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SCHOOL INFORMATION SYSTEM



A project report submitted to QUAID-I-AZAM UNIVERSITY a partial Fulfillment of the requirement for POSTGRADUTE DIPLOMA IN

COMPUTER SCIENCE.

BY: SAJID MEHMOOD FGEI(C/G)

&

ABDUS SATTAR

QUAID-E-AZAM UNIVERSITY
ISLAMABAD
JUNE 2003.



FOR F.G TECHNICAL HIGH SCHOOL CHAKLALA RAWALPINDI



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FINAL APPROVAL

It is certified that we have read the project submitted By MR. SAJID MEHMOOD AND MR.ABDUS SATTAR JAVED It is our judgments that this thesis study is of sufficient standard to warrant its acceptance by the Quaid-I-Azam University Islamabad for the post graduate, Diploma In computer sciences.

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DEDICATION

To our dearest parents, brothers and loving family for their moral and Financial support encouraged us in our studies and to all our friends, class fellows who have helped us in our project and gave us courage and support in the completion of our final Project.

ACKNOWLEDGEMENT

Success is never accomplished alone; there are many people around us who helped us to accomplish the desired goal? Although it is difficult to express our indebtedness in words for all their help and co-operation during project course. But it is the only way for appreciating their efforts. First of all all praise to Allah the almighty that created us

and blessed us with knowledge and wisdom.

We wish to express our heartiest gratitude and acknowledgement is due to Mr. ABDUL SUBHAN for his enduring support and guidance through out the project.

Thanks to my school administration who provide all relevant information about school to making our project successful and meaningful.

We would like to admit our brothers, and family whose prayers are source of determination for us.

Special thanks to our team mates for their joint efforts. It was indeed their teamwork, which made it possible to accomplish such a big task in short time.

And last but not the least we are really grateful to BRIG. ABDUL KHALIQ (DIRECTOR FGEI C/G) who initiated PGD course in computer science in all C/G institution spread all over Pakistan.

We are second badge of C/G employees to avail this facility.

> SAJID MEHMOOD FGEI (C/G) ABDUS SATTAR JAVED

PROJECT BRIEF

PROJECT TITLE:

SCHOOL INFORMATION SYSTEM

OBJECTIVE:

TO COMPUTERIZED SCHOOL

INFORMATION

UNDER TAKEN BY:

SAJID MEHMOOD

& ABDUS SATTAR JAVED

SUPERVISED BY:

MR. ABDUL SUBHAN

STARTING DATE:

APRIL 2003.

COMPLATION DATE:

JULY 2003.

LANGUAGE USED:

ORACLE 7/DEVELOPER 2000.

SYSTEM USED:

PENTIUM-III

OPERATING SYSTEM: WINDOW.98

ABSTRACT:

School information in computerized system to assist the administration in maintaining the record of every student enrolled in the school promptly and efficiently. By implementing this system administration personal would be relieved of the cumbersome and abstruse ledgers. It will remove the existing problems and drawbacks as will as providing accuracy and efficiency. Through this system any information about the student can be obtained in seconds. The following reports is intend to briefly point out the drawbacks of the existing system and to highlight the benefits of computerization. The system developed is flexible, comprehensive and user friendly. By simply typing the adm-no of the student a comprehensive detail will be displayed or printed as desired by user. It will give a detail and easy way to follow the description of the system designing and data processing of the whole school information system.

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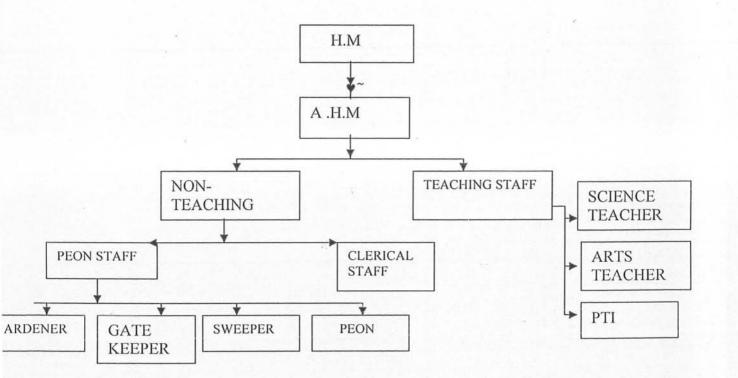
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SCHOOL INFORMATION SYSTEM CHAPTER-1 INTRODUCTION

CHAPTER-1

ORGANIZATION HIERARCHY



1.1 INTRODUCTION OF ORGANIZATION

This institution is situated in very important place in Rawalpindi cantt. It is located near International Airport Islamabad and PAF base. This institute was established in 1954. The cantonment board primarily managed it Rawalpindi. In 1975 Federal Ministry of education took over the charge.

Later on 1977 Army Education Corp under G.H.Q Rawalpindi took charge all cantt Board Institutions. These institutions were named as Federal Government institutions. This institute is from class 6th to 10th now in morning shift.

Only science subjects are taught in high classes. This institution is biggest in Chaklala cantt. There are about 40 staff members and 1100 students.

The school activities and environment is as follow.

1.2- MAIN SECTION:

- Admission section.
- · Fee section.
- Student information section.
- · Teacher information section.
- Examination section.
- · Timetable.

1.3- ADMISSION SECTION:

This section is responsible for taking admission of the candidates and providing them necessary information about the admission. The production of merit list is also responsibility of this section. All the record of appearing candidates is kept safe and is important section of the school.

1.4-STUDENT INFORMATION SECTION:

In this section there are many sub sections. This section provides information about the student, his roll number, address, age and all his particular. In this section we can check the student's class his teacher name and his admission number.

1.5-EXAMINATION SECTION:

In this section examination related record is maintained. This section produces three types of exams.

- 1- 1st term exams.
- 2- Mid term exams.
- 3- Annual exams.

1.6-FEE SECTION:

This section maintains the records of fee and funds of the students.

1.7-EXTRA ACTIVITY SECTION:

This section maintains the records of activities of the students weather they are involved in good or bad activities. So that we can see the character of each student and each student may be checked whole time.

1.8-EXPENDITURE SECTION:

This section is responsible to maintain the records of all the expenditures regarding to maintenance utilities, payments to staff purchase of different

Assets and 0ther miscellanies expenditure in the school. This section also maintains the record of school expenditures. An account is responsible to maintain the records of different expenses and to pay for them.

SCHOOL INFORMATION SYSTEM CHAPTER-2 EXISTING SYSTEM

CHAPTER NO -2

2.1 STUDY OF EXISTING SYSTEM

The animation linked directly with this project is a school. All the process performed in schools is same. Every one would be know, that all function are being performed manually which are lies in many ways. All procedures such as student admission, fee collection, timetable, teachers information record, generation of date sheet, making of papers, result compilation and many others are done manually.

