



NEAR EAST UNIVERSITY

FACULTY OF ENGINEERING

DEPARTMENT OF COMPUTER ENGINEERING

**CONFERENCE TRACKING AND MANAGEMENT
SYSTEM**

GRADUATION PROJECT COM-400

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ABSTRACT

Now a days,the importance of computers is a fact which can never be rejected.Database development in computer systems is one of the most important field that is required for all organisations and institution.

The aim of this project is to manage the conferences,the people who are going to take part in these conferences,handling the personnels who just came to visit conference to listen to some paper presentations,to manage the time and date arrangement,to control and record the payments and to manage the sending of invitation cards.

MS Access is used to achieve thse aims.The fundamental structure and function of MS Access is explained in this project.

INTRODUCTION

Many excellent database systems and generic applications are available for storing information about different persons from different field of areas. Many applications make a list of people who would be coming to an event or the people who may not be able to attend the event due to some problem. Many other can send emails to different persons at the same time, other can handle accounts and security.

But there is no application which can do all this at the same time or instant, my application tries to accomplish it. My target was to produce an application which will in turn give us the flexibility of sending mass emails handling accounts and tracking records.

This project begins by providing general information about the importance of computer in our life. In the first chapter there is a brief history of development of databases in all over the world and there need in our life and after that the role of MS Access in the field of computer science as a database system is provided. Also the functionality of MS Access is also a part of it. In the end of the chapter the advancements made in the field of MS Access are explored.

Second chapter provides the brief case study of the patient's record system, then the design of the tables and there relationships are given.

Third chapter layout logic of the program and its flowcharts. This is an important chapter as it draft out the way for the application.

In the fourth chapter the designs of the forms used and reports are given. It also includes menu forms. The properties and logic behind it is also discussed also gives the brief coding behind each form and queries used for tables, search forms and reports.

INTRODUCTION TO DATABASE AND MS ACCESS

1.1 NEED OF COMPUTERS IN LIFE

As we know that computer software has become a driving force. It is the engine that drives, business decision making. It serves as the basis for modern scientific investigation and engineering problem solving.

It is a key factor that differentiates modern product and services. It is embedded in systems of all kinds: transportation, medical, military, telecommunication, industrial processes, entertainment, office products and even business concerns, etc.

Now as we move on to the new era software engineering and problem solving will become the main force behind all the fields, from elementary education to generic engineering.

Before the introduction of computers in the different institutions, especially in medical diagnostics and management almost all the daily work was done with pen paper. In the hospitals the information regarding the patients, their medical history, records of rooms, services all were on cards and files. And the cards were updated everyday for updating each and every services and information rendered to the patient. Due to this kind of updating there were more chances of errors, and a wrong and criminal entry could be made. As there no backups for the cards so when they are lost or damaged, all the data was lost.

So to improve the working of any institution, not especially hospitals. A new sense of change had to be brought in, which simply pointed to the fast machines to work place, in place of humans to eliminate any chance of errors and create an environment where every bit of data is secured and can be accessed by a simple touch of a button. And also there would be no or almost zero chance of losing any data due to the presence of backup systems, kept at different places.

A computer system in hospital or in private clinics means that the accuracy and speed of hospital services will increase to a great extent. And also it has increased the speed of diagnoses.

1.2 DATABASE MENAGEMENT SYSTEM

Database is collections of related data items. Examples of databases are records of students in university, patient's records in a hospital, customer records in a bank etc.

When it is required to access a particular record in a database, a database management system (DBMS) is used. The DBMS creates the database, provides easy access to users in order to view, update or add a new record. Many small applications can be designed by using a single database. Large applications may require a number of separate databases.

1.3 RELATIONAL DATABASE

In recent years, database management systems (DBMS) have established themselves as the primary means of data storage for information systems ranging from large commercial transaction processing applications to PC-based desktop applications. At the heart of most of today's information systems is a relational database management system (RDBMS). RDBMS have been the workhorse for data management operations for over a decade and continue to evolve and mature, providing sophisticated storage, retrieval, and distribution functions to enterprise-wide data processing and information management systems. Compared to the file systems, relational database management systems provide organizations with the capability to easily integrate and leverage the massive amounts of operational data into meaningful information systems.

The evolution of high-powered database engines such as MS Access has fostered the development of advanced "enabling" technologies including client/server, data warehousing, and online analytical processing, all of which comprise the core of today's state-of-the-art information management systems.

1.4 INTRODUCTION TO ACCESS DEVELOPMENT

1.4.1 WHAT KIND OF APPLICATIONS CAN BE DEVELOPED BY ACCESS

Microsoft Access offers a variety of features for different database needs. An Access application is made up of the same objects as an Access database tables, queries, forms, reports, data access pages, macros, and modules. What makes an application different from a database is that the objects are tied together into a coherent system. An application organizes related tasks so that the user can focus on the job at hand, not on

how the application works or on the program used to develop the hand, not on how the application works or on the program used to develop the application. MICROSOFTS ACCESS can be used to develop five general types of applications:

- Personal applications
- Applications used to run a small business
- Departmental applications
- Corporation-wide applications
- Front-end for enterprise-wide client/server applications

1.4.2 ACCESS AS A DEVELOPMENT PLATEFORM

The keys to an Access application are its objects, their properties, and the events that occur on forms. Your application is made up of objects that users see and use directly (forms, reports, and data access pages) and supporting objects that control how the forms, reports, and data access pages work (tables, queries, macros, and modules).

Although Access might be best suited for departmental applications, it can also be used to produce applications that are distributed throughout the organization. How successful this endeavor will be depends on the corporation. There is a limit to the number of users that can concurrently share an Access application while maintaining acceptable performance. There is also a limit to the number of records that each table can contain without a significant degradation in performance. These numbers vary depending on various factors:

- How much network traffic already exists on the network?
- How much RAM and how many processors the server has.
- What the server is already being used for; for example, are applications such as Microsoft Office being loaded from the server or from local workstations.

- What types of tasks the users of the application will be performing; are they querying, entering data, running reports, and so on.
- Where Access and your Access application will be run from (the server or the workstation).
- What network operating system is in place?

INTRODUCTION TO PROBLEM AND THE DATABASE DESIGN

2.1. CASE STUDY

Our university held many conferences each year and the conferences, the people who are taking part in those conferences, handling the personals who just came to visit the conference to listen to some paper presentations, the days, time and place of different papers all these and more were used to manage by hand or better be said manually.

My conference tracking system promise to manage all that and bit more, with it you can send different notifications e.g. sending notifications to all the people who did not paid money that the time is getting lost please send money automatically. Also one can send different pre drafted email messages to a pool of different peoples.

2.2 SOLUTION

I have selected MS ACCESS as my developing tool, as it is one of the best database application development tools. This application is going to be a single tire application, that means it is going to be run on a single platform but it can also be converted to n-tire application by simple enhancements. Many people asked me when I choose MS ACCESS as the development environment that why you did not choose other options available, I told them it the worlds rated number one desktop RDBMS and its flexibility as a front end tool is unbelievable, that's why also many of the worlds companies are using MS ACCESS as their primary development tool.

2.3. DESIGN STEPS FOR BUILDING THE SYSTEM

The design steps for building the application or the system is given below, but remembers that each step is work in progress, so we may have to revisit any step during development. Following are the steps:

1. Designing the database structure that will going to hold the persistent data.
And make relationships between tables.
2. Designing the stored procedures in the database to perform basic functions like add, update from the records.
3. Design the user interface for the system.

4. Program the user inter face by using modules and macros also make required quires.
5. Test the system with sample run.
6. Deploy the system.

2.4. DESIGNING TABLES

Many businesses that use databases do not appreciate the importance of table design they tend to focus on forms and reports, which are more visible to users. But the design and content of tables and the relationships among tables can significantly affect the services that custom database solutions can provide. Table design can also affect the speed of a custom solution as well as how easily new services can be added to the system.

I end up with seven tables after normalizing the data the list of the tables is as follows.

1. tAccCon (this table is for the money and payment information for the contributor.)
2. tAccGst (this table is for the money and payment information of the guest.)
3. tContr (this table consists general information about the contributor.)
4. tGuest (this table consists general information about the guest.)
5. tDates (this table store the different dates for the system e.g. abstract submission date.)
6. tPaper (this table store the information about the papers that contributors are going to present during the conference.)
7. tUser (this table contain the information about the users and their passwords who are going to access the system.)

Now let us explore the structure design of these tables.

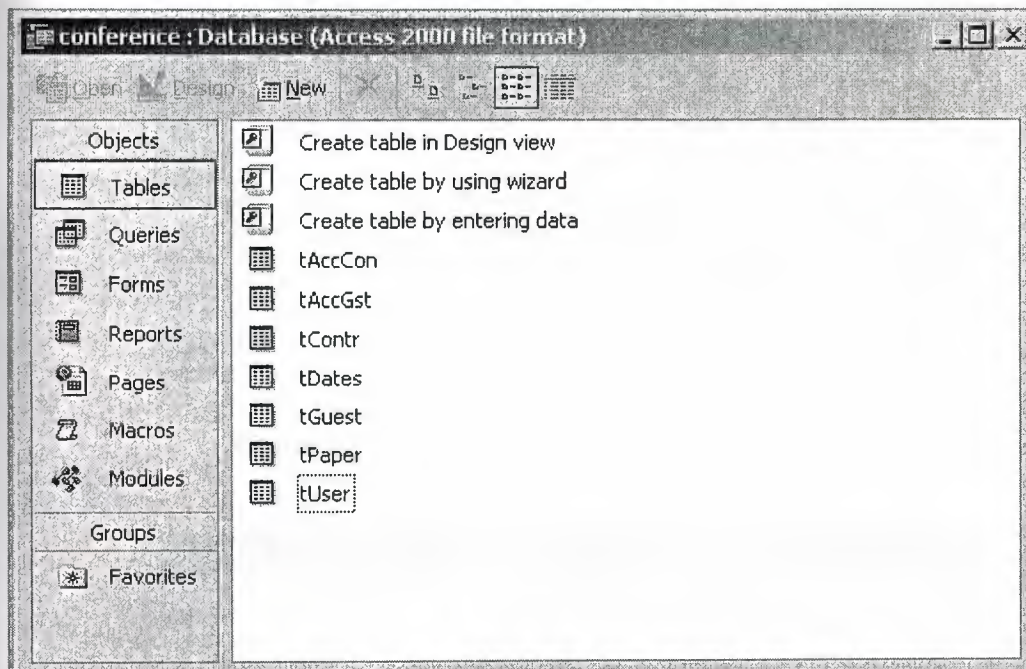


Figure 2.1. Tables of the conference tracking system.

