SCHOOL MANAGEMENT SYSTEM

PROJECT WORK DONE AT
AFT SOFTWARE SOLUTIONS PVT. LTD.,
CHENNAI - 600102

PROJECT REPORT P-818

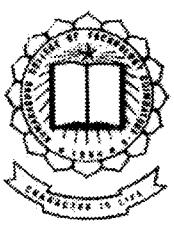
SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF
M.Sc [APPLIED SCIENCE] SOFTWARE ENGINEERING
OF BHARATHIAR UNIVERSITY, COIMBATORE.

SUBMITTED BY

JACOB ABRAHAM
REG NO. **9937S0076**

UNDER THE GUIDANCE OF

External Guide	Internal guide
Mr. Venkat	**Mr. Nandakumar**
AFT Soft Pvt. Ltd.,	**Dept. Of CSE.**
Chennai - 102	**Coimbatore – 6**



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
KUMARAGURU COLLEGE OF TECHNOLOGY
COIMBATORE – 641 006
MAY 2002 – AUG 2002

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

KUMARAGURU COLLEGE OF TECHNOLOGY

(Affiliated to Bharathiar University)
COIMBATORE – 641 006
SEPTEMBER – 2002

CERTIFICATE

This is to certify that the project entitled

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M.Sc [Applied science] SOFTWARE ENGINEERING
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Professor and HOD 26/9/02

Internal Guide 25/9/2002

Submitted to University Examination held on 26-9-2002

Internal Examiner 26/9

External Examiner

DECLARATION

JACOB ABRAHAM
M.Sc. Software Engineering (4th year),
Department of Computer Science and Engineering,
Kumaraguru college of Technology,
Coimbatore.

I hereby declare that the project titled **"SCHOOL MANAGEMENT SYSTEM"** submitted in partial fulfillment for the award of M.Sc. Software Engineering degree is my original work and that has not previously formed the basis for the award of my degree or any other similar title.

Coimbatore
Date :

JACOB ABRAHAM
(Reg. No. 9937s0076)

FT
bling e-Business
FT Software Solutions (P) Ltd

'L' Block, No.52, 24th Street,
Anna Nagar East, Chennai-600 102.
Ph : 6630215 / 6630381
E-mail : aftsoftsol@vsnl.net
Website : www.aftsoft.com

Certificate

This is to certify that **Mr. Jacob Abraham** has been involved as a project trainee with us from 20 - 06 – 2002 to 10 – 09 – 2002 to develop certain modules of the software product named "**SEAMS**" (School Evaluation Automation And Management Software)

His contribution on the development process has been commendable. We only hereby permit him to utilize his experience on development of the project as his academic project work.

AFT Software Solutions Pvt Ltd reserves all rights for the above mentioned product and therefore we do not provide the project trainee with any Source code and Architectural details. Any act by the project trainee to reveal the confidential information, or utilize the product for any other commercial purpose is not permissible.

Yours sincerely

Ravi Sankar
(Director)

Acknowledgment

To add meaning to the perception, it is my indebtedness to honor a few who had helped me in this endeavor, by placing them on record.

With profound gratitude, I am extremely thankful to **Dr.K.K.Padmanaban B.Sc. (Engg.), M.tech, Ph.D.**, Principal, Kumaraguru College of Technology, coimbatore for providing me an opportunity to undergo the MSc [APPLIED SCIENCE SOFTWARE ENGINEERING] course and thereby this project work also.

I extend my heartfelt thanks to my CSE department head **Prof.Dr.S.Thangasamy B.E (Hons), Ph.D.**, for his kind advice and encouragement to complete this project successfully.

It's my privilege to express my deep sense of gratitude and profound thanks to **Mr. Ravi Sankar (Director)**, AFT Software Solutions Chennai, for having allowed me to do my project work in his esteemed team and for helping me in all means in successful completion of this project work.

Gratitude will find least meaning without thanking my course coordinator **Mrs. Devaki M.S.** and my guide **Mr. Nandakumar** for the valuable guidance and support throughout my project.

Words are boundless for me to express my deep sense of gratitude and profound thanks to **Mr. Venkat, (Project Guide)** and all my associates at AFT Software Solutions, for all their kind guidance and encouragement towards my project work.

My gratitude is due to all staff members of CSE department, my parents and all my friends for their moral support and encouragement for successful completion of my project.

SYNOPSIS

SYNOPSIS

This project is done at AFT Software Solutions, Chennai. The main purpose of this project is to develop software for the Schools. The System concentrates on all the internal activities that take place in maintenance of the school. The activities involve admission of the students & appointment of staffs, keeping track of the students during his studies, and maintaining history of students after their completion of course. A management may have more than one school with different modes and mediums. It is difficult for the management to control all the activities that takes place at different schools at various levels.

The project includes two modules namely **"Configuration"** and **"Operations".** The Configuration part maintains and manipulates the entire master tables. The operation part concentrates on day to day activates that takes place and updates transaction tables.

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INTRODUCTION

1.1 Organization Profile

About AFT

AFT was founded in 1999, with a vision to become visible as a Technology company in the global arena. The Company focuses in design and development of rapid development tools aimed at software developers to deliver Scaleable, Shareable and Secure Web based solutions.

In today's world Software Technologies are changing at lightning speed and business organizations are facing the challenge of adopting appropriate technology for their needs. In many cases implementing a particular technology is a complex task on which Time and Money are spent in great proportions.

AFT Software Solutions is destined to help the Business organizations adopt cost effective and flexible IT Solutions for their diverse needs. AFT is redefining the way Business organizations perform e-Business through its revolutionary technologies and products. The core strength of AFT is its team, which involves highly skilled, determined and passionate software architects, administrators and visualisors of the various business-related applications. Added to this, AFT adopts Microsoft technologies to provide flexible, integral and reliable solutions for our clients.

Today Business organizations are focusing mainly on the Internet to perform their transactions, as it has no location boundaries and because of its far reach into the lives of the people throughout the world. But it is not an easy task for a business organization to move their transactions to the Internet. It requires complex and diverse software expertise to develop an e-Commerce solution over the Internet. Either it is done in-house by a business organization or contracted to a specialized software company.

AFT is committed to provide technology-based solutions to ease the e-Commerce-related problems faced by the Business Organizations and Software Industry.

Products from AFT

e-identity

AFT's Research and Development team continuously strive in bringing out innovative ideas and shape them as generic, robust and mission critical products.

AFT with its traditional strength in technology has built a rapid development toolkit called the **eBiz central**, which is a unique web development tool. This tool gives extensive facilities and flexibility of operation. It saves substantially the development time. This product is considered as boon to developers. AFT intends to expand its scope and contents to upgrade as a unique Web operating system.

AFT's next release would be another product The **Ad. Manager**, which is a component based product, helps developers and portals to implement Web advertising methodologies quickly and efficiently.

Services provided by AFT

AFT designs, develops and implements a variety of systems and applications. AFT is there right throughout, from the project conception stage, phases of development, testing, and implementation and follow up support.

Areas of Expertise:

Enterprise Application Integration:- Integrating disparate legacy systems, which can share applications, business logic and Databases among multiple sites in a secure and controlled manner.

E-Business Solutions:- Portal development, Integration of Supply chain, e-enabling of existing Systems.

Web Applications & eCRM Solutions:- Software solutions integrating Web, E-mail, Web based call centers, Action/Request solutions and E-document solutions.

Strengths:

- Strong Project management skills
- Proven implementation history
- Strong systems background
- Expertise in Software Engineering methodologies

1.2 Project Overview

The project "School Management System" concentrates on all the internal activities that take place in maintenance of the school. The activities involve admission of the students & appointment of staffs, keeping track of the students during their studies, and maintaining history of students after their completion of course. A management may have more than one school with different modes and mediums. At this situation it is difficult for the management to control all the activities that takes place at different schools at various levels.

This project SEAMS (School Evaluation Automation Management Software) helps the management to keep track of all the activities and control them. It also helps the management to dynamically allocate the resources based on availability. It helps to maintain information about fees Collections and attendance of both students & staffs.

In a school user from various levels may use the application at the same time. To meet this situation the project is designed for multi-user environment with LAN. For making the product user friendly with minimum cost it has been developed in Visual Basic 6.0 with MS-Access as back end.

The project includes two modules namely **"Configuration"** and **"Operations".** The Configuration part maintains and manipulates the entire master tables. The operation part concentrates on day to day activates that takes place and updates transaction tables.

SYSTEM ANALYSIS

2.1 EXISTING SYSTEM: -

The presently existing system is a manual system. All the operations like admission of students, appointing staffs, allotting classrooms for teachers and student to the sections is being done manually.

The preparation of timetable has to be done by considering number of factors like availability of staff, classrooms, and subjects and time. Considering all these factors and preparing it is a critical task because he has to keep track about all the information. A single person cannot perform this task effectively for big school, which consists of more than one mode and mediums.

The management should depend on other people to manage the activities. He personally cannot know the details directly without the help of his subordinates. For ex if he wants the status of particular staff he has to get it only from the subordinate who keeps track of staff information. Depending on subordinates for all the requirements will not be effective all the time. One of the major drawbacks is that if one person is absent, no other person can handle his operations because the other who handles may not know the way he performs.