Teachers and staff members carry all these out. Record keeping is tedious job, for instance data is records on registers and files. To manage this work multiple entries of each record is necessary. Time gives authority, so to mange's time is really a big problem faced specially in searching the data records. Time also consumed while managing single data on many registers for proper entry. Many people's even whole staff has to involved into data entry of the school data in one way or the other. So there is need to change this schedule and format data with involvement of various people. 2.2 problems specification

But problems lie in many ways. For The administration and staff of the school has been working with full dedication for the noble cause bringing up new generation with full capabilities. All functions in the school are performed efficiently instance.

TIME FACTOR:

The biggest problems faced by institution are vast age of time. A lot of time is wasted during updating the data and retrieval of data.

REDUNDENCY:

Data of the similar type has been stored at different locations. It is most common draw back in manual system.

INONSISTENCY:

Some data is stored in different locations so data is not consistent. When it is needed to modification then data have to change on all these positions.

EXTRA LABOR:

Existing system is manual due to which much time is wasted during the operation, resulting in time wasting and extra labor.

MODIFICATION:

There are specific registers for specific purposes. There is no extra page available in the school register for modification. If any how it then all records have to be altered accordingly.

DATA SECURITY:

No data security as any one can change the data in this file processing system.

NO PROPER HELP:

The existing system depends upon some skilled persons. Absence of any one, serious problems arises in the management. Because there is no proper help available about the existing system.

2.3-Drawback In the Existing System:

I am a teacher of this institute, so I know the draw back of this manual system.

So in the existing system, there is no coordination between the dues section, examination section, admission section and other student's activity section. So the information is placed at different places casing duplication of data. Due to this many problems take placed.

As several sections are working simultaneously, if a certain section needs a particular information. It will have to request the other section to provide the required information. If a student is absent for a very long time, then examination section will have to be informed for necessary action.

Since decision may need complete information, if the head of the institute wants to take the immediate decision on a particular matter then all the information is to be searched and then decision is made on the basis of the available information. This takes a lot of time. This method of information collection is full of errors and these errors may lead to wrong decision.

No scientific method is applied to collect the required information. It is very difficult to compile the huge amount of information about the students, which are written in the registers or in the folders. The will be placed in to the files cabinets and file cabinets will be placed in to different rooms, making the searching of information difficult.

As the information processing is done manually. It takes a lot of time in concentration to get the require information, but the chance of errors remains. For example preparation of student's examination result, first the result of each subject and each class is made then the result card of each student is compiled and then the result of the whole institution is prepared.

As several steps are involved with several persons engaged in it, causing an increase in chance of errors. When all the stages of result preparation are performed then several different types of reports concerning to students, teachers, classes, subjects and the institution are prepared. As all this is done manually so these are not error free.

When particular information about a particular person is to be inserted, updated, or deleted or retrieve, active some search is to be performed. First to locate that particular record location and then perform the required operations for example updating which causes overwriting that looks untidy. Thus the ongoing process is inefficient, boring and untidy.

To keep all the information of the persons involved in this system the institution required huge amount of stationary, furniture and sufficient number of employees.

So many amounts will be spent on all these. It is difficult to maintain the privacy and security of information because paper files may be easily accessed by the unauthorized person or may be destroyed or stolen.

Thus a computerized system is proposed to provide accurate reliable and timely information to the management.

2.4-ANALYSING THE EXESTING SYSTEM:

The proposed system is analyzed on the following bases:

1-What is the existing system?

2-What types of problems and difficulties are faced by the students?

3-How can these difficulties be removed?

PROPOSING THE NEW SYSTEM:

The new system is proposed on the following steps:

> DESIGNING OF SYSTEM:

To design system which need the demand of students.

> REMOVAL OF FAULTS:

Steps are taken for the removal of faults.

> DEVELOPING SOFTWARE:

Software developments.

> REDUCE THE MANUAL OPERATION:

Steps to reduce the manual operation.

> FAST RETRIEVAL OF INFORMATION:

Steps taken to achieve fast retrieval of information.

2.5 OBJECTIVES OF THE PROJECT:

Presently the system is functioning manually, which is time consuming, inaccurate and economical. In order to remove these difficulties and hurdles, the objectives of the new system are formed. The main aim to develop and implement a computerized school information system.

> QUICK AND EASY RETRIEVAL:

To computerize the school information system for quick and easy retrieval and for proper maintenance of records.

> PRODUCE NUMBER OF REPORTS:

To produce number of reports in time and easy to prepare.

- > QUERIES: To enter queries.
- > TIME SAVING:

To reduce time involved in the existing system.

> DATA ENTRY:

To make data entry as few as possible.

> ACCURACY:

Accuracy is an important aspect of new system.

- > UP-TO-DATE INFORMATION ON DEMAND: Up-to-date information should be available on demand.
- > USER FRIENDLY INTERFACE: To provide a user-friendly interface.

SCHOOL INFORMATION SYSTEM CHAPTER-3 THE PROPOSED SYSTEM

CHAPTER NO 3

PROPOSED SYSTEM

3.1 Introduction:

In the existing system there are many problems which
Is facing by the existing system. For solving these problems we have
to proposed a system, which solves all the problems. As mentioned
Earlier that this proposed system is a computerized systemize. In this
System we have to make the software, which solve all the problems.
For the proposed system first of all it is necessary to define the
Scope of the proposed system or scope of the project.

3.2 SCOPE OF THE PROPOSED SYSTEM/PROJECT:

Scope of the proposed system is to design an efficient and errorless student Information system. The proposed system will be capable to keep the data about the student admission, student dues, student external Activities, examination, teacher information, teacher qualification, teacher external duties and so on.

3.3 OBJECTIVES OF THE PROPOSED SYSTEM:

Objectives of the proposed system are given bellow.

- > To maintain information in a systematic manner such that the data redundancy is removed.
- > To decrease the time for file access and file retrival.i.e. The system

is efficient.

- To develop a system in which there is no chance of accidental input Of invalid data.i.e. there some check on the inputting data.
- To develop a system which easy to use. it should generate appropriate message to alert the user if the take wrong step.
- > To provide the consistency in the whole database.
- > To develop a system which flexible enough to accept the changes in the future.i.e. have the maintenance.
- > To develop a system that has security.i.c.only authorized user can access the system.
- > To develop a system which has a backup copy.

> To develop a system for which there is no requirements of more space, stationary and manpower.

S/W AND H/W SELECTION:

3.4-SOFTWARE SELECTION:

There are three aspects of a DBMS, which are Inputs, outputs and the programs that manage all the operation and Storage of information besides this programming is also important.

Because it controls both the input and output as well as storage of the information inside the database. Thus it very important to choose a suitable s/w, while keeping in mind all the aspects of problems from any analyst point of view oracle/developer 2000 seems to be the most appropriate for the development of this project.

3,5-HARDWARE SELECTION:

Following H/w will be used in the development of the system.

Main processor 500 MHZ

Ram 128 M B Hard disk 8.4 GB

Monitor VGA color digital monitor

Printer. DOT Matrix/Laser

Operating system Window 98.

WHY ORACLE USE?

The oracle use due to the following reasons.

> 3.6-RELATIONAL DATABASE LANGUAGE: -

Structure Query language is relational database language plays an important role in the retrieval of information. Oracle fully supports the SQL language, which means that an application developed in oracle can also run with SQL based DBMS products.