tAccCon : Table			
	Field Name	Data Type	
?	id	AutoNumber	
	cID	Text	contributor ID
	dueAmount	Number	amount that is to be paid
	paidAmount	Number	amount that is paid
	leftAmount	Number	the remaining amount
	payDate	Date/Time	the date of transaction

Figure 2.2. Table for storing money information of contributor.

tAccGst : Table			
	Field Name	Data Type	
?	id	AutoNumber	
	gID	Text	guest id
	dueAmount	Number	amount have to pay
	paidAmount	Number	amount that is paid
	leftAmount	Number	amount left to be paid
	payDate	Date/Time	date of transaction

Figure 2.3. Table for storing money information of guest.

tContr : Table			
	Field Name	Data Type	
	cID	Text	contributors id
	cName	Text	name
	cSname	Text	surname
	job	Text	what kind of job
	jobPlace	Text	where he/she works
	nation	Text	nationality
	hAddress	Memo	contact address or home address
	wAddress	Memo	mailing address or work address
	hContNum	Text	home contact phone number
	wContNum	Text	work contact phone number
	email	Text	email
	saltation	Text	saultition mr ms mrs
	hotel	Text	where he/she have to live

Figure 2.4. General information about the contributor.

tGuest : Table			
	Field Name	Data Type	
	gID	Text	guest id
	gName	Text	name
	gSname	Text	surname
	job	Text	what is the job
	jobPlace	Text	place of the job
	nation	Text	nationality
	hAddress	Memo	contact address
	wAddress	Memo	mailing address
	hContNum	Text	home contact phone number
	wContNum	Text	work contact phone number
	email	Text	email
	saltation	Text	saultition mr ms mrs
	payNot1	Yes/No	notification of payment first
	payNot2	Yes/No	notification of payment second
	hotel	Text	where to stay during conference

Figure 2.5. General information about the guest.

tPaper : Table			
	Field Name	Data Type	
	papID	Text	going to be same as abstract id
	cID	Text	participant id
	abstract	Text	small introduction
	paper	Text	Name of paper
	paLenght	Text	duration of paper
	paTime	Date/Time	starting time of the paper
	paDate	Date/Time	date of the paper
	place	Text	the hall in which paper is going to be read
	abRec	Yes/No	abstract is receieved or not
	abAccep	Yes/No	abstract is accepted or not
	payNoti1	Yes/No	notification for payment 1
	payNoti2	Yes/No	notofication for the payment 2

Figure 2.6. Table storing information and track of paper.

tDates : Table			
	Field Name	Data Type	
?	id	AutoNumber	primary key
	absRecNoti	Date/Time	abstract submission notification date
	absAccNoti	Date/Time	abstract acceptance notification date
	payNoti1	Date/Time	first payment dates
	payNoti2	Date/Time	last payment notification dates

Figure 2.7. Table storing all important dates.

tUser : Table			
	Field Name	Data Type	
?	sID	Text	user id
	sName	Text	name
	sSname	Text	surname
	pass	Text	password
	type	Text	type of user

Figure 2.8. Table storing user information.

2.5. RELATIONSHIPS BETWEEN TABLES

When you create tables for an application, you should also consider the relationships between them. These relationships give a relational database much of its power. There are three types of relationships between tables: one-to-one, one-to-many, and many-to-many.

The relationship mean that how are the databases interacting with each other, and how is the data in one table is related with the data in other tables. In relationships one thing is always important that is you must have one master table.

You create and edit relationships between tables in Access by using the Relationships window. To display the Relationships window, click the **Relationships** command (**Tools** menu). When you define a relationship in Access, you choose the fields you want to use to define the relationship between two tables by dragging a field from one table in the Relationships window to the appropriate field in the other table. Access displays the kind of relationship it will create. If only one of the related fields is a primary key or unique index, Access creates an onetomany relationship; if both related fields are primary keys or unique indexes, Access creates an onetoone relationship.

When you define a relationship, you can specify whether to enforce referential integrity and whether to allow cascading updates and cascading deletes. Enforcing referential integrity prevents *orphan records* (a master record is deleted when related detail records still exist in other tables) in your database. For example, if you select the **Enforce Referential Integrity** check box in the **Relationships** dialog box, no one can enter an order for a customer that is not in the Customers table or delete a customer if orders exist for that customer. If you select the **Cascade Update Related Fields** or the **Cascade Delete Related Records** check box, records that have been edited or deleted in the primary table are automatically updated in related tables. You can control how these relationships are maintained through the Relationships window. The following illustrates the relationships between all the tables in our database.

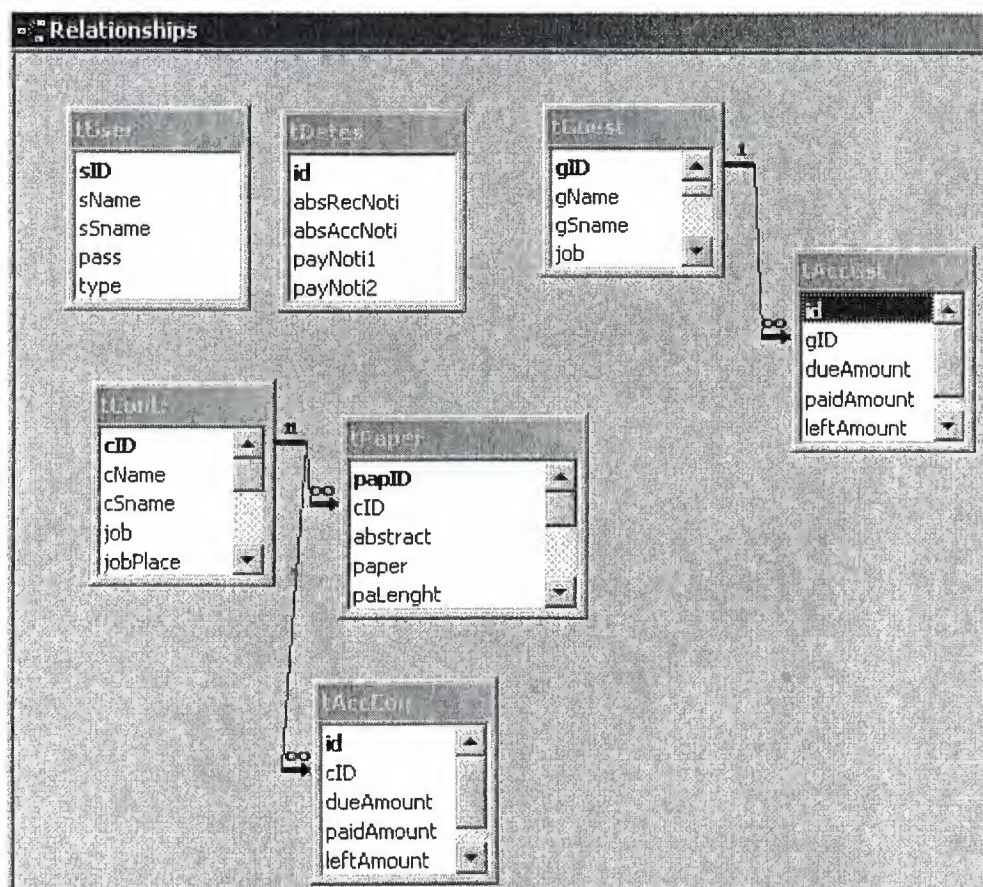


Figure 2.9. Relationship between tables

DESIGNING THE SYSTEM USING FLOW CHARTS

Flow charts are one of the best tools for software engineering modeling, they show how the data and information is flowing in the system also they made easy to make the final application of any kind. Actually they are the steps of how the program is going to be developed.

There are many kinds of flowcharts, like dataflow diagrams, simple flowcharts, structure charts etc. I have used a mixture of structure and traditional flowcharts to model the system.