2.2 PROPOSED SYSTEM: -

The proposed system is computerization of school management. This system helps to perform the tasks with minimum effort. All the required activities can be done easily without any strain. Consider a situation where a single management contains more than one school with different modes and mediums. At this stage it becomes difficult for the management to manually control all the activities that takes place in different schools at various levels. So this proposed system help to keep track all the activities. The management at just a click of a button can access all the information without any help from others. With help of this proposed system a single person can perform all the activities. He can know the availability of staff's, subjects handled by the staff, classes that are being engaged and which are not. He can also know the status of students, his marks, fee dues etc. since the work is done with the help of system all the process will be in unique way so that another person can handle the work in case of absence.

The automation of "School Management" reduces the work of the staff and management. Not only reducing, it also helps to do the work more effectively and efficiently. The preparation of timetables and allocating classrooms can be easily done because the system will suggest the clues like raising error's when the staff is being engaged with another class at the same time.

SYSTEM ENVIRONMENT

3.1 Computing Environment

Hardware Requirements

	Minimum Requirements	Recommended
Clock Speed	200MHz	400MHz
RAM	32 MB	64MB
Hard Disk Space	50 MB of Free Space	200 MB of Free Space
CD drive	32x	48x
Mouse	Serial 2 button	Serial 2 button
Display	SVGA	AGP
Key Board	Standard 101/102-Key	Standard 101/102-Key

Software Requirements

Operating System : Windows'NT, Windows-95, Windows-98

Application Tool : Visual Basic 6.0

Database : MS-Access-2000

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3.2 Technologies – Quick Reference

Visual Basic 6

Visual basic is a powerful programming system for developing sophisticated, graphical applications for Microsoft Windows environment. Its productivity has been enhance by addition of a complete set of tools to simplify rapid application development.

" Visual " refers to the method used to create the graphical user interface (GUI) that the user illustrations, rather than writing numerous lines of code to describe the appearance, function and location of interface elements. " Basic " refers to the BASIC programming language, a widely preferred language by many programmers for its simplicity. Visual Basic has evolved from the original BASIC language and now contains several hundred statements, functions, and keywords, many of which relate directly to the windows GUI.

Visual Basic 6.0 introduces us to the New World of Active X technology, a unique way harness the Internet. Visual Basic offers many salient features to aid in the development of full – featured applications including:

- Data access functionality allows creating of front-end applications that can work on most of the popular database systems.

- Active X technology allows usage of the functionalities provided by other applications, such as Microsoft word, Microsoft Excel, and other windows applications and their possible development on the web.
- Applications developed using Visual Basic provides a true exe file that uses a runtime dynamic-link library, which can be freely distributed.

MS-Access

Microsoft Access is a powerful relational database application with which a desktop user can efficiently create and manipulate database systems. Access targets the desktop category and works best for individuals and workgroups managing megabytes of data. For multi-user access to the same database, Access uses file-server architecture, rather than client-server architecture.

As a leader in the desktop database category, MS-Access makes the desktop database category easy for users to find and manage their data to make better business decisions. With strong integration with Microsoft Office, Access offers a similar appearance and functionality to that found in the popular Microsoft Word and Excel applications. For general business users, Access provides easy-to-use wizards throughout, such as the Database Wizard for getting up and running quickly, and the Simple Query Wizard for easily finding information from the data. More advanced users appreciate the power behind the Microsoft Visual Basic® for Applications (VBA) programming language, programmable toolbars, and the freely distributable run-time version of Access available with the Office Developer Edition. The combination of ease of use and power in Access makes it the top choice among developers who frequently use Access as a front end to SQL Server in a client-server scenario.

Access has two major components. The first contains an application development environment for Visual Basic for Applications programmers that include forms technology, reports, and database administration. In addition, as mentioned earlier, there is also the user interface (UI) common to both Access and the other Office applications.

The second component in Access, and the main topic of this paper, is the data engine. Before Access 2000, users and developers were using the Jet data engine, whether they knew it or not. In the next version, users and developers will be given a choice of data engines. They can continue with an improved version of the default Access data engine (Jet 4.0), or MSDE, a new data engine option in Access 2000.

There are different types of database management systems like Oracle, SQL-server, MS-Access etc. Among these MS-Access is easy to handle and that to its cost is very low. Other database management system like SQL-Servers is very high cost. All the users may not be capable to purchase the software. Databases in MS-Access can be handled very easily and effectively. This software comes freely with the Windows software itself. Creating, manipulating, deleting the records and databases is very easy with MS-Access. It handles the databases very effectively.

MS-Access Security and Database Formats

MS-Access also provides very good security to the users in both single-user environment and multi-user environment. MS-Access works with three types of databases: traditional Access databases, MSDE databases, and databases stored on machines running SQL Server 6.5 or later. MS-Access databases are stored in .mdb files that can be shared with other users by putting them in a shared network folder. MSDE is a new technology that can be installed on computers running Microsoft Windows 95, Microsoft Windows 98, or Microsoft

Windows 2000 Professional to provide local or shared storage capabilities that are compatible with SQL Server 7.0.

The user-level security feature set provided by Access and the Microsoft Jet database engine for Access databases (.mdb) is one of the best in the desktop database management market. When deciding whether to use an Access database or an Access project connected to an MSDE or SQL Server database, you should consider your multi-user requirements, database size, need to scale, and network configuration.

SYSTEM DESIGN

4.1 Input Design

Input design or form design consists of designing the screens for accepting the input. The user inputs are collected as screen entries. The screen has been designed in a way to provide GUI features to the user. The input screens are designed in a way as to control the amount of input required, avoid delay and keep processing simple.

The form layout is designed to be user friendly. Layout labels are made self-explanatory. Common sets of entries are grouped into a frame for easy identification. Drops down lists are provided in the case of item selection. The user can choose from the valid data from the list provided thus avoiding erroneous data. Command buttons are provided for all activities that take place through the form such as additions, deletions etc. Input data is validated in the screen entries itself. Appropriate error message and warnings are displayed for user's convenience.

4.2 Output Design

Outputs from computer system are required primarily to communicate the result of processing to users. The outcome of data processing will be a set of information in a neat layout, which is used for analysis and decision making. Output design involves the designing of the format of processed data. The report should be in a simple format and should be able to convey the details clearly. Reports provide a hard copy of information, which has to be circulated throughout the organization.

4.3 Detailed Design

Detailed design of a system includes developing prototypes, user interfaces and Backend databases. For this phase, Data Flow diagram (DFD), Entity Relationship diagrams (ERD) and System Flow Chart (SFC) are used.

Date Flow Diagrams depict how data interact with a system. DFDs are extremely useful in modeling many aspects of business function because they systematically subdivide a task in to its basic parts, helping the Analyst understand the system, which they are trying to model.

A DFD models a system by using external entities from which data flows to a process which transforms the data and creates output data which goes to other processes on external of files. Data in files may also flow to processes as inputs.

The main merit of data flow diagram is that it can provide an overview of what data a system would process, what information of data are done, what files are used and where the results flow. The graphical representation of the system makes it a good communication tool between the user and an analyst, its difficult to represent the business process through verbal description alone. Here data flow diagram helps in illustrating the essential component of a process and the way they interact.