> 3.7-OBJECT ORIENTED APPROACH: -In programming world, object oriented analysis approach is the finest, advanced and reliable approach. All the work in oracle/developer 2000 is done using object oriented approach.

> 3.8-BUILT IN SECURITY: -

Oracle provides an adequate number of built in subprograms, in the context of security, that are quite useful at the time of system development. These built-in save a lot of programmer's times.

> 3.9-MACHINE INDEPENDENCE:>

Oracle is a machine independent i.e. it can be installed and run on a variety of machine such as IBM, MACINTOSH, and NEC etc.

> 3.10-DISTRIBUTED ARCHITECTURE: -

Because of oracle's distributed architecture it allows data and application to lie on multiple computers and still communicate Very efficiently.

SCHOOL INFORATION SYSTEM CHAPTER-4 SYSTEM DEVELOPMENT

SYSTEM DEVELOPMENT IMPLEMENT&TESTING

SCHOOL INFORMATION SYSTEM CHAPTER-4 SYSTEM DEVELOPMENT

SYSTEM DEVELOPMENT IMPLEMENT&TESTING

CHAPTER NO 4

SYSTEM DEVELOPMENT IMPLEMENT AND TESTING:

4.1 INTRODUCTION:

After the detail study of the existing system and design of the proposed system the next step is the system development, system implementation and system testing.

System development is the process in which we develop the system to achieve the requirements, goal and objective of the proposed system. During development phase the s/w developer attempt to describe how data structure to be design and how the design of the system will be translated into programming language and testing is performed.

* 4.2 DBMS:

A DBMS is basically a computerized record keeping system I.e. it is a computerized set who purpose is to keep all the data, information and make the information available on demand.

*** 4.3 SYSTEM DEVELOPMENT:**

After the designing of the proposed system it is required to develop a system. Some of the most common approaches are:

- > TOP DOWN APPROACH
- ▶ BOTTOM UP APPROACH.
- ► MIXED APPROACH.

> 4.4 TOP DOWN APPROACH

In this approach the development with a scheme containing high level abstraction and successive Top-down refinement are applied for example a main program is design first and then its modules are written.

4.5 BOTOM-UP APPRACH:

The developer starts with a scheme containing basic abstractions.

For example all sub modules are written first and then all modules are linked with main module.

4.6 MIXED APPROACH:

In this scheme inserted of following any particular approach throughout the design the requirements are partitioned while using topdown approach and part of scheme is designed, for each partition using bottom-up approach, then varies scheme parts are combine.

APPROACH USED:

Out of all these approaches. We have selected the bottom-up approach. In this approach the programs are separately developed and checked and after that they are linked with main module. The importance of this approach is that each and every module can be tested separately and then linked With main menu to ensure that the system is error free.

4.7 DEVELOPER/2000:

Developer/2000 was selected the product from oracle corporation that make it easy to build data base applications. It handles most of the issues elegantly and well using the features of oracle.

4.8 ORACLE SQL * PLUS:

Oracle SQL* PLUS is an interface through Which SQL commands may be entered and executed. The SQL data base language allows us to store and retrieve data in oracle.

4.9 ORACLE * FORMS:

The form component of developer/2000 is the environmental component, form is develop from module. These forms provide fast and easy data entry, updating, deletion and quires to an oracle database.

4.10 ORACLE * REPORTS:

The report component of developer/2000 is used to create different reports in a variety of styles. Reports can be of a single database table with columns heading, columns of data base information system and total as desired.

4.11-PROCEDURAL LANGUAGE:

ORACLE provide a powerful procedural language extension to SQL known as PL/SQL. PL/SQL significantly increase application performance developer productivity, while enhancing the power and functionality of other oracle products. With the help of this facility we can write procedures and functions just like any procedural language. A number of other facilities are also structures for example oracle provide import/export utilities with help of which it is possible to more structure along with data contained in these structures from system to another.

4.12-SYSTEM DEVELOPMENT:

Each system comprises of one or more component relating to one specific branch of a system. A description of system components is given below.

EDITOR:

Developer/2000 editors, which are:

PL/SQL editor.

Lay out editor.

Object navigator.

PL/SQL editor:

It is used to write triggers, program units, procedure etc. Lav out editor:

It used for creating, formatting and arranging interface items and graphics. It provides a complete set of drawing and editing tools.

Object navigator:

It is used to display editors. It provides work area for creating and modifying form objects.e.g it is used for creating a new block etc.

Forms: a form application represents a data in an online format consisting of a series of fields laid out in one or more windows. It provides a good way of executing and changing that information. We can enter the data by using a form. The main types of forms are simple form, master detail form, query form etc.

The layouts of the forms are given in appendix-A.

SCHOOL INFORMATION SYSTEM CHAPTER-5 USER'S GUIDE

CHAPTER NO.5

USER'S GUIDE:

5.1-Introduction

This chapter is specially designed for explanation that how the developed system works. This chapter will guide the user in detail that how he can get the full benefits from the system. And what types of features the system will provide. In this chapter we will discuss the different operations like insertion, deletion, record entry, record modification and the retrieval of the records etc for the users.

Login And Logout From The System:

Our developed system can be operated in multi-user environment. So when you get the services of a database administrator tasks of the system such as creating new user, keeping backup copies of the data as well as confirm to the efficient working of the system.

> There involves several steps before we use the developed software.

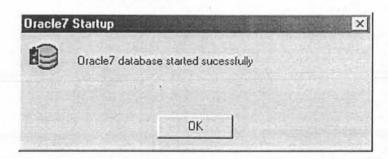
5.2 LOG IN AND OUT:

- > The first step is the installation of the operating system, which is the "Windows95 or Windows 98".
- > The next step is the installation of the "Oracle 7/ Developer 2000".
- > SQL*DBA is used to start and stop the oracle programs. It also provides the monitoring function and the maintenance.
- ➤ After installation stage we will have to create a user in "Oracle Navigator" and gave the user its limits (i.e. Roles and Privileges).
- > In the above the user's passwords must be set up for security reasons.
- > This password is used for login and logout.

USERNAME:

PASSWORD: *****

- > There appears a windows giving message that the database is starting,
- > After this a window will appears such as,



- > To run the system, write Developer Menu user name and password and then press "ENTER "key. So that the menu will be executed. After some time, the main menu appears on the screens in which we can use any option.
- Similarly in order to shutdown the database, click on "stop database"
 Icon is provided on the desktop.
- > Before using the system the following important points must be followed.

5.3 EDITING FIELDS:

> With the help of the "EDITING FIELD" a form layout is able to store and retrieve data to and from the database. So the editing field is a base unit in the form designing.

5.4 STATUS LINE:

- > The line which appeared on the screen which display the information of the current status of SQL*FORMS is called "STATUS LINE". It is usually the last line of the screen. It contains the following information,
- > It will indicate that the current field is scroll to the right side of the screen.
- > It will indicate that the current field is scroll to the left side of the screen.

Char Mode will indicate the number of records retrieved. Count counts the number of records retrieved.