3.1. FLOWCHART'S OF MENU DESIGN

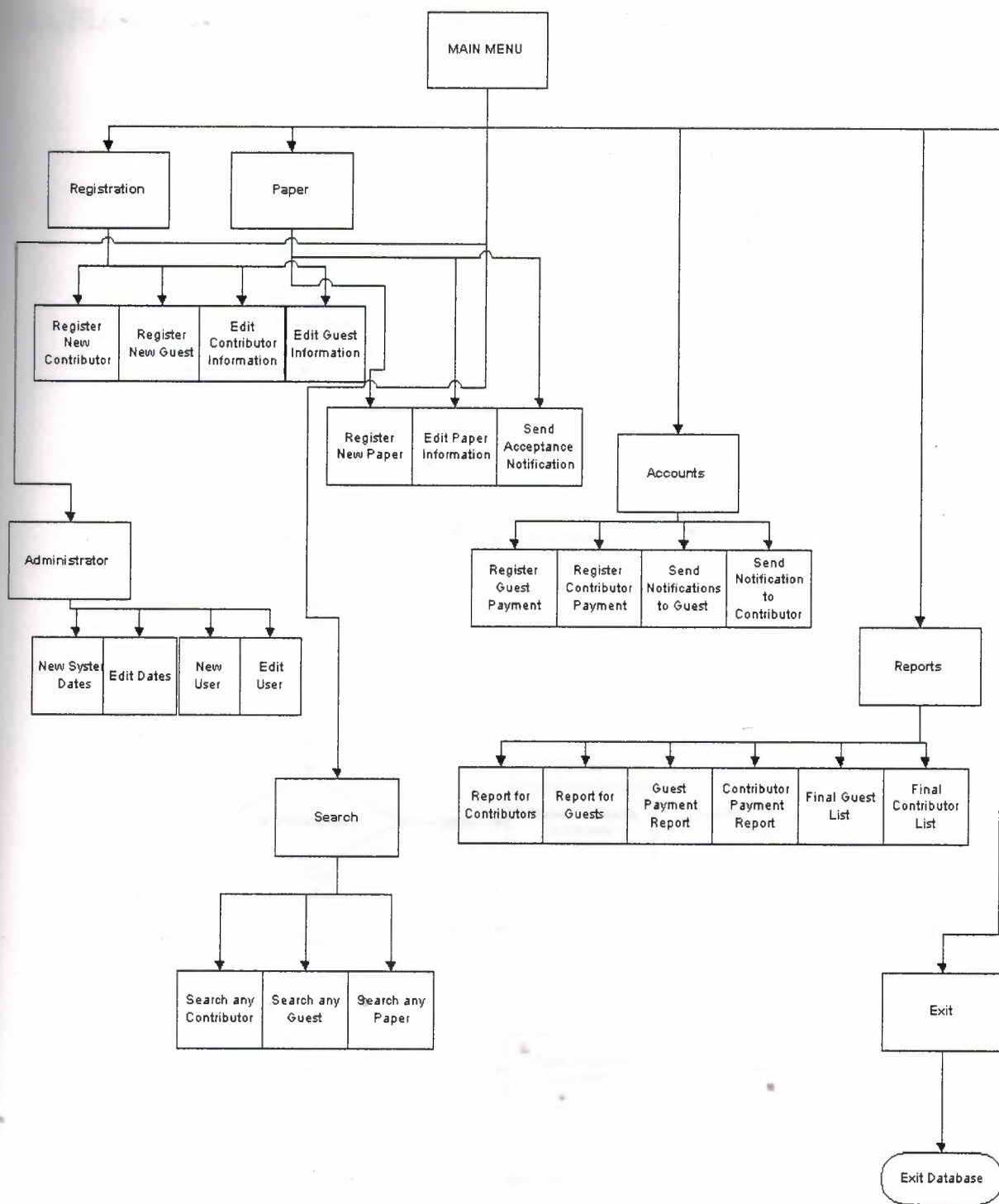


Figure 3.1. Sub Menus and options available on main page or main menu.

3.2. FLOW CHARTS OF THE PROCESSES

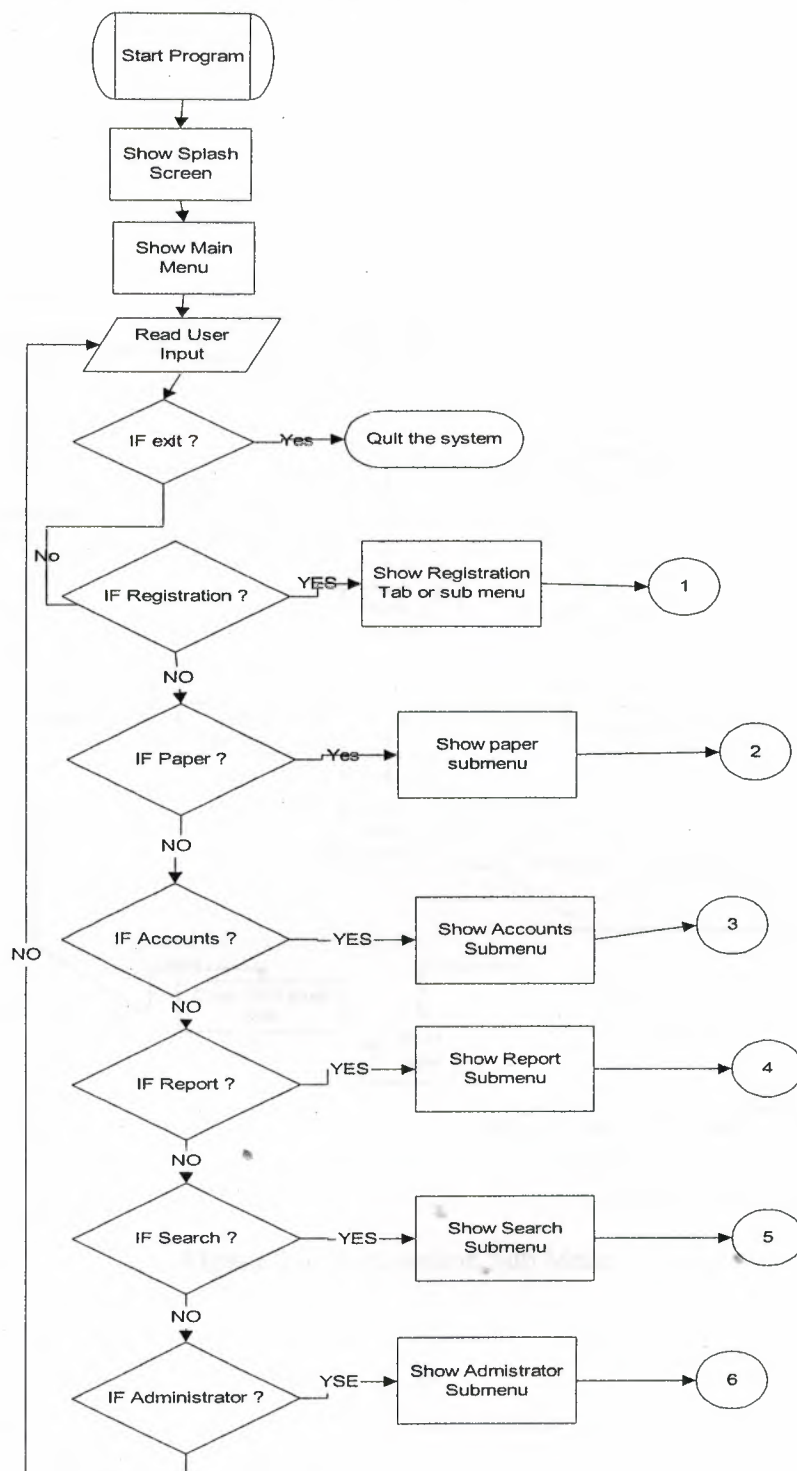


Figure 3.2. The Main Process.

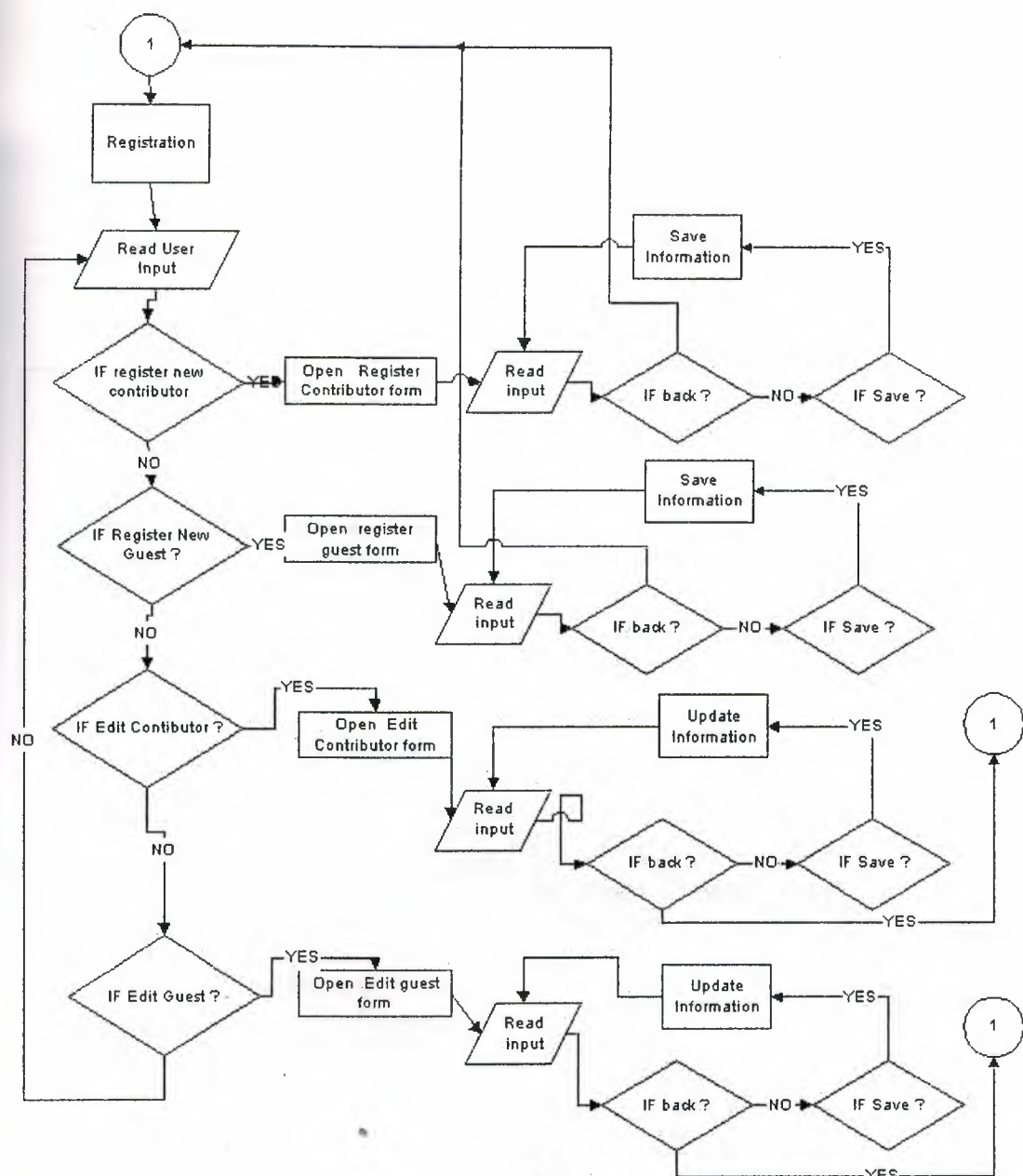


Figure 3.3. Registration Sub Menu.