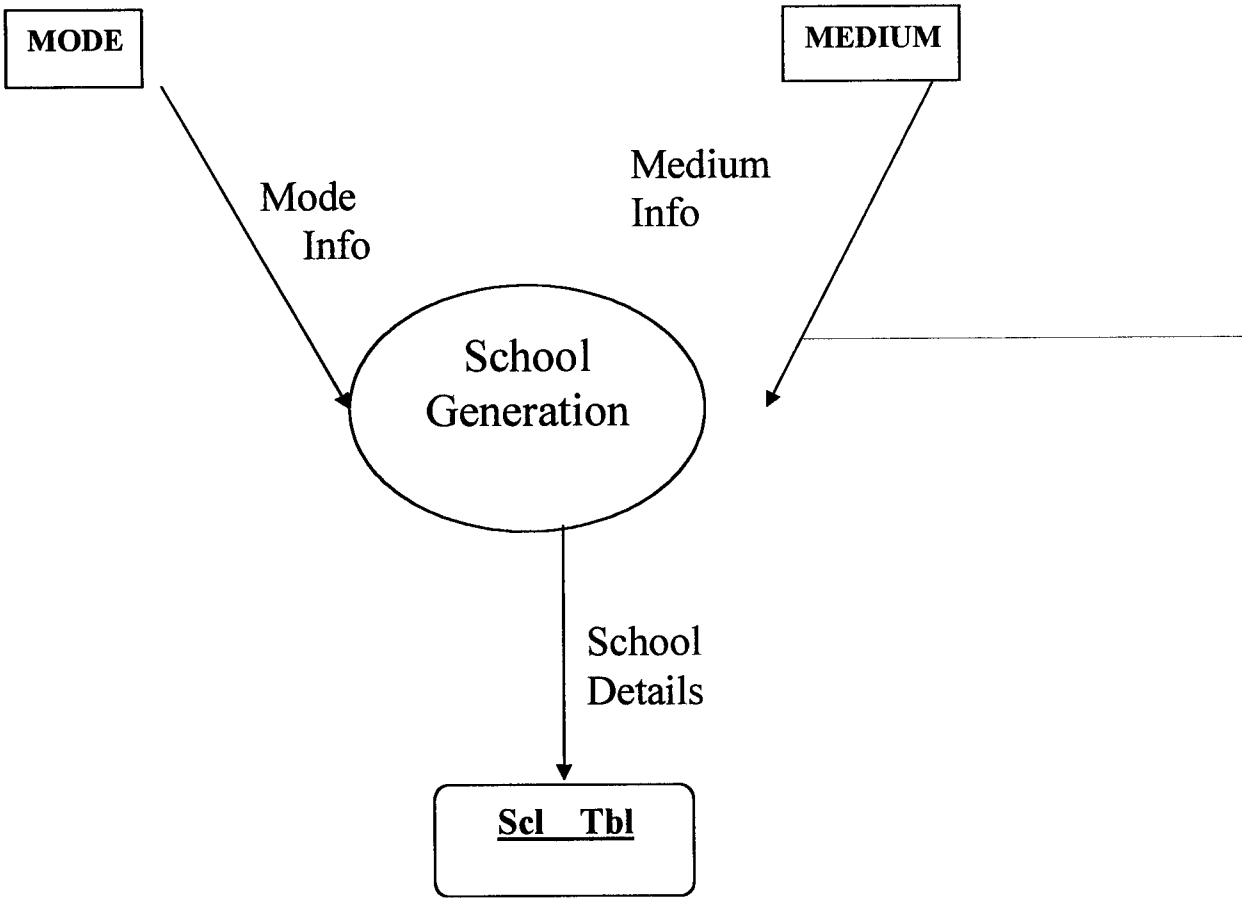
DFD Components

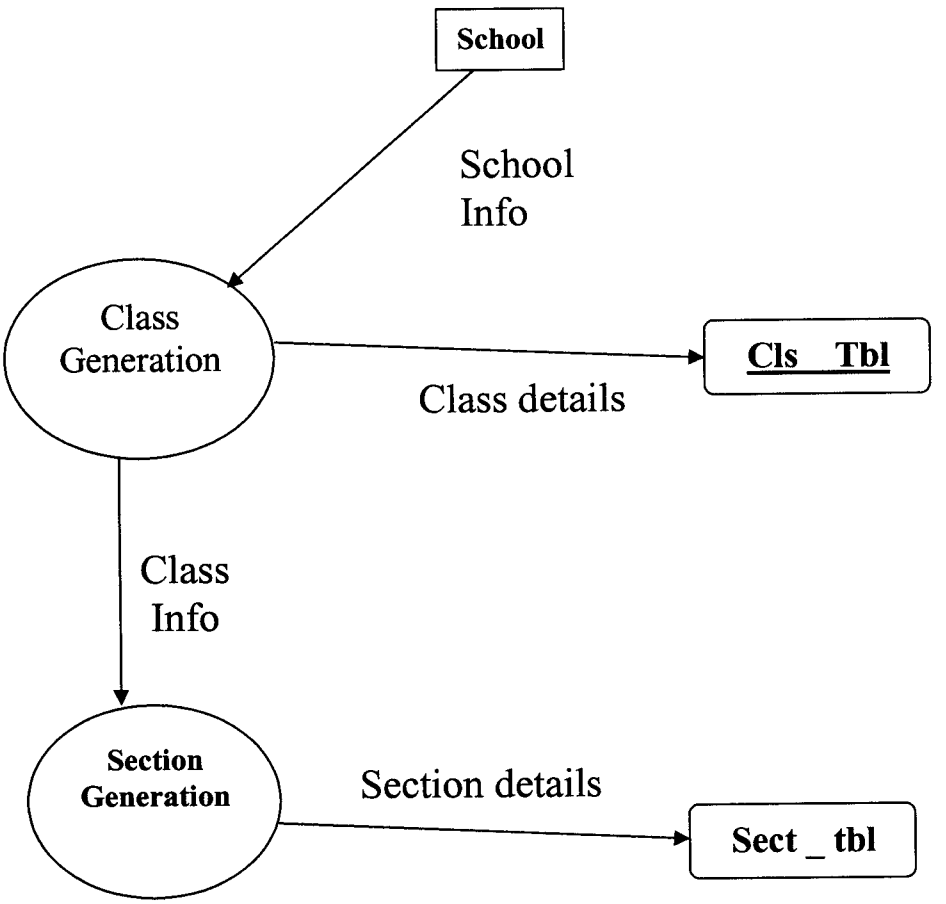
DFDs are constructed using four major components: (a) External entities (b) Data store (c) Processes and (d) Data flows.

External entities represent the sources of data that enter the system or the recipients of Data that leaves the system. Data store represent stores of data within the system. It may be a databases or individual files. Processes represent activities in which data is manipulated by being stored or retrieved or transformed in some way. Data flows represent the movement of data between other components, for example a report produced by a process and sent to an external entity.

A circle is used to depict a process. Both input and output are data flows. An arrow represents the data flows. External entities are represented by rectangles. Entities supplying data are known as sources and those that consume data are called as sinks.