5.5 FORMS In the forms we will enter and retrieve data from the database. In our project we used various form layouts.
5.6 MESSAGE LINE:

In a particular form layout the last line appeared is called the "Message Line". In this place the SQL*FORMS displays the messages and help.

5.7 RECORD MANIPULATION:

There are four operations on a database table.

5.8 ADD RECORDS:

If a user wants to add anew record, he/she will to adopt The following criteria.

- > The form, which he/she wants to insert, must be displayed.
- > Click the record menu item on the main menu and click "insert" Enter appropriate values for the different field on the form.
 - > Pressing <next arrow>key it will save this new record.
 - > If insert another record repeat the same process.
 - > After this simply press "save" icon button.
 - Press <EXIT> from the "ACTION" menu to return Main menu.

5.9 DELETE RECORDS:

In order to delete a record from table user should follow these steps.

Open the form corresponding to the table which a record has to be deleted, place the cursor on the first field of the form and click" REMOVE" from the "RECORD" menu of the form. This will remove

Only from the workspace but not from the database, therefore to remove it permanently press saves from toolbar.

5.10 RETRIEVE RECORDS:

When user to want retrieve the information from the database it canbe

Retrieved two different ways.

- 1- Display All Records in all tables.
- 2- Display specific Record from The table.

DISPLAY ALL RECORDS FROM TABLES:

Open the form corresponding to the table from which you want to access information, place the cursor position to first in the form layout

and CLICK "execute" from the query menu. Now press the down arrow keys on the keyboard to see the details of each record one by one. In this way you can see all records present in the table and of course also desired record for which you have done all this.

This method is not good enough in case when the tables contain large no of records and searching the required record in this time consuming job and required a lot of passion and concentration, therefore it is recommended to adopt the second approach.

DISPLAY SPECIFIC RECORD FROM THE TABLE:

Similarly in this case, open the form and place the cursor the first field in the form and click" ENTER" form the query menu of the form now enter a specific search criteria in the field and click" EXECUTE" from the query menu. You will see only those records, which are full filling the given criteria. The retrieved records may be one or more then one depending on given condition.

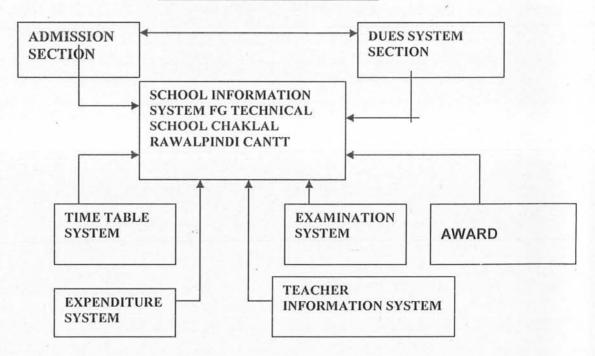
5.11-MODIFY RECORDS:

To modify already existing records is quite a simple job. For this you first need the records which you want to modify and for this you will have to repeat the same steps, place the cursor under the first(main) text field of the form click 'ENTER QUERY' from query menu of the form. This will give you the required records and now you can change any field of records by clicking it and changing its already existing value and to make these changes permanent click 'SAVE' from the action menu of the form or click save icon button on the toolbar.

CHAPTER-6

- 1-CONTEXT DIAGRAM
- 2- DATA TABLES
- **3- BATCHMAN DIAGRAMS**
- **4-ENTITY RELATION DIAGRAM**

6.1 CONTEXT DIAGRAM



6.2 STRUCTURE OF DATA BASE TABLES:

Data tables are used to store and retrieve information.

Following data tables are used in the system.

Table no 1.

Table name: Occupation. Primary key: occup id.

Purpose: this table describes the information about father

occupation of the student.

SPECIFICATION:

Field name	Type	Width	Description
Occup-id	Number	2	Occupation identification.
Occup- name	Char	30	Occupation name

Table no.2

Table name: sports.
Primary key: game id.

Purpose:

This table store information about student's

game.

SPECIFICATION:

Field name Type		Length		Description	
Game_id	4	Number	2 .	Game identification	
Game_ Name		Char	30	Game name	

Table no 3.

Table name Eactivity:

Primary key activity-id.

PURPOSE:

This table describes the extra activity of the students.

SPECIFICATION:

Field	Type	Width	Description
Activity-id	Number	2	Activity identification
Activity- name	Char	30	Activity name

Table no 4.

Table name class:

Primary key: class-id.

Purpose: This table describes the different classes for the students.

Specification:

Field name	Type	Width	Description
Class-id	Number	2	Class identification
Class-name	Char	30	Class name

Table no 5.

Table name subject:

Primary key: sub-id

Purpose:

This table stores the information about the subjects.

Specification:

Field	Type	Width	Description
Sub-id	Number	2	Subject id
Sub-name	Char	30	Subject name

Table no 6:

Table name ADMISSION:

Primary key: adm-no

Foreign key occup-id, game-id, activity-id, class-id.

Description:

This table describes the whole information about student admission. Specification:

Field name	Type	Width	Description
Adm-no	Number	5	Admission number
Adm-date	Date	10	Admission date
St-name	Char	30	Student name
F-name	Char	30	Father name
D-o-birth	Date	10	Date of birth
F-mon- income	Number	6,2	Father monthly income
Activity-id	Number	2	Activity-identification
Pres-addr	Char	60	Present address
Perm-addr	Char	60	Permanent address
Last-inst	Char	60	Last institution
Occup-id	Number	2	Occupation-identification
Game-id	Number	2	Game-identification
Class-id	Number	2	Class-identification
Tele-no	Number	12	Telephone number
Sex	Char	2	Sex
Sch-ship	Char	2	Scholarship

Table no 7.

Table name **DUES HEAD**:

Primary key dues-id

Purpose:

This table gives the information about class dues (fee& funds).

Description:

Field	Type	Width	Description
Dues-id	Number	2	Dues-id
Dues-name	Char	30	Dues name

Table no 8: Table name DUES. Primary key: SR-NO

Foreign key dues-id, adm-no, class-id, sec-id.

Purpose:

This table gives information about class dues.

Field	Туре	Width	Description
Sr-no	Number	2	Serial number
Adm-no	Number	5	Admission number
Class-id	Number	2	Class identification
Sec-id	Number	2	Section number
Dues-id	Number	2	Dues-identification
Pmt-date	Date	10	Payment date
Paid amt	Number	5	Paid amount

Table no 9.

Table name ACADEMIC QUALIFICATION:

Primary key. Qualify_id.

Purpose: This table shows the academic qualification of the teachers.

Description

Field	Type	Width	Description
Qualif-id	Number	2	Qualification- id
Qualif-detail	Char	30	Qualification detail

Table no 10.

Table name-PROFESSIONAL QUALIFICATION

Primary key. Profess_id.

<u>Purpose:</u> This table represents the professional qualification of the teachers.

Field	Type	Width	Description
Profess-id	Number	2	Professional qualification

Table no 11.

Table name; DESIGNATION:

Primary key. Desig id

Purpose: this table stores information about teacher's designation.

Description:

Field name	Type	Width	Description
Desig-id	Number	2	Designation identification
Desig-name	Char	30	Designation name

Table no 12.

