

Designing of Data Management System Development for Resource Sharing Systems Rajendra Vishwakarma^{1*}, Mohan Dixit² and Priyam Singh³

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ABSTRACT

The success of the institute lays a lot behind its usage of latest technologies for performing their work as fast as possible. Computers made this possible by its arithmetical and logical capabilities. The present work designed the data management system development for resource sharing systems for school management system.

Keywords: Data management system, Resource-sharing system, School management system.

INTRODUCTION

The paper discusses the salient features of an automated circulation system, designed and developed to suit the requirement of Data management and Resource Sharing system using the visual basic as the programming language. ^[1,2,3]

METHODOLOGY

The method used the VISUAL BASIC an ideal programming language for developing sophisticated professional applications for Micro-soft Windows. ^[4] It made use of Graphical User Interface (GUI) for creating robust and powerful application. The graphical user interface as the name suggests, users illustrations in text, which enable users to interact with an application. This feature made it easier to comprehend things in a quicker and easier way.

Coding in GUI environment is quite a transition from traditional linear programming methods where the user was guided through a linear path of execution and is limited to a small set of operations. In the GUI environment the number of feature is more for both the user and the programmer.

Visual basic was developed from the BASIC programming language. In 1970s, Microsoft has started developing ROM-based Interpreted BASIC for the early Microprocessor based computers. In 1982, Microsoft Quick Basic revolutionized Basic as a serious development language for MS-DOS environment. Later on, Microsoft Corporation created the enhanced version of BASIC Known as Visual Basic for Windows.

Visual basic is the worlds most widely use RAD language, (Rapid Application Development (RAD) is the process of rapidly creating an application. Visual Basic provide a powerful features such as graphical user interface, events handling assess to Win 32 API, object-oriented features, error handling, structured programming and much more. Not until Visual Basic appeared, developing Microsoft windows based application



was a difficult and cumbersome process. Visual basic greatly simplified window application development.

MINIMUM REQUIREMENTS

The following are required to operate the Application.

- Pentium Computer
- Microsoft windows 98 for higher
- Oracle 7.3 or Higher (as Backend)
- At least 500 MB of RAM
- Visual Basic 6.0 Version
- Keyboard & Mouse

RESULTS AND DISCUSSIONS

A computerized Designing of Relational Data Management System Development for Resource Sharing Systems required a database comprising of the documents, students, associated members and daily transactions records. ^[5,6] The forms gathered the information. An algorithm to look into how this program can be written has been developed which follows the patterns of the flow chart (Fig 1).



Fig 1: Flow chart of the program

PROGRAM DESIGN

The application was installed in the system with the setup. The workings of application are shown below:



A) Splash screen

The Splash screen was used for display the information about the software and the version. In the splash screen (Coding) the author set the Evaluation Period of application if not to be purchased it will automatically closed on the desired date. The application would be closed forever (Fig 2).



Fig 2: Splash Screen of the program

B) Authentication screen

The Authentication screen had three types of verified user with different Username and the password for showing the different menus for working in the application. The Super user (Admin) has all the access regarding the software.

If three invalid attempts were occur then the application would automatically shutdown (Fig 3).



C) Main screen

The main screen showed the active school year, school code and showing the name of computer. On the left hand side there was the panel showing the Icon and some button. I used the readymade application like "Control panel", Calculator", "Notepad" and so on. The "Log off" and the "Exit" would record the date and time when the user exit to the application. The panel showed the "Current User Login" to the application & showing the date and the Time.

If the User directly close the application then it record the unsuccessful logout and when the user click the "Exit Button" then it record the successful logout (Fig 4).

				D.A. PUBLIC HIGH SCHOOL MANAGEMENT SYSTEM	
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Fig 4: Main Screen of the program



D) Admission form

The Admission form would give the complete information regarding the student and their Annual (Month) & Examination fee structure. ^[7] We would search the student with the use of the Scholar number that was previously given to the student. From that form we choose the photo of the student. After all the information we will save the data of the student (Fig 5).