4.4 Dataflow diagram of Students & Staffs Operations:

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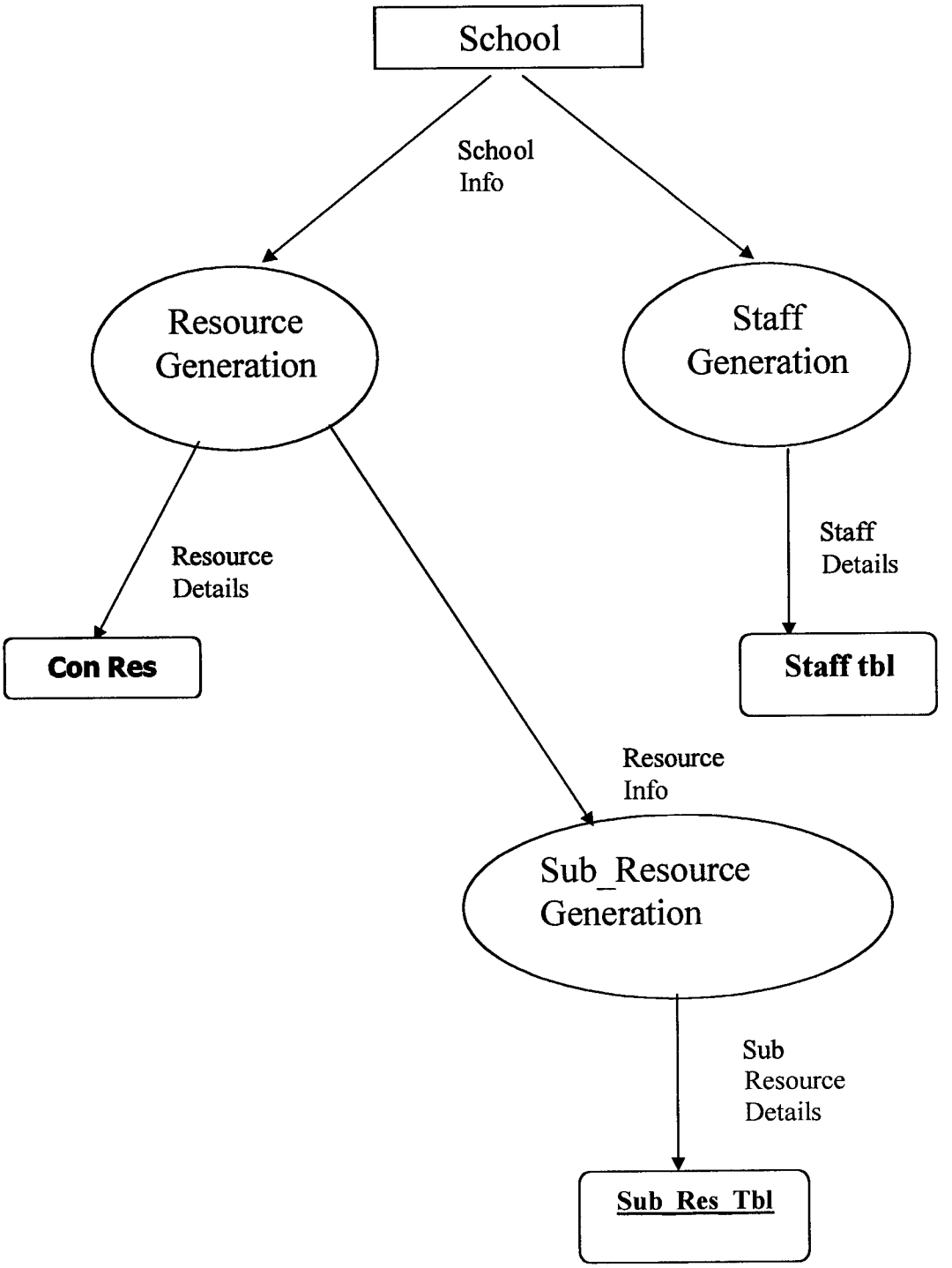
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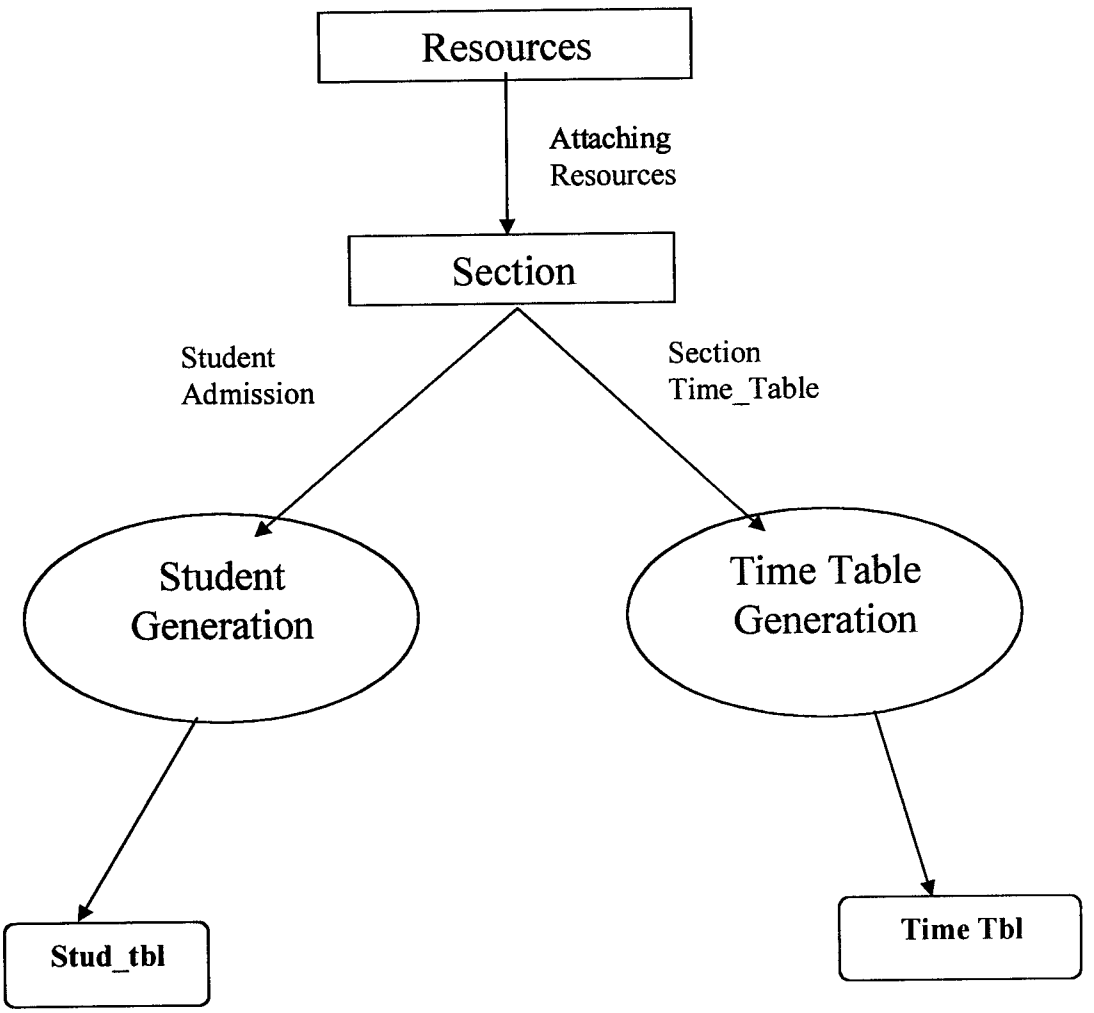
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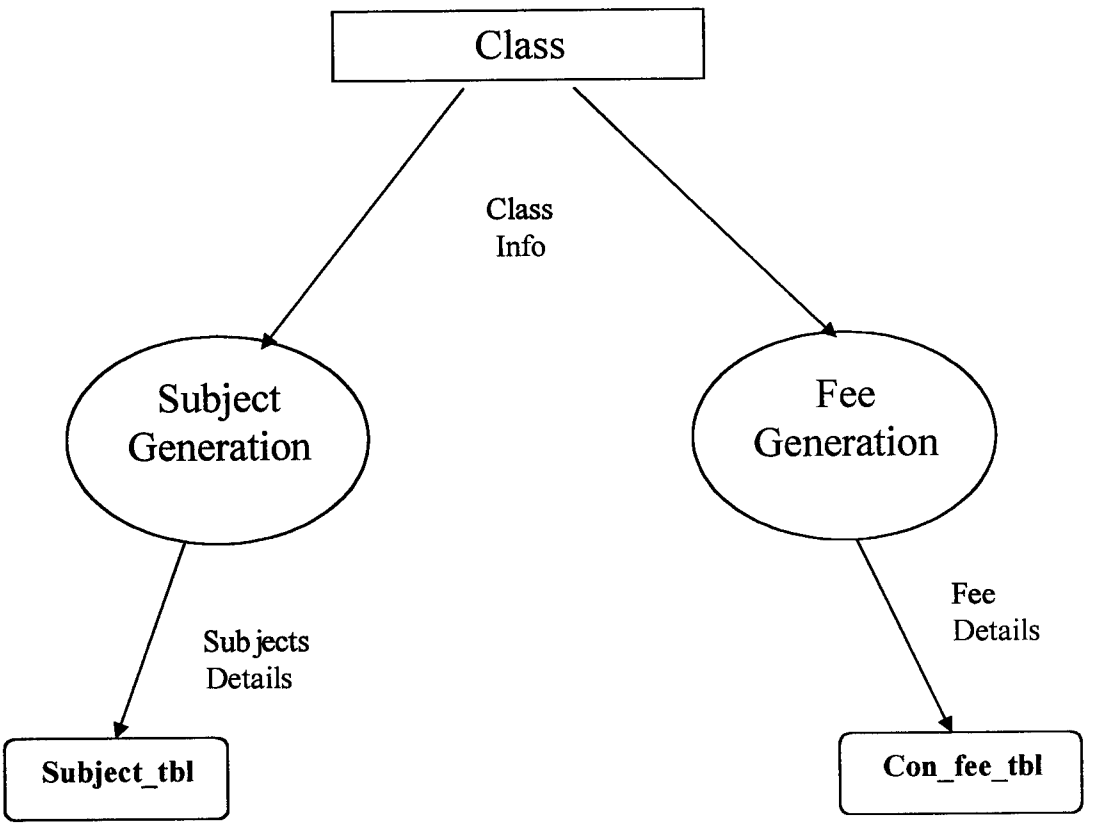
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Subject_tbl
Con_fee_tbl

4.5 Table Designs

Configuration Module: -

1) Table Name: Scl_tbl.

Description: This table contains the details of a school like Name, Address, and Logo etc.

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	phdesc2	Text
scl_id	Text	ph3	Text
scl_name	Text	phdesc3	Text
Add1	Text	ph4	Text
City	Text	phdesc4	Text
state	Text	logo1	Image
Pin	Text	logo2	Image
country	Text	slogan1	Text
email	Text	Slogan2	Text
Site	Text	Slogan3	Text
ph1	Text	Slogan4	Text
phdesc1	Text	established_dt	Datetime
ph2	Text		

2) Table Name: Resource_tbl.

Description: All the information regarding resources like classrooms, playgrounds are stored in this table.

Table Structure:

Field Name	Field Type	Field Name	Field Type
id	Text	Conres_id	Text
Scl_id	Text	Conres_name	Text

3) Table Name: Sub_res_tbl

Description: This table contains the details of all sub-resources under a given resource. For example, chair within a classroom.

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	subres_name	Text
Scl_id	Text	subres_qty	Number
Conres_id	Text	subres_value	Money
subres_id	Text		

4) Table Name: subect_tbl

Description: All the subjects relating to a class (optional and compulsory) are stored in this table.

Table Structure:

Field Name	Field Type	Field Name	Field Type
id	Text	syllabus	Memo
scl_id	Text	max_mark	Number
cls_id	Text	pass_mark	Number
subj_id	Text	opt_sub	Boolean
subj_name	Text	acad_type	Boolean

5) Table Name: con_cal_tbl.

Description: Details of holidays, functions, examination timetable and other events are stored in this table.

Table Structure:

Field Name	Field Type	Field Name	Field Type
scl_guid	Text	day	Number
mode_guid	Text	month	Number
medium_guid	Text	year	Number
class_guid	Text	description	Text
sub_guid	Text	acc_year	Text
ass_guid	Text	cal_dt	Datetime
applic	Text	time	Datetime
cal_type	Text	cal_session	Text

6) Table Name: Con_fees_tbl.

Description: Details of Various Fees information like Refundable, Non-Refundable, No-of-Installments etc. are stored in this table.

Table Structure:

Field Name	Field Type	Field Name	Field Type
id	Text	con_fees_name	Text
scl_guid	Text	inst_no	Number
mode_guid	Text	refundable	Boolean
medium_guid	Text	pay_type	Text
con_fees_id	Text		

7) Table Name: Con_penalty_tbl.

Description: Different types of Penalties and their default amounts are stored here.

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	conpenaltyname	Text
scl_id	Text	conpenaltyamount	Money
conpenaltyid	Text		

8) Table Name: Scl_assessment_tbl.

Description: Different Assessments info like Academic or Non-Academic, Type (Annual, Unit-Test etc) are stored in this table.

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	class_id	Text
scl_id	Text	con_ass_id	Text
mode_id	Text	ass_type	Text
medium_id	Text	type	Text
Max_marks	Number	Min_marks	Number

9) Table Name: con_timeslot_tbl.

Description: This table stores Starting time of School and No of Periods and their Timings.