Table name; TEACHER INFORMATION:

Primary key. T-id.

Foreign key: qualif-id, profess-id, desig-id.

Purpose: This table stores information about the teachers.

Description:

Field name	Type	Width	Description
T-id	Number	2	Teacher identification
T-name	Char	30	Teacher name
Pres-addr	Char	60	Present address
Perm-addr	Char	60	Permanent address
Qualif-id	Number	2	Qualification identification
Profess-id	Number	2	Professional identification
D-o-birth	Date	10	Date of birth
Domicile	Char	15	Domicile
Appoint-date	Date	10	Appointment date
Joining-date	Date	10	Joining date
BPS	Number	2	Basic pay scale
Desig-id	Number	2	Designation identification
Permotion-date	Date	10	Permotion date
Tele-no	Number	10	Telephone number

Table no 13.

Table name; PERIOD: Primary key. Period-id.

Purpose: this table stores information about periods of the class.

Description:

Field name	Type	Width	Description
Period-id	Number	2	Period identification
Period- detail	Char	15	Period detail

Table no: 14.
Table name: DAY
Primary key: day-id.

Purpose:

This table stores the information about the days of the week.

Specification:

Field-name	Type	Width	Description
Day-id	Number	2	Day identification
Day-name	Char	10	Day name

Table no 15:

Table name: room. Primary key: room-id.

Purpose:

This table provides the information about the rooms.

Specification:

Field name	Type	Width	Description
Room-id	Number	2	Room identification
Room-detail	Char	10	Room detail

Table no 16.

Table name: section. Primary key: sec-id.

Purpose:

This table belongs to section of the classes.

Specification:

Field-name	Type	Width	Description
Sec-id	Number	2	Section identification
Sec-name	Char	10	Section name

Table no 17.

Table name Timetable:

Primary key: sr-no.

Foreign key: class-id, sec-id, sub-id, period-id, day-id, T-id.

Purpose:

This table shows the timetable of the classes.

Field-name	Type	Width	Description
Sr-no	Number	4	Serial number
Class-id	Number	2	Class identification
Sec-id	Number	2	Section identification
Sub-id	Number	2	Subject identification

Period-id	Number	2	Period identification
Day-id	Number	2	Day identification
T-id	Number	2	Teacher identification

Table no: 18.

Table name: date sheet. Primary key: Dsheet-no.

Foreign key: day-id, sub-id, class-id.

Purpose:

This table is about date sheet of the examination.

Specification:

Field-name	Type	Width	Description
Dsheet-no	Number	2	Date sheet number
Day-id	Number	2	Day-identification
Exam-date	Date	10	Examination date
Sub-id	Number	2	Subject identification
Class-id	Number	2	Class identification
Term	Char	6	Examination term
St-time	Number	8	Starting time
End-time	Number	8	Ending time

Table no: 19.

Table name: Result sheet.

Primary key: sr-no.

Foreign key: adm_no, sub_id, class_id, sec_id.

Purpose:

This table shows the results of the students.

Specificati	on.		
Field-Name	Type	Width	Description
Sr-no	Number	4	Serial number
Roll-no	Number	5	Roll number
Adm-no	Number	5	Admission number
Sub-id	Number	2	Subject identification
Class-id	Number	2	Class identification
Sec-id	Number	2	Section identification
Obtn-marks	Number	3	Obtain marks
Max-marks	Number	3	Maximum marks

Table no 20.

Table name: T-duty. Primary key: sr-no.

Foreign key: day-id, T-id, room-id, class-id, sub-id.

Purpose:

This table provides the information about teacher's exam duty.

Specification:

Field name	Type	Width	Description
Sr-no	Number	2	Serial number
Day-id	Number	2	Day identification
T-id	Number	2	Teacher identification
Room-id	Number	2	Room identification
Class-id	Number	2	Class identification
Sub-id	Number	2	Subject identification
D-no	Number	2	Duty number
St-roll-no	Number	4	Starting roll number
End-roll-n0	Number	4	Ending roll number

Table no: 21

Table name: Award Primary key: Award-id.

Purpose:

This table stores the information about the awards.

Specification:

Field name	Type	Width	Description
Award-id	Number	2	Award identification
Award- name	Char	15	Award name

Table no 22.

Table name: St-award Primary key: sr-no.

Foreign key: Adm-no, class-id, sec-id, award-id.

Purpose:

This table belongs to awards given to the students.

Field name	Type	Width	Description
Sr-no	Number	2	Serial number
And-no	Number	5	Admission number
Class-id	Number	2	Class identification
Sec-id	Number	2	Section identification
Award-id	Number	2	Award identification
Award-date	Date	10	Award date

Table no: 23.

Table name: punishment. Primary key: punish-id.

Purpose:

This table stores the information about the punishments.

Specification.

Field name	Type	Width	Description
Punish-id	Number	2	Punishment identification
Punish- name	Char	20	Punishment name

Table no 24.

Table name: St-punishment.

Primary key: sr-no.

Foreign key: Adm-no, class-id, sec-id, punish-id.

Purpose:

This table belongs to punishment given to the students.

Field-name	Type	Width	Description
Sr-no	Number	2	Serial number
Adm-no	Number	5	Admission number
Class-id	Number	2	Class identification
Sec-id	Number	2	Section identification
Punish-id	Number	2	Punish identification
Punish-date	Date	10	Punishment date

Table no: 25.

Table name: bill-type. Primary key: bill-id.

Purpose:

This table stores the information about the bills.

Specification:

Name	Type	Width	Description
Bill-id	Number	2	Bill identification
Bill-detail	Char	25	Bill detail

Table no: 26.

Table name: equipment-nature.

Primary key: equip-id.

Purpose:

This table stores the information about the equipments.

Field name	Type	Width	Description
Equip-id	Number	2	Equipment identification
Equip-detail	Char	30	Equipment detail

Table no 27.

Table name: School-expenditures.

Primary key: record-no.

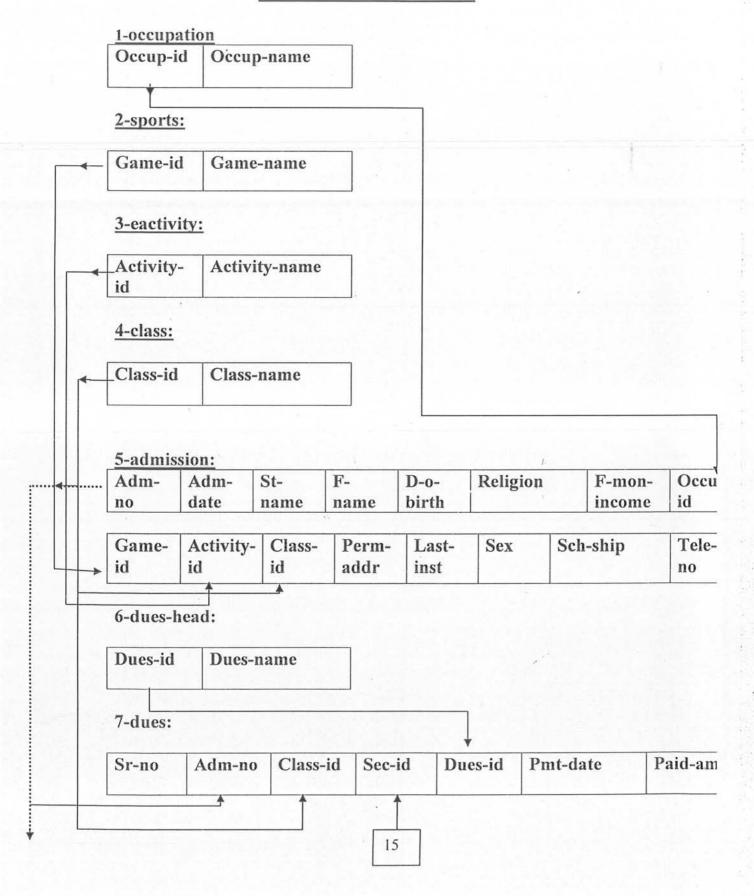
Foreign key: bill-type, equipment-nature.