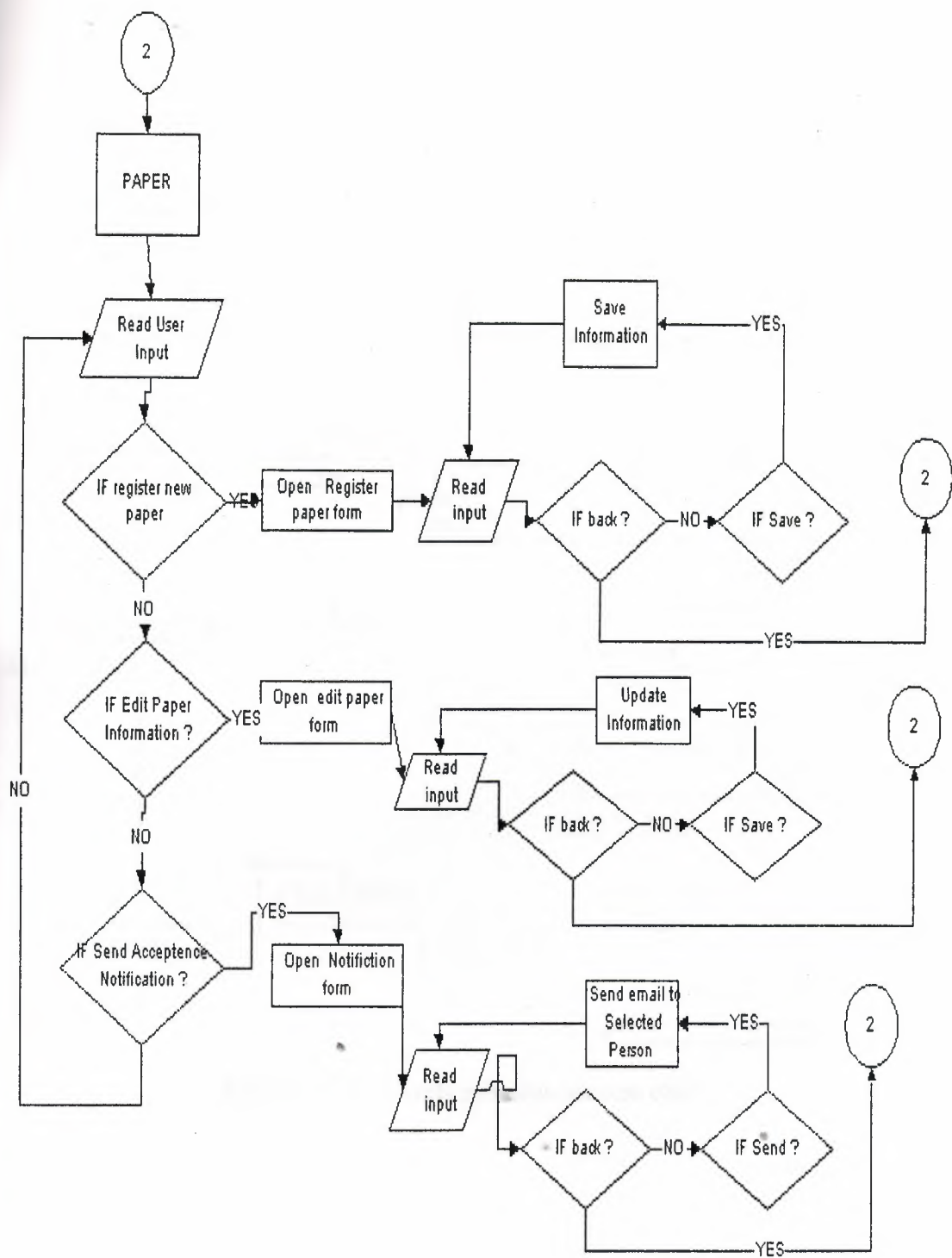


Figure 3.4. Paper Submenu process

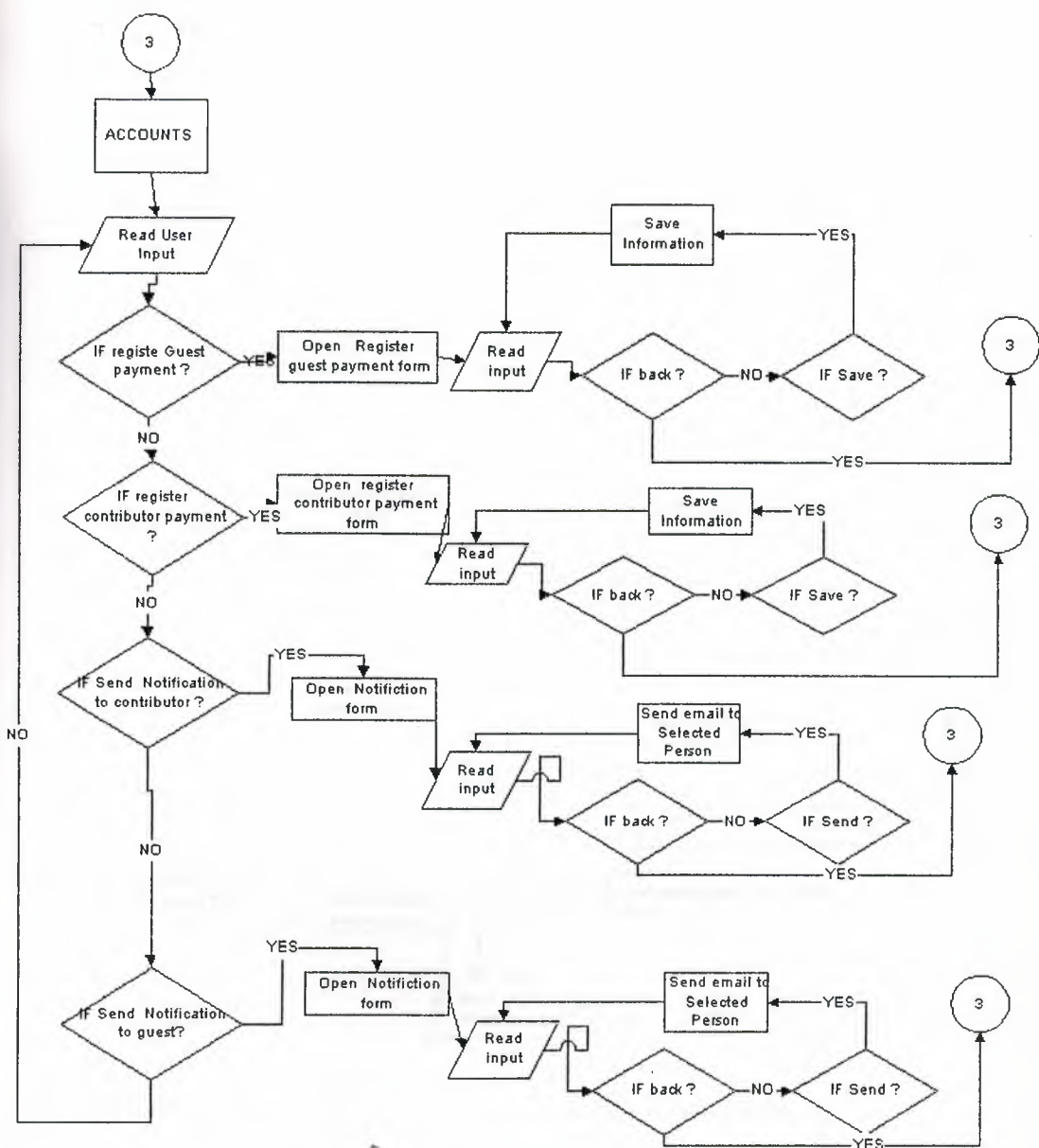


Figure 3.5. Accounts submenu process chart.