Field Name	Field Type	Field Name	Field Type
id	Text	end_time	Datetime
timeslot_guid	Text	session_no	Text

start_time	Datetime	session_type	Text

10) Table Name: Section_timetable_tbl.

Description: Timetable details pertaining to a Section such as Class, Section, Subject, Staff, period type (period, lunch, Break) are stored in this table.

Table Structure:

Field Name	Field Type	Field Name	Field Type
Scl_guid	Text	Staff_guid	Text
Mode_guid	Text	Session_guid	Text
Medium_guid	Text	Day	Number
Cls_guid	Text	Start_time	Datetime
Sect_guid	Text	End_time	Datetime
Res_guid	Text	Calender_year	Text
Subject_guid	Text		

11) Table Name: con_cls_tbl.

Description: This table stores details pertaining to a particular class such as classid, mode, medium etc.

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	con_medium_guid	Text
Scl_id	Text	cls_id	Text
con_mode_guid	Text	cls_name	Text

12) Table Name: Sectiontbl.

Description: This table stores the details of a section like Mode, Medium, Class, Section Id, Name etc.

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	cls_guid	Text
scl_guid	Text	sect_id	Text
con_mode_guid	Text	sect_name	Text
con_medium_guid	Text	Strength	Number

13) Table Name: Con_Student_tbl.

Description: This table stores details of students like Mode, Medium, Class, Section, Personal Details, Optional Subjects etc.

Table Structure:

Field Name	Field Type	Field Name	Field Type
id	Text	pstate	Text
scl_id	Text	pctry	Text
mode_id	Text	ppin	Text
medium_id	Text	pphone	Text
cls_id	Text	cadd1	Text
sect_id	Text	cadd3	Text
stud_id	Text	cstate	Text
stud_name	Text	cctry	Text
date_of_birth	Datetime	cpin	Text
sex	Text	cphone	Text
nationality	Text	pers_email_id	Text
religion	Text	prnt_email_id	Text
community	Text	etest_det	Text
mother_tng	Text	admtd_dt	Datetime
medical_stat	Text	scholar_type	Text
disabilities	Text	scholarship_det	Text
weight	Number	co_cur_det	Text
height	Number	present_class	Text
photo	Image	Present_sect	Text
blood_group	Text	prev_scl_det	Text
id_marks	Text	tc_det	Text
guardian_name	Text	conduct_det	Text
fmonthlyincome	Money	relvd_dt	Datetime
Padd1	Text	relvd_desc	Text
Padd3	Text		

14) Table Name: Con_staff_tbl.

Description: This table stores staff details like mode, Medium, Personal Details, Skill Set etc.

Table Structure:

Field Name	Field Type	Field Name	Field Type
id	Text	City1	Text
scl_guid	Text	City2	Text
con_mode_guid	Text	State1	Text
con_medium_guid	Text	State2	Text
staff_id	Text	Pin1	Text
nature	Text	Pin2	Text
name	Text	Country1	Text
Dob	Datetime	Country2	Text
Sex	Text	Ph1	Text
Nationality	Text	Ph2	Text
Religion	Text	Email	Text
Community	Text	Join_date	Datetime
Weight	Number	Education	Text
Height	Number	Exp_detail	Text
Photo	Image	Desg	Text
Blood_group	Text	Grade_guid	Text
Guardian_name	Text	Agreement	Text
Marital_status	Text	Relieved_date	Datetime
Add1	Text	Relieved_desc	Text
Add2	Text		

15) Table Name: attach_timeslot_tbl

Description: This table is used while attaching timeslot to classes.

Table Structure

Field Name	Field Type	Field Name	Field Type
Scl_guid	Text	Class_guid	Text
Con_mode_guid	Text	Timeslot_guid	Text
Con_medium_guid	Text		

16) Table Name: con_cls_fees_tbl

Description: This table is used while attaching fees to classes

Table Structure:

Field Name	Field Type	Field Name	Field Type
scl_guid	Text	full_amount	Money
mode_guid	Text	inst_amount	Money
medium_guid	Text	inst_no	Number
cls_guid	Text	start_date	Datetime
fees_guid	Text	due_date	Datetime
academic	Text		

17) Table Name: attach_res_tbl

Description: This table is used when resources are attached to section

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	Conres_id	Text
Scl_id	Text	Cls_id	Text
Mode_guid	Text	Set_id	Text
Medium_guid	Text		

18) Table Name: Staff_history_tbl

Description: This table is used to store staff history, ie, details of staff who have left the school.

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	City1	
Scl_guid	Text	City2	Text
Con_mode_guid	Text	State1	Text
Con_medium_guid	Text	State2	Text
Staff_id	Text	Pin1	Text
Nature	Text	Pin2	Text
Name	Text	Country1	Text
Dob	Datetime	Country2	Text
Sex	Text	Ph1	Text

Nationality	Text	Ph2	Text
Religion	Text	Email	Text
Community	Text	Join_date	Datetime
Weight	Text	education	Text
Height	Text	Exp_detail	Text
Photo	Image	Desg	Text
Blood group	Text	Grade_guid	Text
Guardian_name	Text	Agreement	Text
Marital_status	Text	Relieved_date	Datetime
Add1	Text	Relieved_desc	Text
Add2	Text		

19) Table Name: leave_staff_tbl

Description: This table stores the leave details of staffs

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	Avai_pl	Number
Scl_id	Text	Avai_cl	Number
Staff_id	Text	Avai_sl	Number

20) Table Name: skillset_tbl

Description: This table stores the skill set of staffs.

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	Cls_guid	Text
Scl_id	Text	Subj_guid	Text
Mode_guid	Text	Staff_guid	Text
Medium_guid	Text		

21) Table Name: student_history_tbl

Description: This table stores history details of students, ie, details of students who have left the school.

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	Pstate	Text
Scl_id	Text	Pctry	Text

Mode_id	Text	Ppin	Text
Medium_id	Text	Pphone	Text
Cls_id	Text	Cadd1	Text
Sec_id	Text	Cadd3	Text
Stud_id	Text	cstate	Text
Stud_name	Text	Cctry	Text
Date_of_birth	Datetime	Cpin	Text
Sex	Text	Cphone	Text
Nationality	Text	Pers_email_id	Text
Religion	Text	Prnt_email_id	Text
Community	Text	Etest_det	Text
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Height	Number	Present_class	Text
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Blood_group	Text	Prev_scl_det	Text
Id_marks	Text	Tc_det	Text
Guardian_name	Text	Conduct_det	Text
fmonthlyincome	Money	Relvd_dt	Datetime
Padd1	Text	Relvd_desc	Text
Padd2	Text		

Operation Module:-

1) Table Name: Pen_tbl

Description: This table contains the details of the allotted penalty information of students.

Table Structure:

Field Name	Field Type	Field Name	Field Type
scl_guid	Text	Due_date	Datetime
mode_guid	Text	Frq_no	Number
medium_guid	Text	Acad_year	Text
collection_id	Number	Penalty_id	Text
stud_guid	Text	Penalty_date	Datetime
Cls_guid	Text	Charged_by	Text

Sect_guid	Text	Description	Text
Pen_guid	Text	Charge_type	Text
Type	Text	Fees_guid	Text
Collection_amt	Money	Fee_freq_no	Number
Collection_mode	Text	Status	Text
Cheque_details	Text	Fin_year	Text
Collection_date	Datetime	Contguid	Text
Staff_guid	Text		

2) Table Name: Cls_ass_tbl

Description: Assessments are attached with maximum, minimum mark and gained marks are posted. This table stores all such assessment details.

Table Structure:

Field Name	Field Type	Field Name	Field Type
scl_guid	Text	Asses_mark	Number
Mode_guid	Text	Maxasses_mark	Number
Medium_guid	Text	Minasses_mark	Number
Cls_guid	Text	Submax_mark	Number
Sect_guid	Text	Submin_mark	Number
Sub_guid	Text	Grade	Text
Stud_guid	Text	Result	Text
Assess_guid	Text	Staff_guid	Text
Asses_type	Text	Remarks	Text
Asses_dt	Datetime	Calender_year	Text
Eval_dt	Datetime		

3) Table Name: Att_stud_tbl

Description: This table contains the daily attendance details of the students like full-day or half-day, on duty etc.

Table Structure:

Field Name	Field Type	Field Name	Field Type
Id	Text	Att_date	Datetime
Scl_id	Text	Abs_status	Text
Cls_id	Text	Reason	Text
Sect_id	Text	Remarks	Text
Student_id	Text	Staff_type	Text

Day_mode	Text	Staff_id	Text

4) Table Name : Att_staff_tbl.

Description: This table contains the daily attendance details of the Staffs like (Full day or Half day, on duty, leave type-pay leave, sick leave, casual leave)

Field Name	Field Type	Field Name	Field Type
Id	Text	Abs_status	Text
Scl_id	Text	Leave_type	Text
Mode_id	Text	Reason	Text
Medium_id	Text	Remarks	Text
Staff_id	Text	App_dt	Datetime
Abs_dt	Datetime	Tot_day	Number
Ses	Text		

5) Table Name: Fee_coll_tbl

Description: This table contains the fee details of a student. (Student, fee id, install no, mode-cash/bank, collected by, amount)

Table Structure:

Field Name	Field Type	Field Name	Field Type
Scl_guid	Text	Due_dt	Datetime
Mode_guid	Text	Acad_year	Text
Medium_guid	Text	Staff_guid	Text
Cls_guid	Text	Collection_date	Datetime
Sect_guid	Text	Collection_mode	Text
Stud_guid	Text	Cheque_details	Text
Fee_guid	Text	Collection_id	Text
Inst_no	Number	Status	Text
Collection_amt	Money	Fin_year	Text
Type	Text	contguid	Text
Start_date	Datetime		

TESTING

5.1 Testing Concepts

Software is only one element of a large computer based system. Ultimately Software is incorporated with other system elements (ex New hardware) and a series of system integration and validation tests are conducted. System testing is actually a series of different tests whose primary purpose is to fully exercise the computers based system.