Purpose:

This table stores the information about the expenditures in the school.

Field name	Type	Width	Description
Record-no	Number	2	Record number
Bill-id	Number	2	Bill identification
Equip-id	Number	2	Equipment identification
Amt paid	Number	6,2	Amount paid
Payment-date	Date	10	Date of payment
Receipt-no	Number	2	Receipt number
Cheque-no	Number	6	Cheque number
Remarks	Char	20	Remarks

6.3. BATCHMAN DIAGRAMS



8-acadmic-qualification:

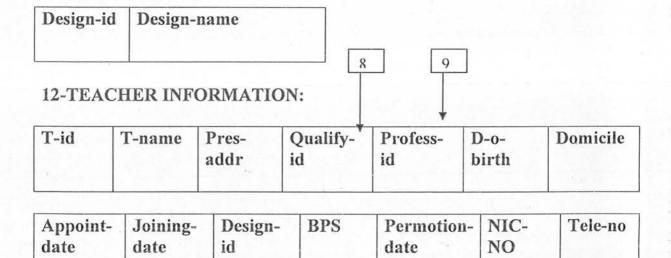
Qualify-id	Qualify-detail

9-profess-qualification:

10-SUBJECT:

Sub-id	Sub-name	

11-DESIGNATION:



13-PERIOD:

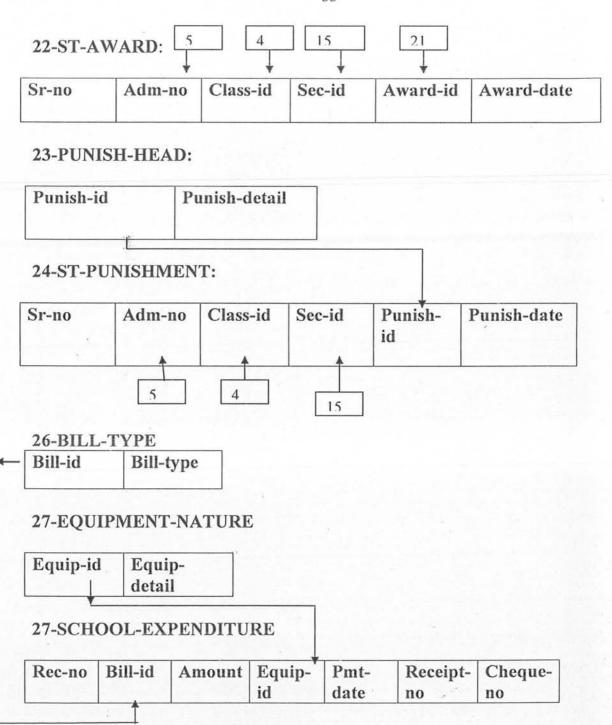
Period-id	Period-name

14-DAY:

Day-id	Day-name

15-SECTION:

Sec-id		Sec-name					
16-ROOM	[:						
Room-id		Room-det	ail				
17-TIME	TABLE	4 15	10	13		[4	12.
Sr-no	Class-ic	Sec-id	Sub-id	Peri	od-id Da	ay-id	T-id
18-DATE	SHEET	14	10	7	4		
Dsheet-no	Day-id	Exam- date	Sub-id	Clas	ss-id St		End- time
19-RESUI	T SHE	ET: 10	4	15			
Sr- Rol no no	l- Ad no	m- Sub- id	Class- id	Sec- id	Obt- marks	Max- marks	Term
20-T-DUT	Y: 5	16				14	
Sr-no D-	id	Room-	Class-id	Sub-id	Date-o- duty	Day-id	Roll- no
21-AWAR			4	10			
Award-id		Award-na	ime				



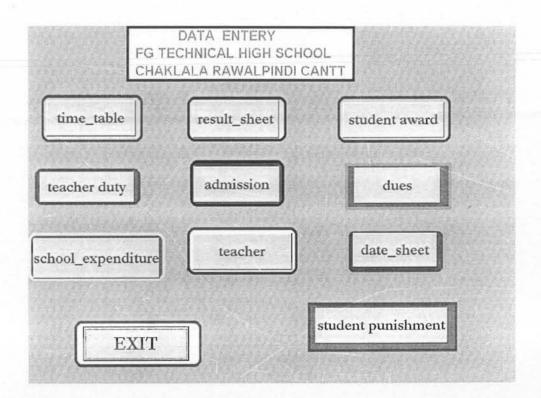
SCHOOL INFORMATION SYSTEM APPENDIX-A FORMS

SCHOOL INFORMATION
This master form stores different information about the school and students.

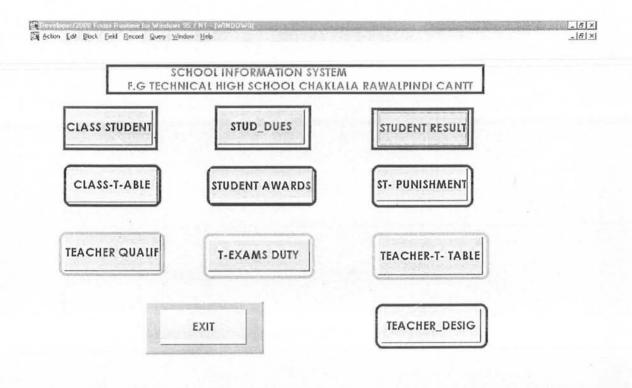
MAIN.	SWITCH BOARD	
G TECHNIC	AL HIGH SCHOOL CHAKLA	ALA
1	SCHOOL INFORMAT	TION
2	AWARD SECTION, DUNISHMENT, D DAY, ROOM, BILL-TYPE	ERJOD
3	OCCOPATION SPORTS, EACTIVITY, CLASS DESIGNATION, QUALIFICATION.	SUBJECT
4	DATA ENTRY	РКЕРЯКЕО ВЧ SAJIO МЕЛМООО
5	REPORTS	ABOUS SATTAT

DATA ENTERY:

This master form stores different types of information of the school system.



SCHOOL INFORMATION SYSTEM: This master form describes different information about the school system.