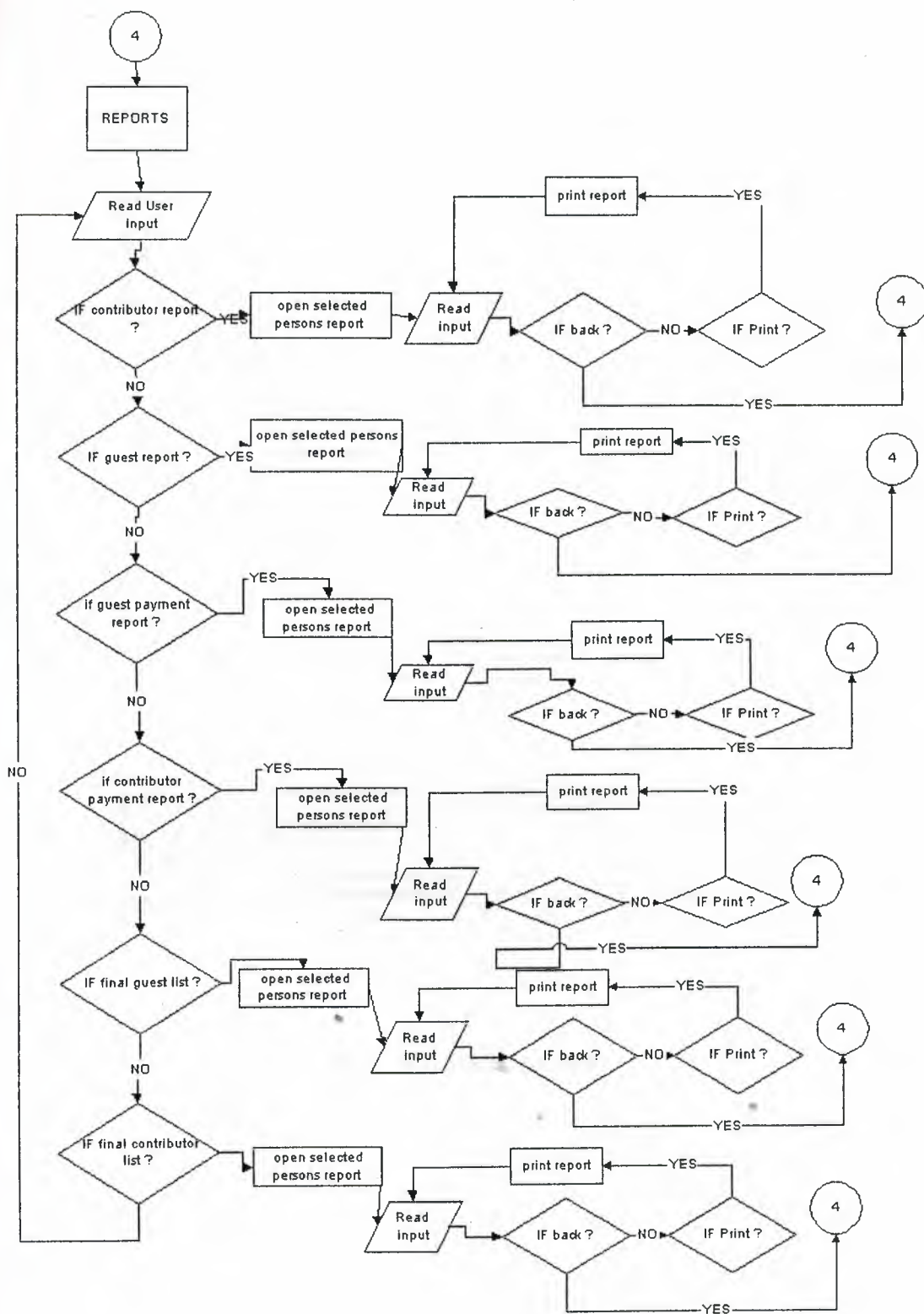


Figure 3.6. Reports submenu process.

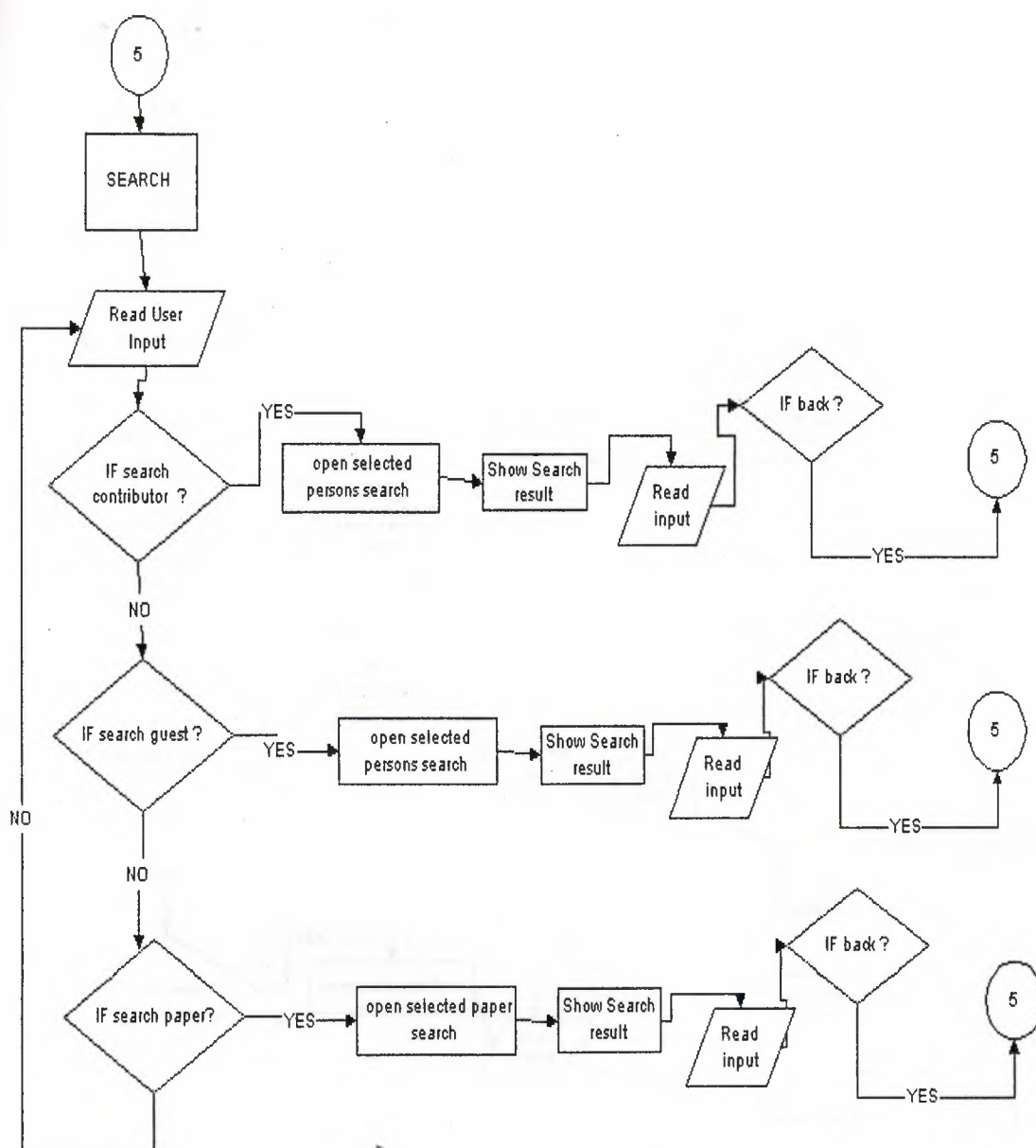


Figure 3.7. Search process

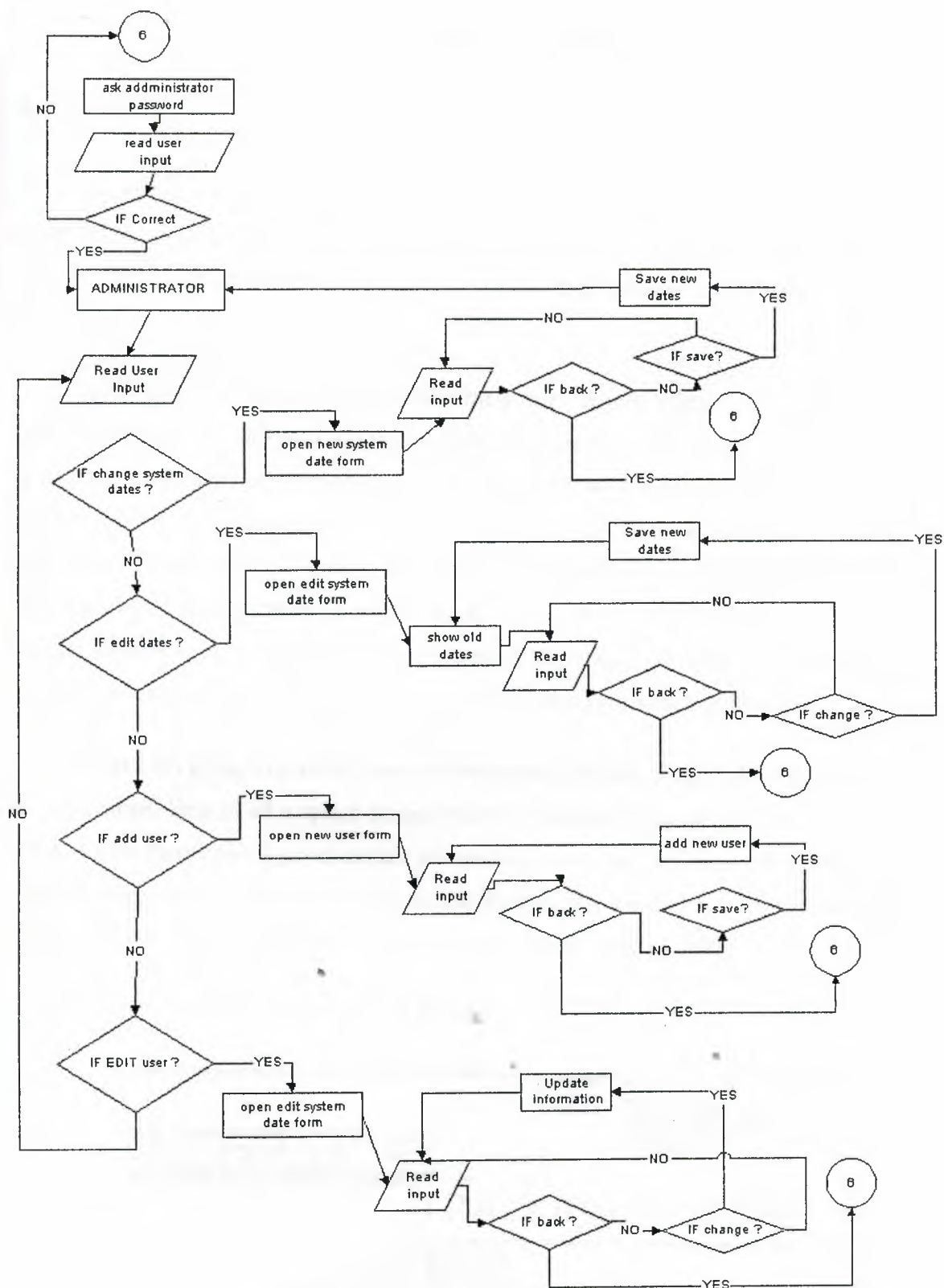


Figure 3.8. The Administrator form process

BUILDING USER INTERFACE

4.1. FORMS

Applications use forms, along with reports, to present data. Forms are also a means of accepting and responding to user input. Because database application users interact with an application almost entirely through forms, form design and behavior are very important.

Forms provide an additional behind-the-scenes benefit when you use macros or event procedures to tie your objects together. In addition to using forms as your application's interface, you can use fields on hidden forms to store and pass values from form to form or from operation to operation. For example, suppose you want to provide your users with the ability to enter a range of dates in a dialog box and then print a series of reports based on that range of dates. The dialog box is a form that you create. When the user clicks OK in the dialog box, you hide the form rather than close it. Now the dates that the user enters are available to the macro or code that prints each of the reports.