Testing presents an interesting anomaly for the software development. The testing phase creates a series of test cases that are intended to 'Demolish' the software that has been built. A good test case is one that has a high probability of finding an as yet undiscovered error. A successful test is one that uncovers an as yet undiscovered error.

Testing process brakes application down in to two main parts:

Unit Testing

In Unit Testing the modules of the system are tested as individual unit. Each unit has definite input and output parameters and often a definite single function.

System Testing

In System testing the system is tested as a whole; that's inter communication among the individual units and functions of the complete system is tested.

Testing for this system was done in 3 steps.

- Testing the function performance of each modular component.
- Testing the interface of software and its function with live data.
- Testing for user acceptance and to see if all user requirements have been met.

SYSTEM IMPLEMENTATION

6.1 Implementation

After the completion of proper testing and validation the system has to be implemented. Implementation includes all those activities that take place to convert from old system to the new system.

The new system is the replacement of the existing manual system. so proper implementation is essential to provide a reliable system to meet organization requirements.

6.2 User Training

A well designed system, should be operated and used properly otherwise it could fail. Training the users is important, as if not done well it could prevent the successful implementation of am information system. Both system operators and users need training. During their training, they need to be given a trouble shooting list that identifies possible problems and identifies remedies for the problem.

The Training should cover:

- Familiarization with the processing system itself.
- Training in using the application i.e. the software.
- Good documentation is essential, but this cannot replace training.

CONCLUSION

Conclusion

All the Two modules of the project works perfectly and is all set for implementation. This project has been very useful and educative. It has helped in understanding practical problems in real life situation. The study conducted has been very useful to the organization as well as to me. It has given completeness to the education received by us during the past three years of degree course.

The system has been developed for the conditions existing at present. The system being flexible can be further enhanced as per user's requirement. A good amount of user-friendly features have been incorporated in this system and it is possible for any user to exploit these features to get the maximum benefit.

The programming techniques used in the design of the system provide a scope for further expansion and implementation of any changes, which may occur in future.

The system has been tested with sample data covering all possible options for each function. Its performance is satisfactory. The system is under implementation. The system is developed with the specifications and abiding by the existing rules and regulations of the company.

7.1 Future Enhancements

The software has been developed with the present working condition and environments in mind. The current environment is a fast growing area and new features, new technologies and different work styles are expected. Hence this software has been developed with near future needs in mind and it has appropriate slots for any future modifications.