CLASS FORM:

This master form stores information about the classes in a school.

CLASS					
Clas	rs Cla	ss Nam	e		
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2	71	СН	1100		
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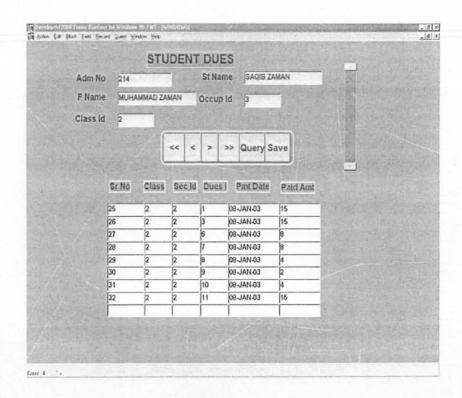
SUBJECTS FORM:

This master form stores information about different subjects taught in the classes.

s Block Field Becord Query &	idos Heb	SYSTEM STATE
	SUBJECT	
Sub Id	Sub Name	
1	English	
2	urdu	
3	ARABIC	
4	ISLAMIAT	
5	SSTUDY	
5	BIOLOGY	
7	Mathematics	
8	G.Science	
	<< < > >> Query Save	
	THE RESERVE TO SERVE THE RESERVE TO SERVE THE RESERVE TO SERVE THE RESERVE THE RESERVE THE RESERVE TO SERVE THE RESERVE THE RE	markets are a
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	AND THE PARTY OF THE PARTY.	ALTON DE PUBLICA

STUDENT DUES:

This master table stores information about the dues of the students.



OCCUPATION FORM:
This master form describes the information about different Occupations.

UCC	NOTREW	
Occup	Occup Name	
þ	CIVILIAN	
2	ARMY SERVING PERS	
3	RTDJARMY	
4	FGEL EMP	
5	CIVILIAN(Del.Paid)	
	<< > >> Query Save	

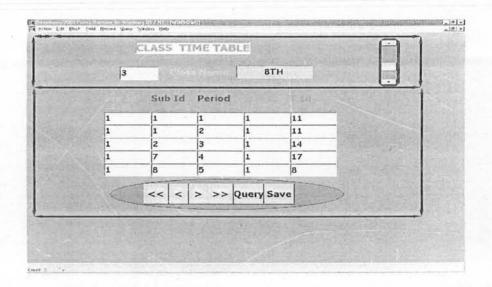
<u>CLASS STUDENT</u>:
This master form stores information about the students and his bio-data, address and the class.

	Test with the second		
lass	Class Name		
	< > > Query Sa		
Adm No	218	Adm Date	22-JAN-03
St Name	MUHAMMAQ AQE	T Name	ABDUL QADIR
DO Birth	15-SEP-88	Religion	ISLAM
T Mon Income	8765	Ores Addr	WARD NO 81/2 HAIDER CS
Last Iust	FG HIGH SCHOOL OKA	Occup Id	Is .
Game Id	1	Activity Id.	4
Tele No	871347	Sex	M

RESULT INFORMATION:
This master form describes the information about the result of the Students and the class.

dm No 216 Name AB	DUL HAMEED		Name RAS	HID NAVEED		
Roll No	Sub Id	Sec Id	> QuerySave	Max Mar	Term	7
68	1	2	61	100	1st	
68	2	2	50	100	1st	
68	3	2	56	100	list	
68	4	2	70	100	1st	
68	5	2	45	100	1st .	
68	7	2	54	100	1st	
68	8	2	40	100	1st	
ii waxaa aa		alessesses		dan berek		1

CLASS TIME TABLE:
This master table describes the information about the timetable of the class.



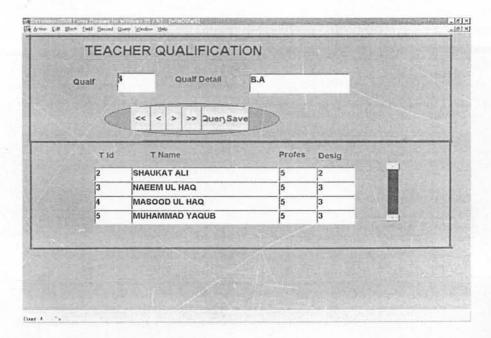
STUDENT AWARD INFORMATION:

This master form stores information about the awards given to the students.

Awan 2	f Award BOOK	Name		
	<< <	> >>	Query Save	
Adm No	Class	Sec 1d	Award Date	
211	1	1	28-MAT-03	
		200000		

TEACHER QUALIFICATION:

This master form stores information about the teacher and his qualification.



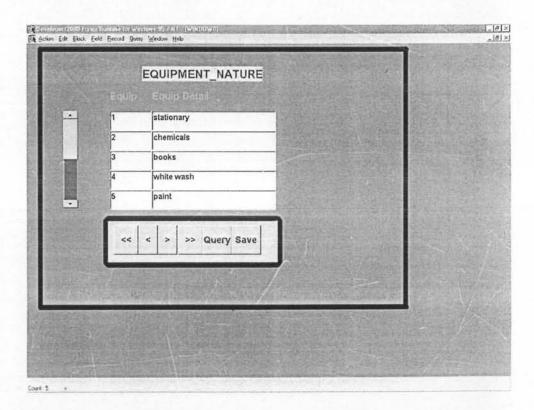


TEACHER DESIGNATION:
This master form describes the designation of the teachers.

ACHER DE	SIGNATION Desig Desig Name			
	B 797	-		- ,
	(<< < > >> Query Save			
ar glaw.	(<< < > >> Query Savi	P		_
Fig. 1				
	Id TName	Bps	4	
[7] [3] [4]	Id TName NAEEM UL HAQ	(Bps)	Ť	
3	Id TName	17 16	j	
3 4	Id (T'Name NAEEM UL HAQ MASOOD UL HAQ	(Bps)	j	

EQUIPMENT NATURE FORM:

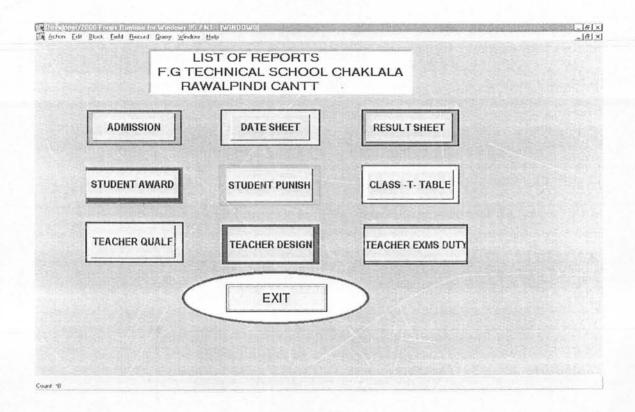
This master form stores information about different equipments in the school.



SCHOOL INFORMATION SYSTEM APPENDIX: B REPORTS

REPORTS FORM:

This master form stores information about the reports Of the admission, date sheet, result sheet, teacher qualification, and designation.



LIST OF STUDENT:

This report shows the admission of students in different Classes.