Next I am going to provide you with the screen outputs of the forms that I used in my application. First of all a splash screen comes up a splash screen is a form that comes before all the forms and it gives certain information about the application its creator and version information. It is used basically to tell the user that some thing is going on under the hood so please sit back and relax while the application loads its self.

4.1.1. SPLASH SCREEN AND LOGON FORM

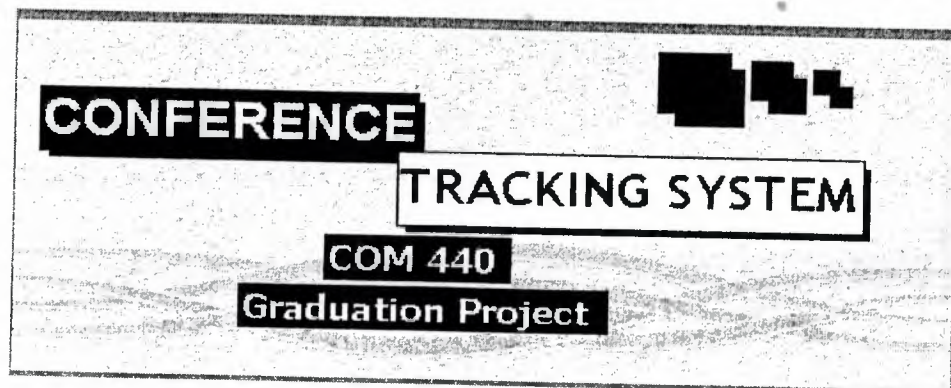


Figure 4.1. The Splash Screen.

After the application loads itself it shows a password form, why I used a password form because my application is going to be used by many persons for performing functions.

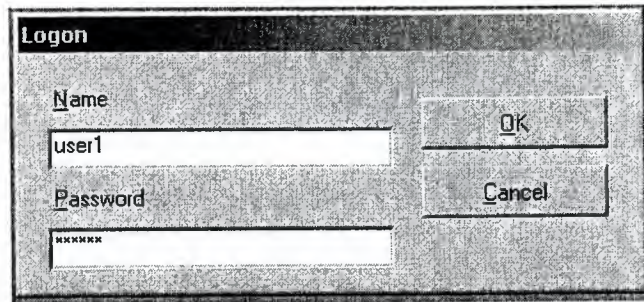
A screenshot of a 'Logon' window. It has a title bar with the word 'Logon'. Inside, there are two input fields: 'Name' with the text 'user1' and 'Password' with masked characters 'xxxxxx'. To the right of the 'Name' field is an 'OK' button, and to the right of the 'Password' field is a 'Cancel' button.

Figure 4.2. Logon form.

After that the main menu appears up which consists of many different tabs and buttons, pointing towards different sub options and menus.

4.1.2. MAIN AND SUBMENUS

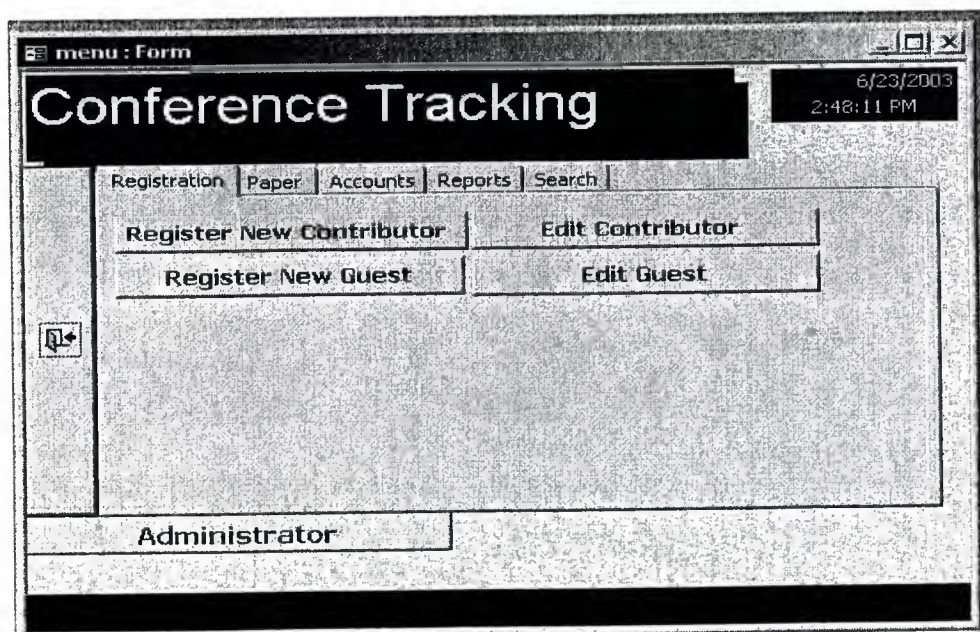
A screenshot of the 'Conference Tracking' application's main menu. The window title is 'menu : Form'. The main title 'Conference Tracking' is in a large font. In the top right corner, the date '6/23/2003' and time '2:48:11 PM' are displayed. Below the title, there is a horizontal menu bar with tabs: 'Registration', 'Paper', 'Accounts', 'Reports', and 'Search'. Under the 'Registration' tab, there are four buttons arranged in a 2x2 grid: 'Register New Contributor', 'Edit Contributor', 'Register New Guest', and 'Edit Guest'. At the bottom of the window, there is a button labeled 'Administrator'. A small icon with a right-pointing arrow is visible on the left side of the main content area.

Figure 4.3. The main menu.

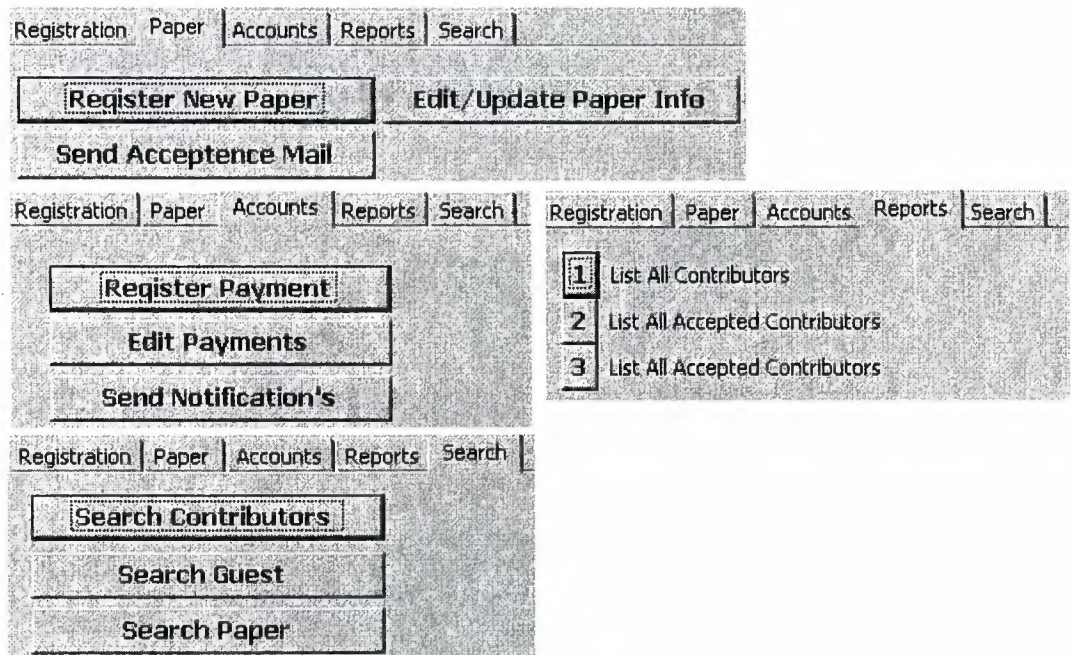


Figure 4.4. All the tabs on main menu

4.1.3. DATA ENTRY AND SEARCH FORMS

The image shows a software window titled "register contributor" with a close button (X) in the top right corner. The main title of the form is "Register New Contributor". The form contains several input fields and labels:

- ID**: A single-line text input field.
- Name**: A single-line text input field.
- Surname**: A single-line text input field.
- Joh**: A single-line text input field.
- Job Place**: A single-line text input field.
- Nationality**: A single-line text input field.
- Home Address**: A multi-line text input area.
- Work Address**: A multi-line text input area.
- Home Contact Number**: A single-line text input field.
- Work Contact Number**: A single-line text input field.
- Email**: A single-line text input field.
- salutation**: A dropdown menu with a small arrow icon.
- Save**: A button with a floppy disk icon and the text "Save".