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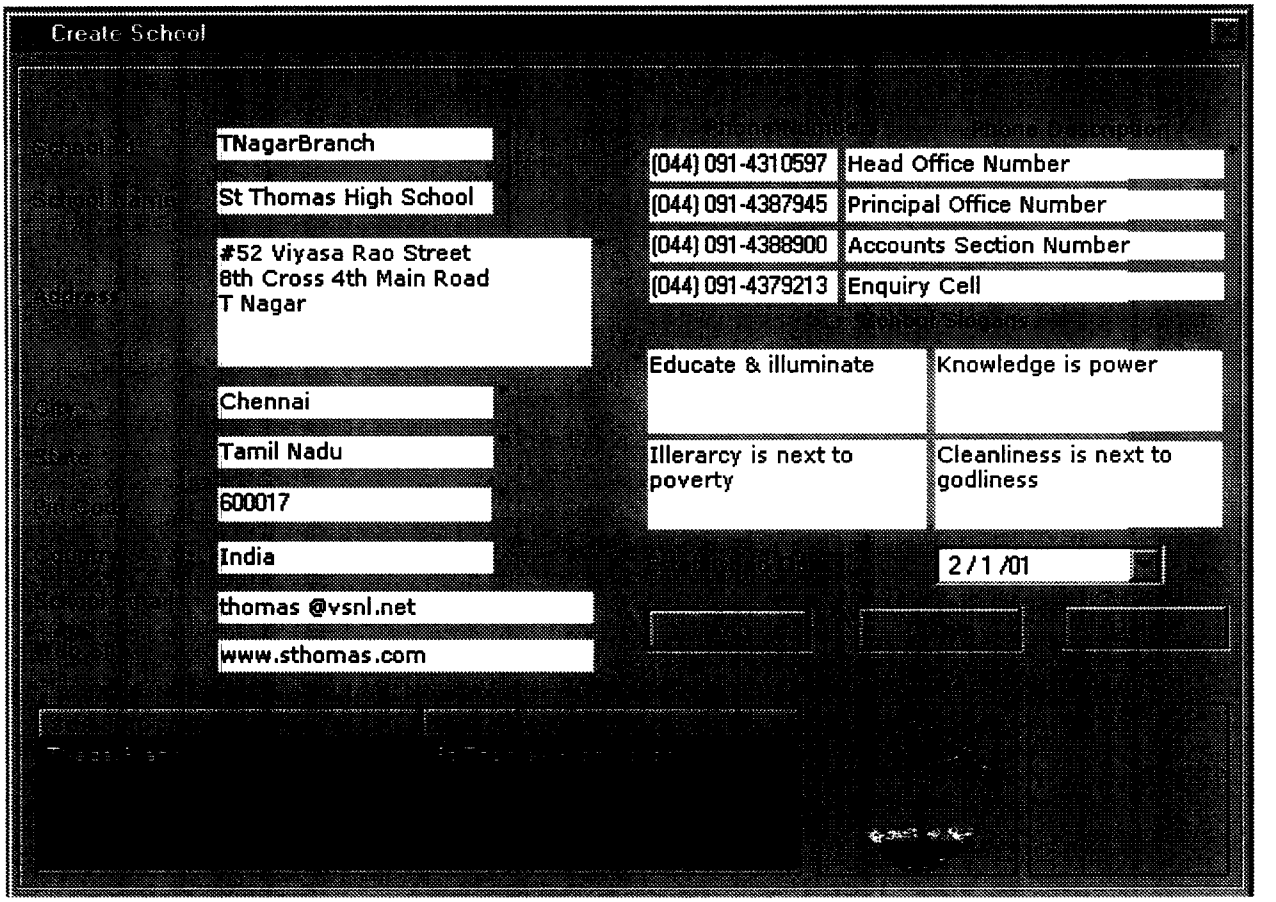
APPENDIX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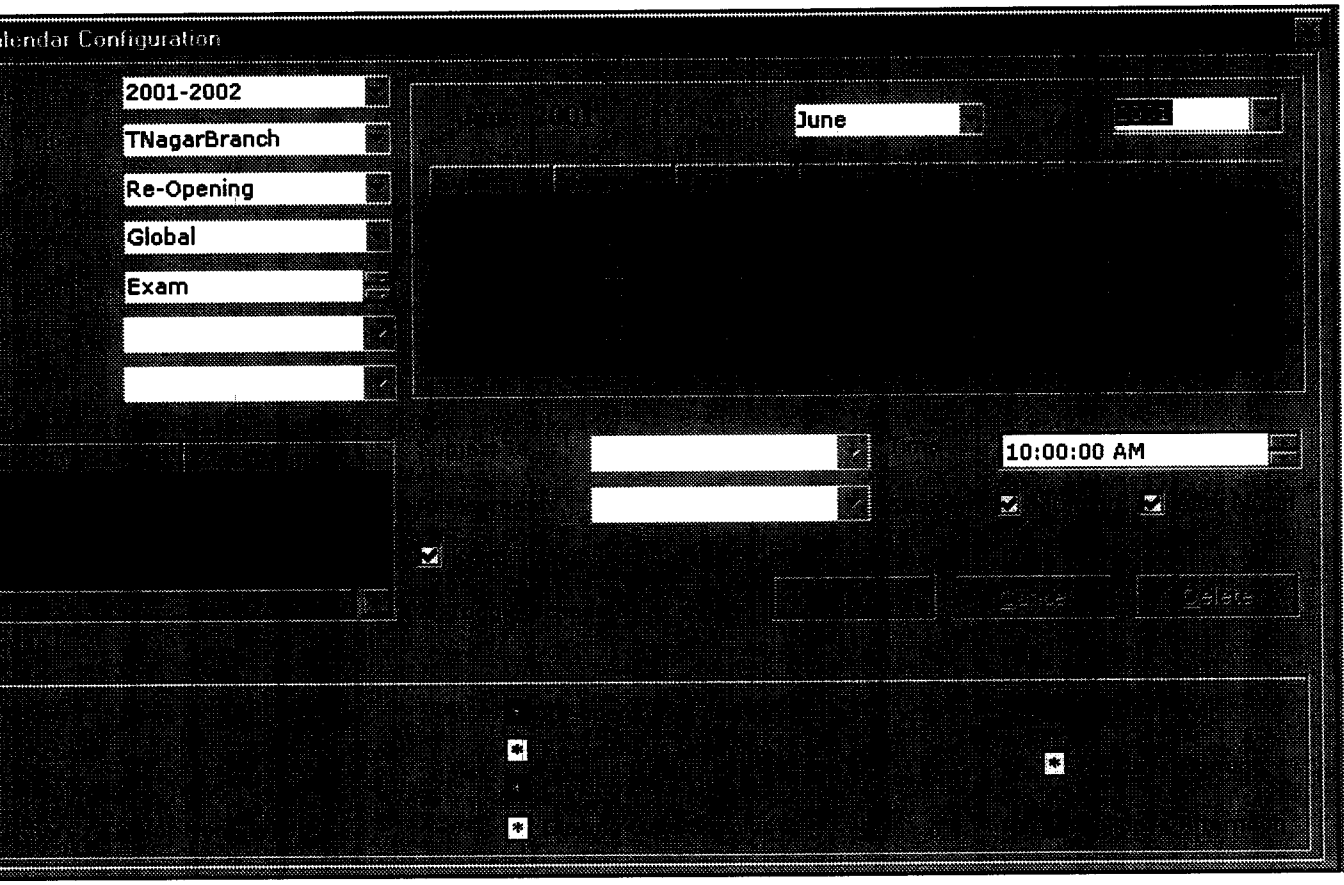
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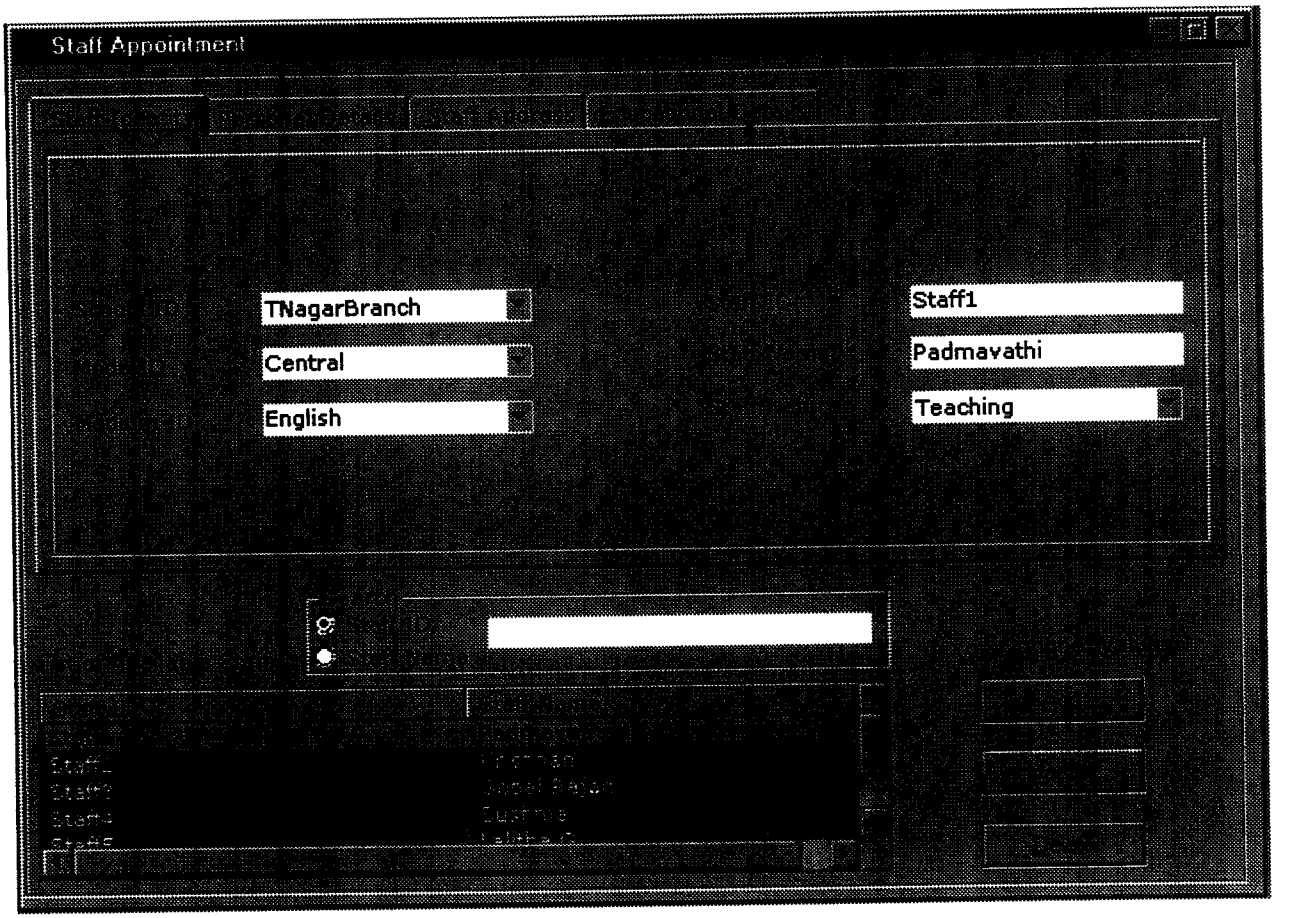
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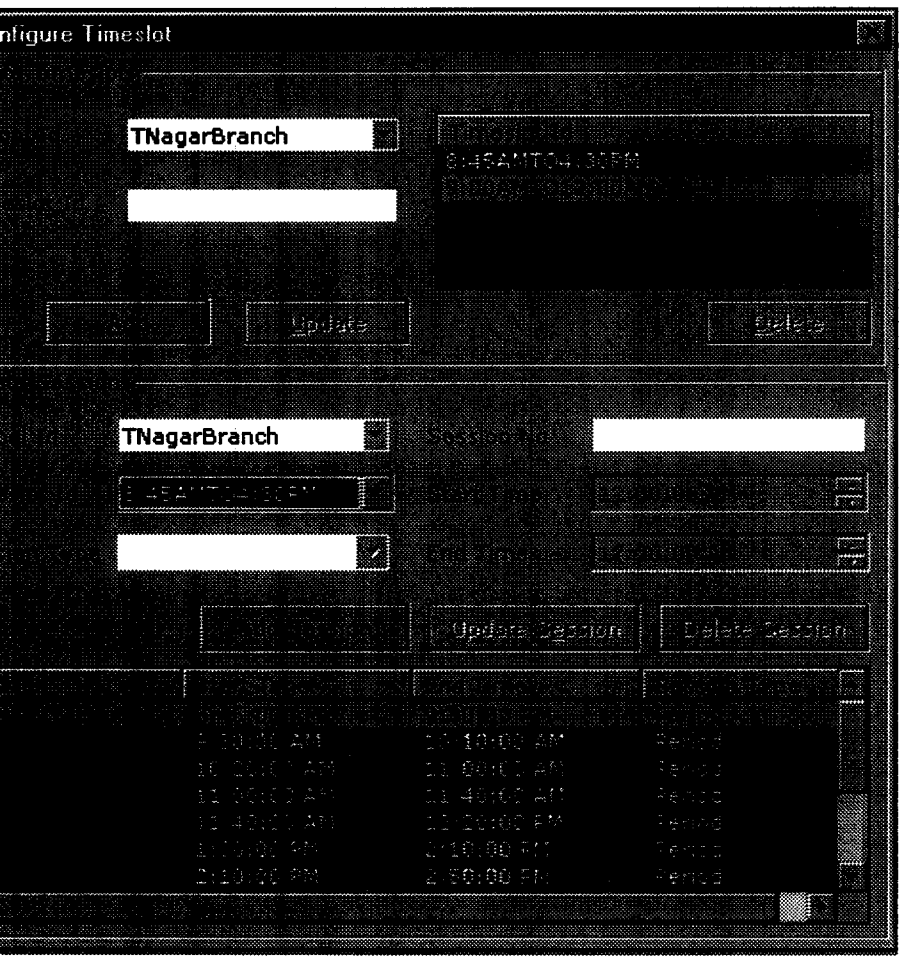