Next First	Last Page: 1	Print	Mail Close
	LIST OF ADMISSI	ON	
1	Class Name 6TH		
Adm No		F Name	
			DOB
211	MUHAMMAD AWAIS	IJAZ AHMAD	01 DEC
212	ALI RAZA	GHULAM MURTAZA	01-DEC
			12-MAY
233	HABIB UR REHMAN	BASHIR AHMAD	11-JUL-:
234	MUHAMMAD MAAZ	ABDUL RAZAQ	Troot.
			22-MAF
235	ANIL UR REHMAN	ALTAF UR REHMAN	04-DEC
236	UBAID UR REHMAN	ABDUR RAHIM	U4-DEC
			15-FEB
237	MUHAMMAD ZEESHAN	LIQUAT ALI	47.1411
238	EHSAN UL HAQ	ALLAH DITA	15-JAN-
200	Erior at Octobria	7166747 5117	29-FEB
2	Class Name 7TH		
Adm No	St Name	F Name	DOB
242	EA IID MEHMOOD	ADDIII CHANI	ООВ
213	SAJID MEHMOOD	ABDUL GHANI	12-AUG
214	SAQIB ZAMAN	MUHAMMAD ZAMAN	
247	TALLID OLIADIES	MULANDAR CHARLE	15-JUL-!
217	ZAHID SHARIEF	MUHAMMAD SHARIF	15-AUG
220	FIDA JAVED	MUHAMMAD JAVED	

RESULT SHEET INFORMATION

This master repots stores information about the results Of the classes and students.

Next	Last	Page:	1			Pr	int	Mail	Close
Acim No 21	1 St	Name MU	HAMMAD AWAIS		Class	Id	1		
			Obtn Marks						
51	211	1	57	W. Sil	100				
51	211	2	52		100			1	
51	211	3	63		100			2	
51	211	4	50		100				
51	211	5	45		100				
51	211	7	60		100				
51	211	8	54		100				
Adm No 21	2 St	Name AL	I RAZA		Class	Id	1		
Roll No	Adm No2	Sub Id	Obtn Marks	Max	Marks				
55	212	1	65		100				
55	212	2	58		100				
55	212	3	75		100				
55	212	4	67		100				
55	212	5	58		100				
55	212	7	50		100			1	
55	212	8	60		100			9	
Adm No 21	3 St	Name SA	JID MEHMOOD		Class	Id	2		
Roll No	Adm No2	Sub Id	Obtn Marks	Max	Marks				
59	213	1	56	7/400	100				
59	213	2	75		100				
59	213	3	62		100				
59	213	4	83		100				
59	213	5	48		100				
59	213	7	55		100				
59	213	8	44		100				
Adm No 21	4 St	Name SA	QIB ZAMAN		Class	Id	2	9	
Roll No	Adm No2	Sub Id	Obtn Marks	Max	Marks				

LIST OF STUDENT AWARD:

Next First Lost Page 1	Print Mail Close
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LIST OF STUDENT AWARD

Award Id Award Name 1 CASH 2 BOOK 3 TROPHY

4 SHIELD

Adm No	Class Id	Award Date	Award Id2
211	1	28-MAY-03	2
215	3	28-MAY-03	1
224	4	28-MAY-03	3
230	5	28-MAY-03	4

TEACHER QUALIFICATION REPORTS

Next	First	Last	Page	1	Print	Mail	Close
	TEACI	HER Q	JALIF:	CATION			

f DetaMATRIC		
T Name	D O B	Appoint Dat
f DetaF.A		
T Name	D O B	Appoint Day
MUHAMMAD AKRAM	15-APR-51	01-JAN-70
MANZOOR AHMAD	01-JAN-70	15-MAY-02
f DetaF.SC		
T Name	D O B	Appoint Day
f DetaB.A		
T Name	D O B	Appoint Day
SHAUKAT ALI	21-APR-49	18-APR-70
NAEEM UL HAQ	13-APR-47	D7-0CT-70
MASOOD UL HAQ	15-DEC-50	22-OCT-70
MUHAMMAD YAQUB	15-JAN-62	15-NOV-B
f DetaB.SC		
T Name	D O B	Appoint Dat
MUHAMMAD ARIF	10-MAY-53	18-SEP-80
SHAFAQAT AHMAD	10-MAY-55	14-OCT-80
NUHAMMAD ILYAS	27-FEB-52	20-NOV-78
GULZAR AHMAD	02-MAY-50	29-SEP-79
KHALID JAMAL	01-JAN-54	04-JAN-8"
f Detam.A		
T Name	D O B	Appoint Dat
MIAN ABDUL MAJID	O5-FEB-45	15-OCT-68
SANA ULLAH	15-APR-48	20-SEP-78
MUHAMMAD ASGHAR	15-DEC-49	10-SEP-83
PHS VI III I VA	12_0CT_60	US-NUM-81

LIST OF TEACHER 'S DESIGNATION

Neat Frid Lext Page: 1		Print Mail Close
LIST OF TEACHER DESIGNATION	N	
Desig Id 1 Desig Name H/M		
T Id T Name	Вря	
1 MIAN ABDUL MAJID	18	
Desig Id 2 Desig Name A.H/M		
T Id T Name	врз	
2 SHAUKAT ALI	17	*
Desig Id 3 Desig Name TGT		
T Id T Namo	Bps	
3 NAEEM UL HAQ	17	
307		

TEACHER'S EXAMS DUTY

Next	Fest	Last Pag	e; 1			Print Hail Clo
ld	5	T Name	MUH	AMMAD YAQUB		
	D No		Sub Id	Room Id	D O Duty	
	1		10	5	24-MAY-03	
	1		5	1	26-MAY-03	
	1		5	2	29-MAY-03	
T Id	6	T Name	MUH	AMMAD ARIF		
	D No		Sub Id	Room Id	D O Duty	
-	1	1	5	4	24-MAY-03	
	1		2	2	26-MAY-03	
	1		3	1	29-MAY-03	
T Id	7	T Name	SHA	FAQAT AHMAD		
	D No		Sub Id	Room Id	D O Duty	
	- 1		8	3	24-MAY-03	
	1		1	3	26-MAY-03	
	1		6	5	28-MAY-03	
Tld	8	T Name	SAN	A ULLAH		
	D No		Sub Id	Room Id	D O Duty	
	1		7	1	24-MAY-03	
	1		4	4	26-MAY-03	1
ī ld	9	T Name	MUH	IAMMAD ASGHAR		
	D No		Sub Id	Room Id	D O Duty	

BIBLIOGRAPHY

- 1- COMMERICAL APPLICATION DEVELOPMENT USING "ORACLE" DEVELOPER 2000 FORMS 5.0 BY IVAN BAYROSS.
- 2- "ORACLE-7" THE COMPLETE REFERENCE BY IVAN BAYROSS.
- 3- DEVELOPING DATABASE APPLICATIONS
 WITH "ORACLE" PL/SQL
 DEVELOPER 2000 VER 2.1,
 FORMS (VER 4.5/5.0)
 REPORTS (VER. 2.5/3.0)
 BY
 EJAZ AHMAD.

*