Figure 4.5. Register new contributor form



tGuest			
Register New Guest			
ID	Name	Surname	Job
982			student
Job Place		Nationality	
near east university		i	
Home Address			
0 nea			
Work Address			
po box			
Home Contact Number		Work Contact Number	Email
0090		9009	t@hotmail.com
salutation			
Mr			
 			

Figure 4.6. Register new guest.

edit contributor

Edit Contributor Information

ID: c2

Name	Surname	Job
John		

Job Place	Nationality

Home Address

Work Address

d

Home Contact Number	Work Contact Number	Email

salutation	Hotel
Mr	villa

Save

Figure 4.7. Edit information of contributor.

tGuest
Edit Guest Information

gID
983

Name	Surname	Job
ALI	KHALIDp	TEACHER

Job Place	Nationality
FIT	JORDANIAN

Home Address
PO BOX PPFHJF
FJDLJF

Work Address
LKJFLKJF
FLKJDFJLDSJ

Home Contact Number	Work Contact Number	Email
		AAA@JJJ.HOTMAIL.COM

saltation	Hotel
Mr	ee

Figure 4.8. Edit information of guest.

tPaper X

Register New Paper

Paper ID	Contributor ID	Abstract
	<input type="text"/>	
paper	a	
	ihon	
	<input type="text"/>	

Length	Time	Date	Place
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Abstract Received ☐

Abstract Accepted ☐

Payment Notification 1 ☐

Payment Notification 2 ☐

Figure 4.9. Register New Paper Information.

tPaper X

Edit Paper Information

Paper ID

Contributor ID	Abstract
<input type="text"/>	<input type="text"/>

Length	Time	Date	Place
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Abstract Received ☐

Abstract Accepted ☐

Payment Notification 1 ☐

Payment Notification 2 ☐

tAccCon Send Acceptance Notifications

☐ To all
☒ Select

paper ID :
 Name :
 Surname :
 Email :

Subject :
 Message :

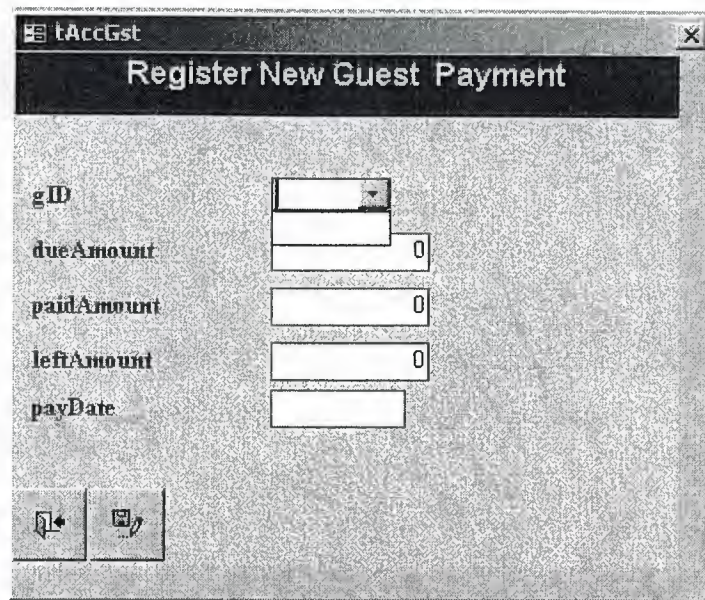
Record: 1 of 1

Figure 4.11. Sending Acceptance Notifications.

register payment Register New Contributor Payment

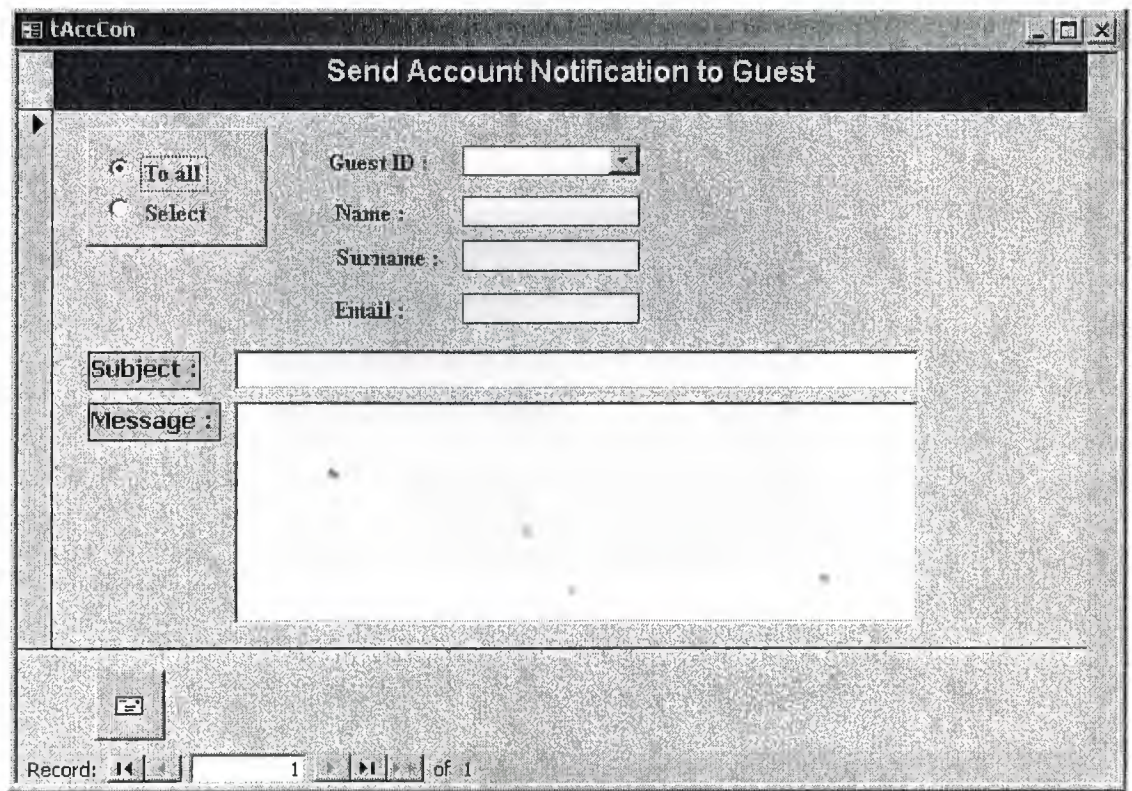
cID :
 dueAmount :
 paidAmount :
 leftAmount : 0
 payDate :

Figure 4.12. Registering payments for contributors



The screenshot shows a software window titled "tAccGst" with a subtitle "Register New Guest Payment". The form contains several input fields: "gID" (a dropdown menu), "dueAmount" (a text box with a "0" on the right), "paidAmount" (a text box with a "0" on the right), "leftAmount" (a text box with a "0" on the right), and "payDate" (a text box). At the bottom left, there are two buttons: one with a left-pointing arrow and another with a right-pointing arrow.

Figure 4.13. Registering Payment for Guest.



The screenshot shows a software window titled "tAccCon" with a subtitle "Send Account Notification to Guest". On the left, there are two radio buttons: "To all" (which is selected) and "Select". To the right of these are four input fields: "Guest ID" (a dropdown menu), "Name" (a text box), "Surname" (a text box), and "Email" (a text box). Below these fields are two larger text areas: "Subject" and "Message". At the bottom left, there is a button with an envelope icon. At the bottom right, there is a status bar that reads "Record: 1 of 1" with navigation icons.

Figure 4.14. Sending money notification for guests.

tAccCon

Send Account Notification to Contributors

☒ To all
☐ Select

Contributor ID :

Name :

Surname :

Email :

Subject :

Message :

Record: 1 of 1

Figure 4.15. Sending email to contributors for money.

fSubSea : Form

Select Search Option

By ID

By Name

c1

Figure 4.16. Finding a contributor information by name or by id.

The image shows two overlapping windows. The background window is titled 'fSubsea : Form' and has a header 'Select Search Option'. It contains two radio buttons: 'By ID' (selected) and 'By Name'. To the right of these buttons is a text input field containing 'c3' and a magnifying glass icon. The foreground window is titled 'tContr' and displays a table with the following data:

cID	cName	cSname	hotel
	jack	lemon	

At the bottom of the 'tContr' window, there is a record navigation bar showing 'Record: 1 of 1 (Filtered)'.

Figure 4.17. The result of Search.

4.1.4. ADMINISTRATOR AREA

The image shows a window titled 'fAdminPass : Form'. It contains two text input fields: 'Administrator ID:' and 'Password:'. Below these fields is a button with a magnifying glass icon.

Figure 4.18. Password form to access administrator area.

The image shows a window titled 'fAdmin : Form' with a header 'Administrator Screen'. It contains four underlined menu items:

- Enter New System Dates
- Edit System Dates
- Register New User
- Edit User Information

At the bottom left of the window is a magnifying glass icon.

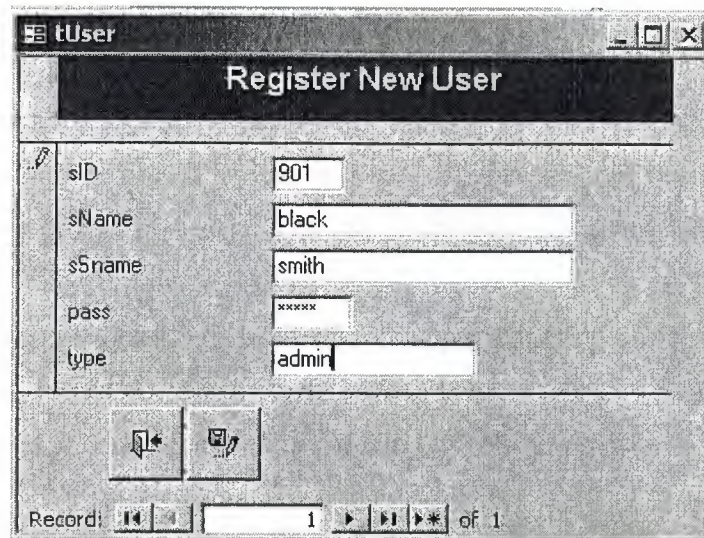
Figure 4.19. Administrator options.

The screenshot shows a window titled "tDates" with a sub-header "Register New Dates". Inside the window, there are four labels on the left and four corresponding empty text input fields on the right: "Abstract Receieving Date", "Abstract Acceptence Date", "Payment Notification Date 1", and "Payment Notification Date 2". At the bottom left of the window, there are two small icons: a left-pointing arrow and a right-pointing arrow.

Figure 4.20. Registering new system dates.

The screenshot shows a window titled "tDates" with a sub-header "Edit Dates". Inside the window, there are four labels on the left and four corresponding empty text input fields on the right: "Abstract Receieving Date", "Abstract Acceptence Date", "Payment Notification Date 1", and "Payment Notification Date 2". At the bottom left of the window, there are two small icons: a left-pointing arrow and a right-pointing arrow.

Figure 4.21. Editing dates form.