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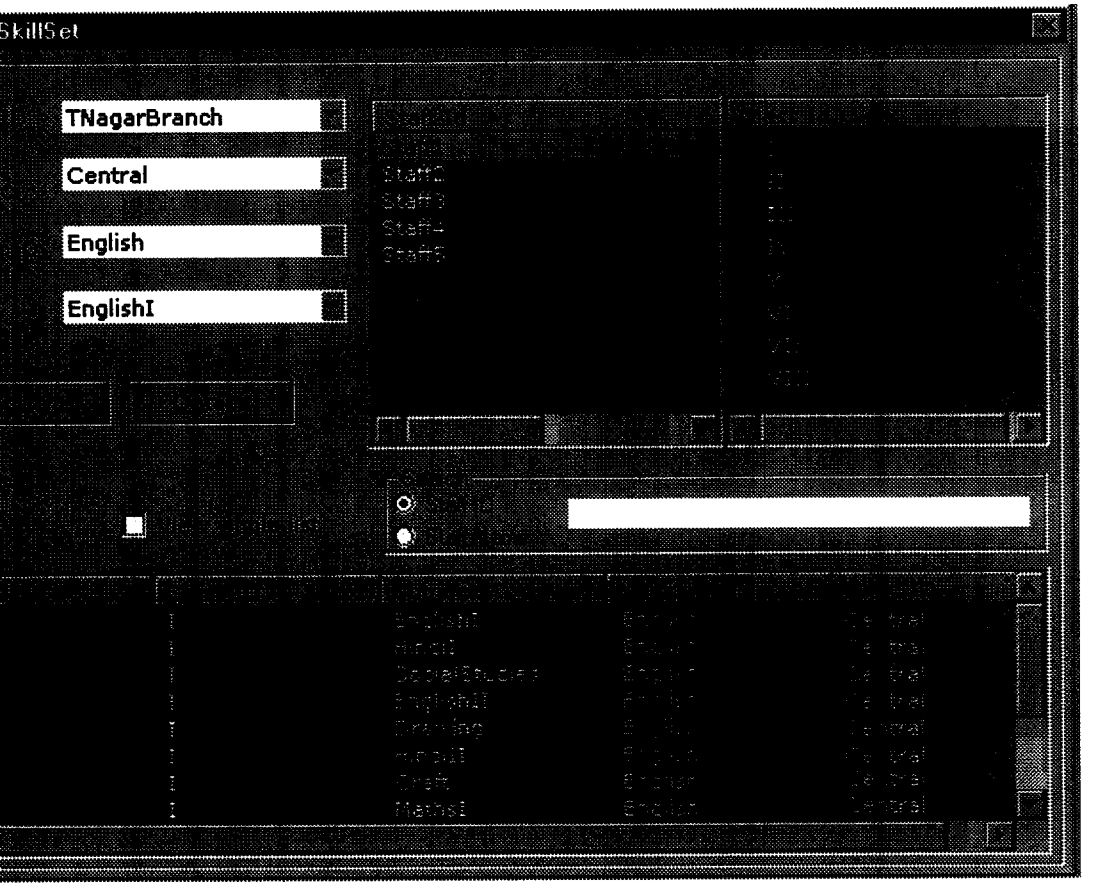
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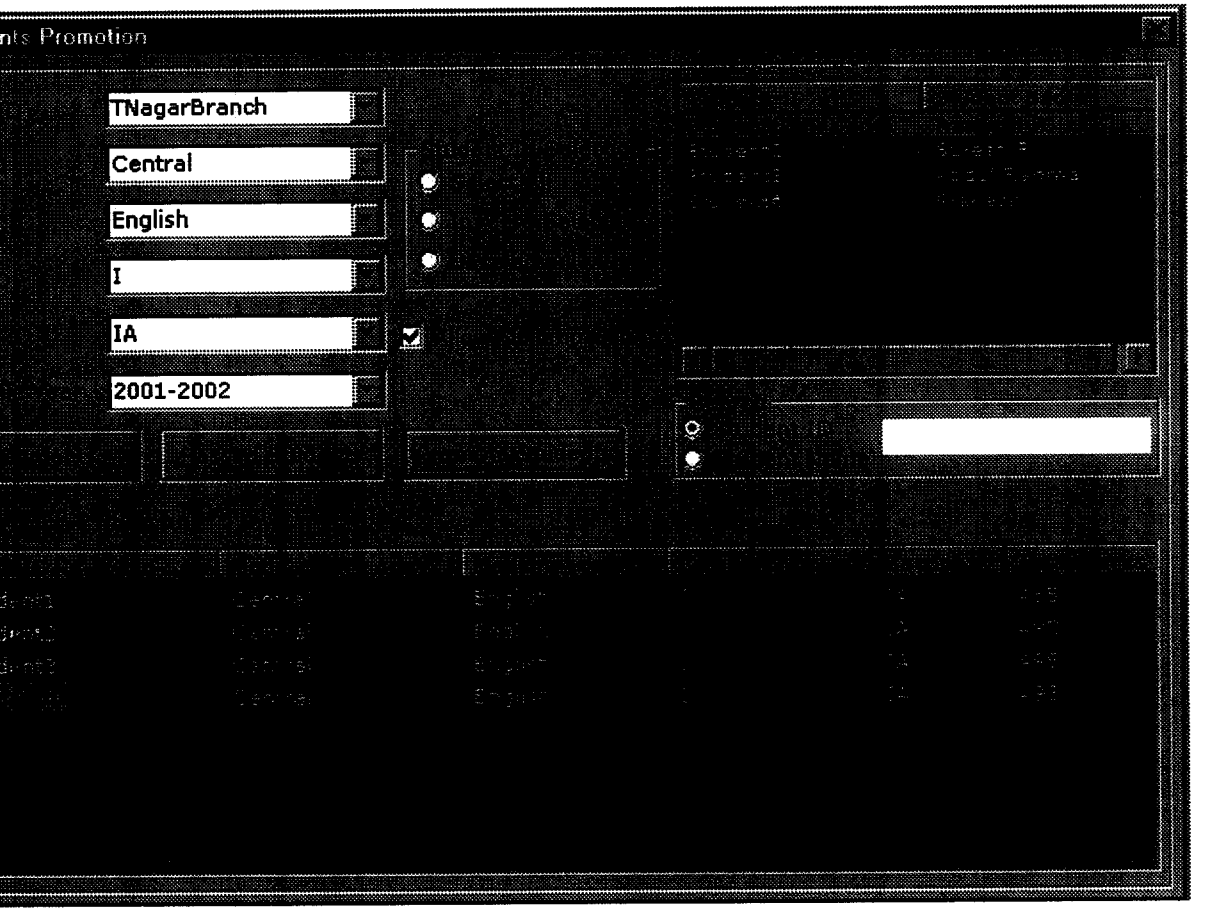
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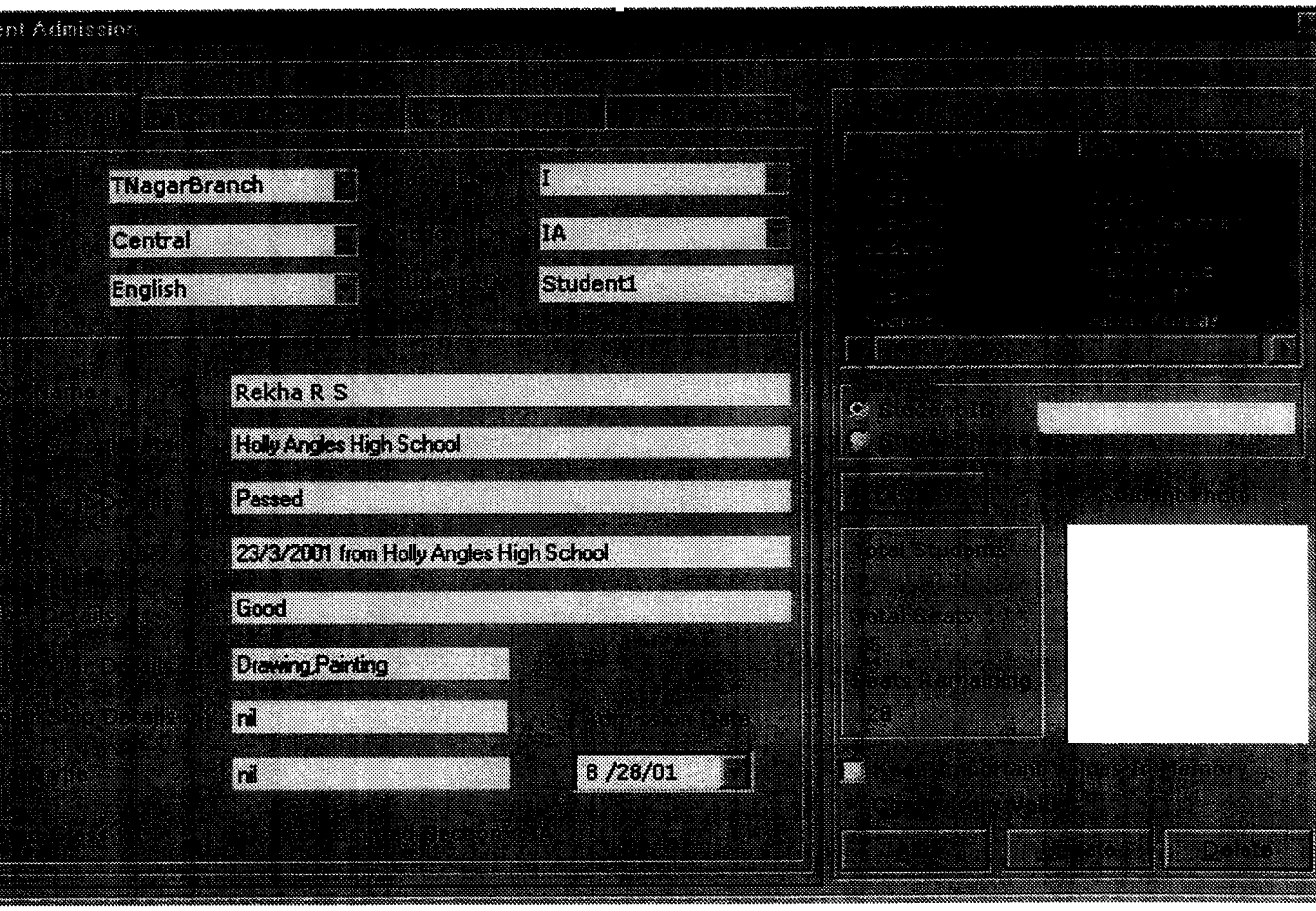

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