Fig 5: Admission form of the program

E) Fee Deposit form

The fee management form will give the complete information regarding the fee, student name, address & class and their amount. There was a listing of fee paid with date wise. If the student submit all the fee then it would show the clear fee message on the application. Here the current date, installment, fee amount, late & balance due after entering the fee amount. One would search the student by scholar no & class wise. There was a print receipt after the submission of fee (Fig 6).



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		Late Fee
		Amount Balance
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Fig 6: Fee deposit form of the program

E) Classwise fee record form

The class wise records would show the fee details that the students would submit in their academic session. We would choose the name of the class the total no of student that would submit the fee is shown in the tubular format and after clicking the desired student another form would open that shows the history of the student (Fig 7).

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Fig 7: Class wise fee record form of the program

F) Fee paid details



The fee details showed the overall details of the fee that was deposited by the student the school year with their Name, Personal information, Receipt no, Date & Amount (Fig 8).

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The Details of all the Students of all Classes	s who paid the fees are	listed below	
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Paid : -			
Balance :			
		Mobile	
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Fig 8: Fee paid details of the program

G) Fee paid receipt

The fee receipt showed the overall details of the fee that was deposited by the student the school year with their Receipt no, Date & Amount.

Another receipt will shows the currently deposit amount with the Receipt no as Bill no and the Late fess that was charged over the student (Fig 9, 10).

es Details	Recipt		E
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	S.No.	Particular	Amount
	1 2	Monthly Fee Late Fee	None None
Print Close	×	1	Print

Fig 9: Total Receipt

Fig 10: Month Wise

H) Reporting section

These sections covered the reporting of various types of report that was recorded in the database for the further verification of the report. The authorizing person should take the print out of the report.

(I) Fee Report



This report shows the overall transaction of the fess that was deposit in the institute with date wise and rolls no wise (Fig 11).

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D.A.PUBLIC HIGHER SECONDARY SCHOOL
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DATE SCHOLA NAME CLASS FEES LATE FEE MEDIUM BILL NO
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Fig 11: Fee report

(II) Personal information

This report showed the personal information, last school, percent & medium of the student (Fig 12).

Page Header (Section2)	
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Detail (Section 1)	
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STUDENT NAME :	NAME [main]
FATHER'S NAME:	FNAME [main]
MOTHER'S NAME :	MNAME [main]
GENDER :	GENDER [main]
DATE OF BIRTH :	DOB [main]
CATEGORY :	CATEGORY [main]
RELIGION :	RELIGION [main]
STUDENT ADDRESS :	HADDRESS [main]
CITY :	CITY [main]
STATE :	STATE [main]
MOBILE NO :	MOBILE [main]
GUARDIAN :	GUARDIAN [main]
GUARDIAN ADDRESS :	GADDRESS [main]
LAST SCHOOL:	LASTSCHOOL [main]
LAST PERSENTAGE :	PRESENTAGE [main]
ADMITTED CLASS :	ADMITTED [main]
MEDIUM :	medium [main]
SCHOOL YEAR :	School year [main]
 Page Footer (Section3) 	
	PACE NO %p /OF %P

Fig 12: Personal information

(III) Fee Report



This report showed the personal information & the total fee structure (Exam & Bus fee) of the student. It shows the total fees that were deposited by the student (Fig 13).

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Fig 13: fee Report of the program

(IV) Login User Report

This report showed the Login description like Authorized person name, Date, Time & Remarks of the User. It can record the Login the Logout information whether it is successes in Login the Logout (Fig 14).

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	NAME DESCRIPTION DATE TIME REMARK
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(V) Login User Created Report

This report showed the Login User description created by the Authorized person, their name, date & Type (Fig 15).



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Fig 15: Login User Created Report

(VI) Yearwise Report

This report showed the overall student that was admitted in the institute yearly with their Roll no, Enrollment no, name, class, medium (Fig 16).

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Fig 16: Year wise Report of the program



ACKNOWLEDGEMENT

The author is highly thankful to Dr. Mohan Dixit, Asst. Prof. Dept. of Computer, YVS College, Gwalior, (M.P.), India for supervision and providing facilities for the research work. The author is also thankful to Dr. Priyam Singh, Dept. of Botany, Govt. P.G. College, Narsinghgarh, Dist. Rajgarh, (M.P.), India for reviewing the manuscript.

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