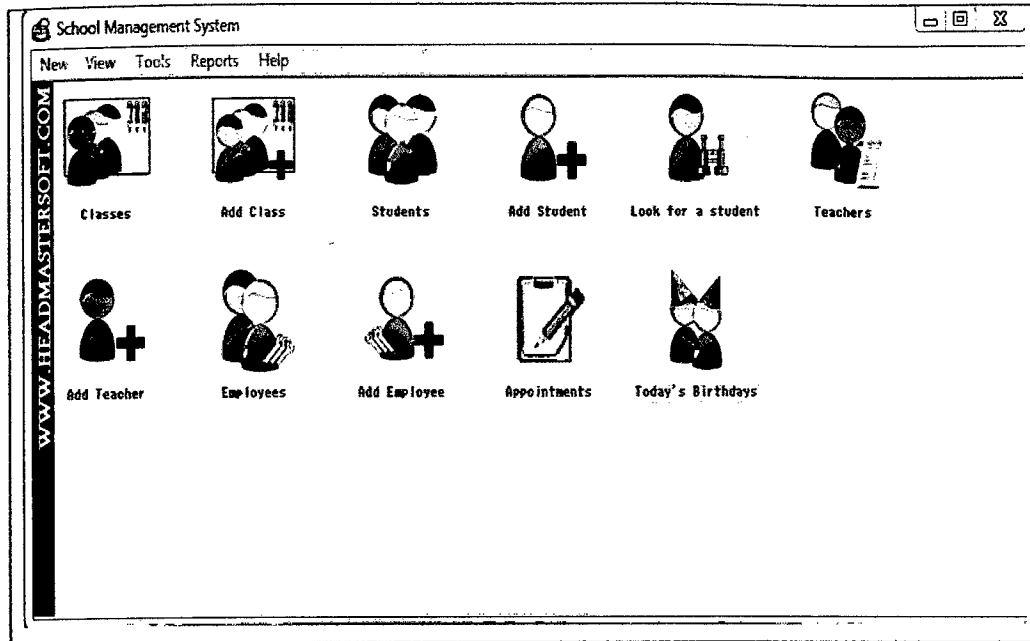
This chapter is about the existing system that had been analyzed which is an education management system.

## **2.2.1 Education Management System**

SMANS is a software application which created by Headmastersoft.COM. This application is developed for Education Company to manage the business flow and consists of four main functions which are class management, student management, teacher/employee management, and appointment or birthday reminder.

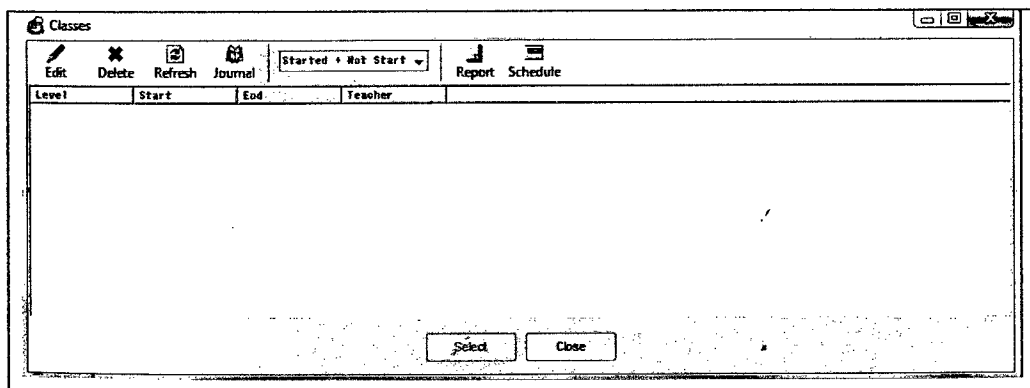
### **2.2.1.1 Overview Existing System Flow**

An overview on how to use SMANS and some introduce on the components inside this system. I have to understand on the existing system flow and also the function that involved in this application, so that I can get some idea when I going to implement E-System for Education Company (EEC). Not only the function, can get some idea on their design as well. The way on start using this application is shown as below.



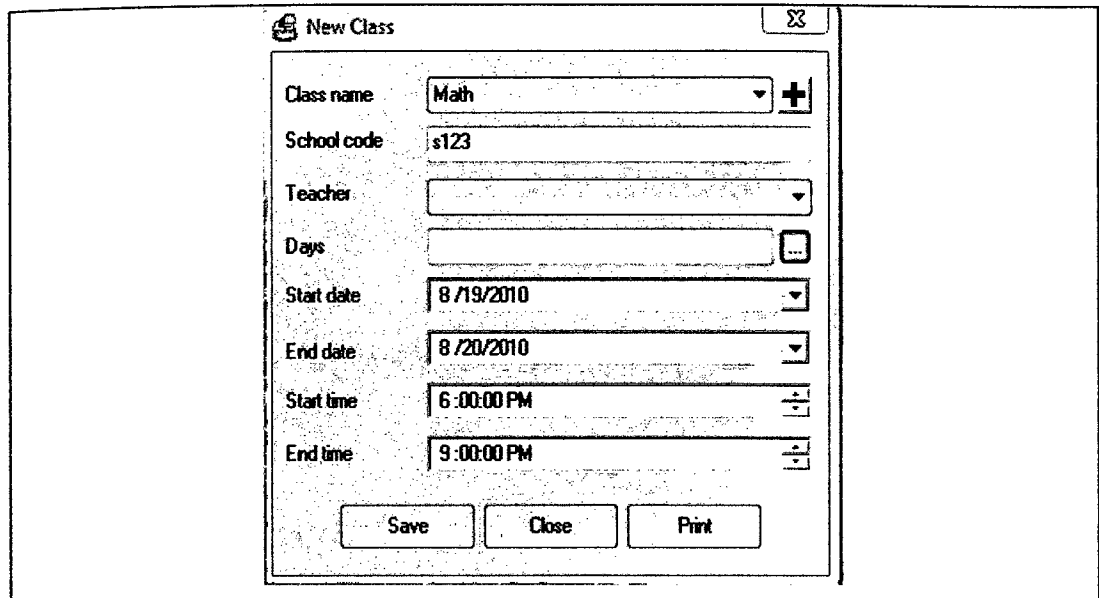
**Figure 2.1: Front Page**

For the class management, it got two main pages which is classes page and add new class page. For classes page, It will show the class details which are level, start time, end time and the responsible teacher.



**Figure 2.2: Classes Page**

For the Add New Class page, user can add the new class by this page.



The image shows a screenshot of a web application window titled "New Class". The window contains a form with the following fields and values:

Field	Value
Class name	Math
School code	s123
Teacher	
Days	
Start date	8 /19/2010
End date	8 /20/2010
Start time	6 :00:00 PM
End time	9 :00:00 PM

At the bottom of the form, there are three buttons: "Save", "Close", and "Print".

**Figure 2.3:** Add New Class Page

For student management, staff can view, edit and delete the student information list. It also show the details of student information such as parent's hand phone number. Furthermore it also show the picture of students, classes register by students. The print button also cans easy the staff to print the information of students.

The screenshot shows a web application window titled "Students". At the top, there is a toolbar with icons for Edit, Delete, Refresh, Find, Fees, Filter, Remove, and Print. A dropdown menu is currently set to "All". Below the toolbar is a large table with the following columns: ID, First Name, Second Name, Family Name, Phone Home, Mother Phone, and Father Ph. To the right of this table is a smaller table with the following columns: Classes, Final m..., Certif.no, and Start. At the bottom of the window, there is a status bar that displays: 0 Students, 0 Enrolled, 0 Not Enrolled, and 0 Old Enrolled.

**Figure 2.4: Student Page**

This page can easy the staff to add new student information. It needs to fill in three categories information of student which is general form, emergency info and parents' info. The add picture function is to add photo of student registered. It will easy teacher to recognize the students.