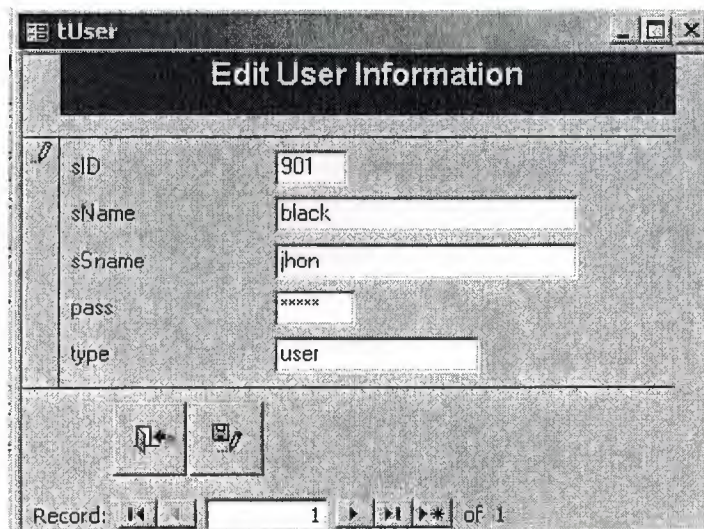


The screenshot shows a window titled "tUser" with a sub-header "Register New User". It contains a form with the following fields:

sID	901
sName	black
sSname	smith
pass	xxxxxx
type	admin

Below the form are two buttons: a left arrow and a right arrow. At the bottom, a record indicator shows "Record: 1 of 1".

Figure 4.22. Registering new user.



The screenshot shows a window titled "tUser" with a sub-header "Edit User Information". It contains a form with the following fields:

sID	901
sName	black
sSname	jhon
pass	xxxxxx
type	user

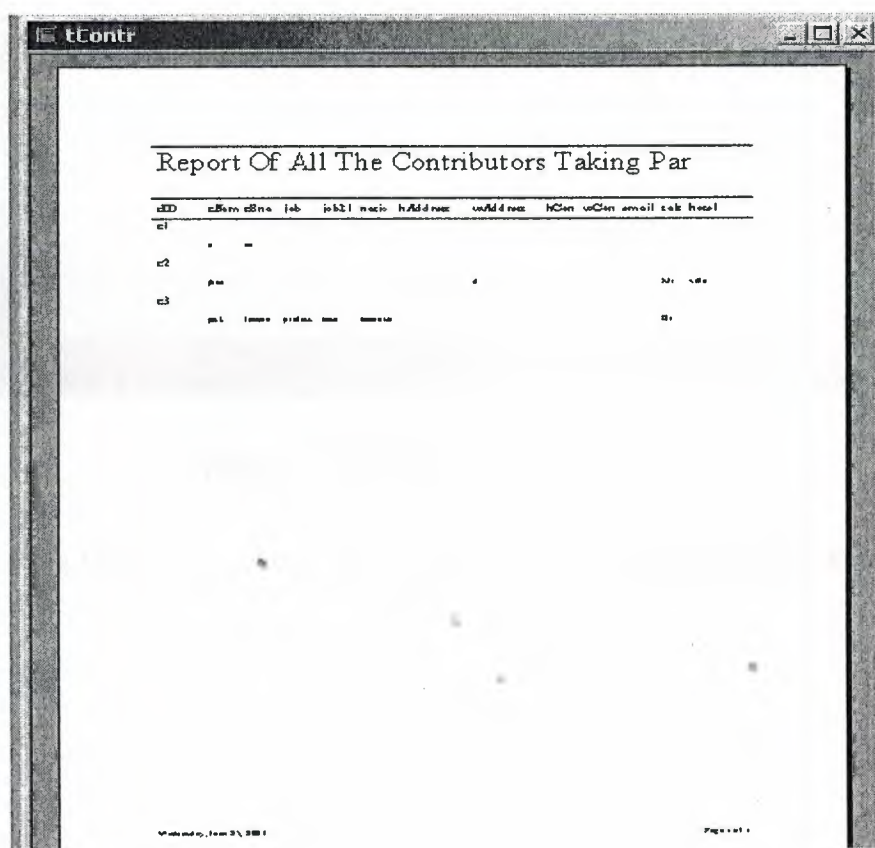
Below the form are two buttons: a left arrow and a right arrow. At the bottom, a record indicator shows "Record: 1 of 1".

Figure 4.23. Edit user information.

4.2. REPORTS

We can use reports to display information from tables and queries in a way that may be more meaningful and readable than just looking at a series of records in a table. Making a quick report is easy in Access. You can create most reports by using the Report Wizard. The Report Wizard can automatically create logical groups of data (for example, orders grouped by customer number); totals (for example, the total number of orders for all customers); and subtotals (for example, the total number of orders for each customer). You can add text, data, pictures, lines, boxes, and graphs to your reports.

Some of the reports that I used in my system are as follows. First report is about if a user wants to get a list of all the contributors and their related information.



The screenshot shows a report window titled 'tContr'. The report has a title 'Report Of All The Contributors Taking Par'. Below the title is a table with the following columns: ID, Name, Job, Job2, Name, Address, Address, HCon, WCon, Email, Sex, and Total. The table contains three rows of data. The first row has values: 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1. The second row has values: 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2. The third row has values: 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3. At the bottom of the report, there is a footer that reads 'Printed on: 11/01/2001' and 'Page: 1'.

ID	Name	Job	Job2	Name	Address	Address	HCon	WCon	Email	Sex	Total
1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3

Figure 4.24. Report of all the contributors in the system.

The next report is about if some one wants to get only his information, or if some organizer wants to get record of any one contributor. Then this report is going to be printed.

Report For

tContr	cName	cSnam	job	jobPla	nation	hAddress	wAddress	hCont	wCont	email	salt	hotel
E3	jack	Benson	professor	nwu	american						Dr	

Figure 4.25. Report for only one person.

Following form is being used to select the person for whom the user need report about.

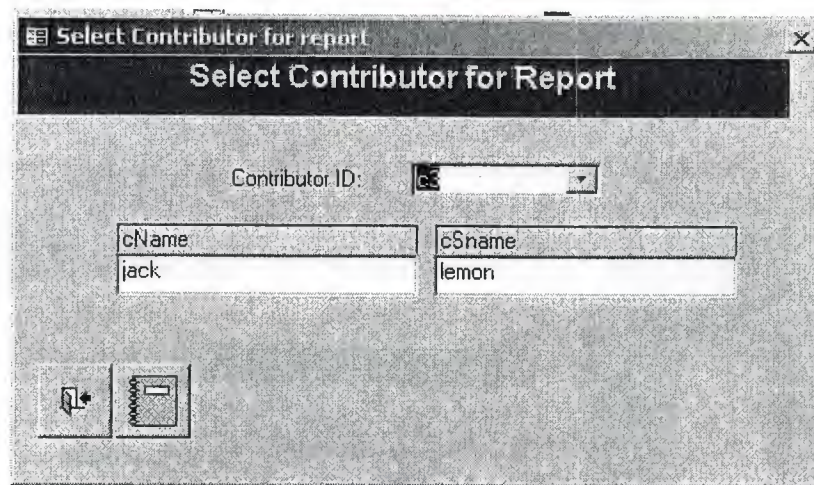


Figure 4.26. Selecting contributor to get report.

The next report is list of all the guests that are taking part in the conference and related information about them.

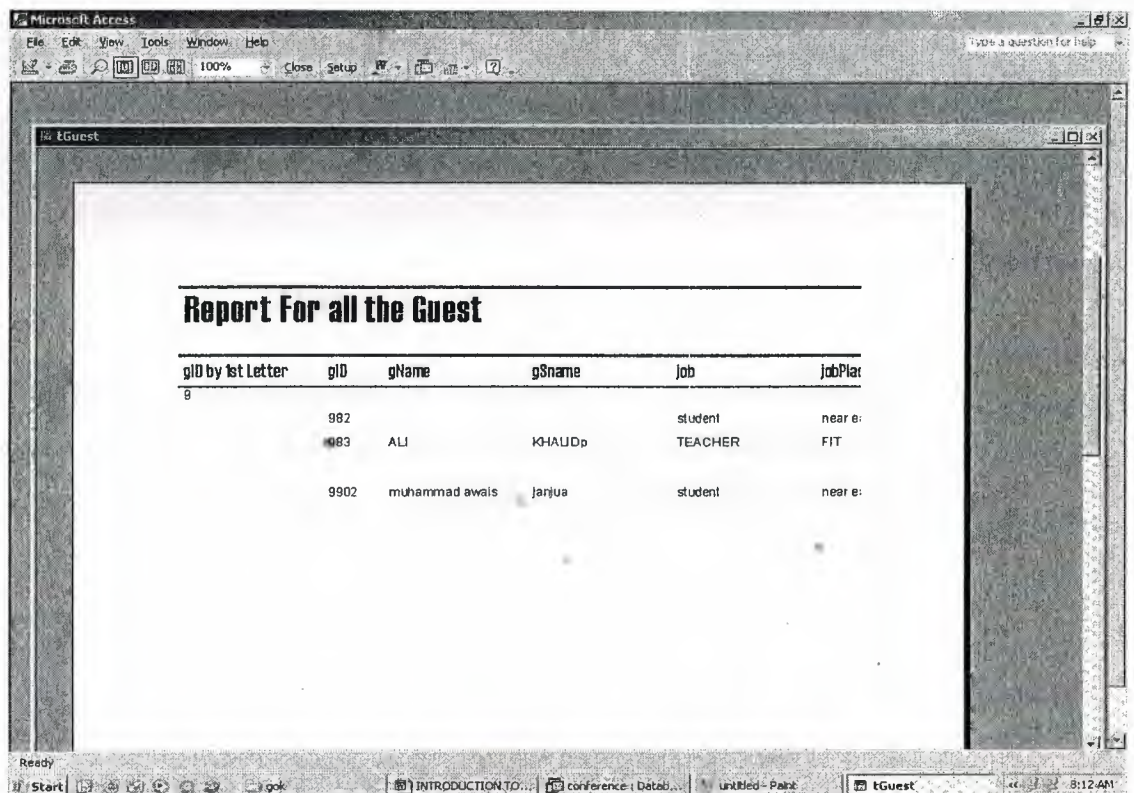


Figure 4.27. Report of all the guests.

If now the user likes to get information about a particular guest and some related information about him like where is the guest staying then this report is being employed.

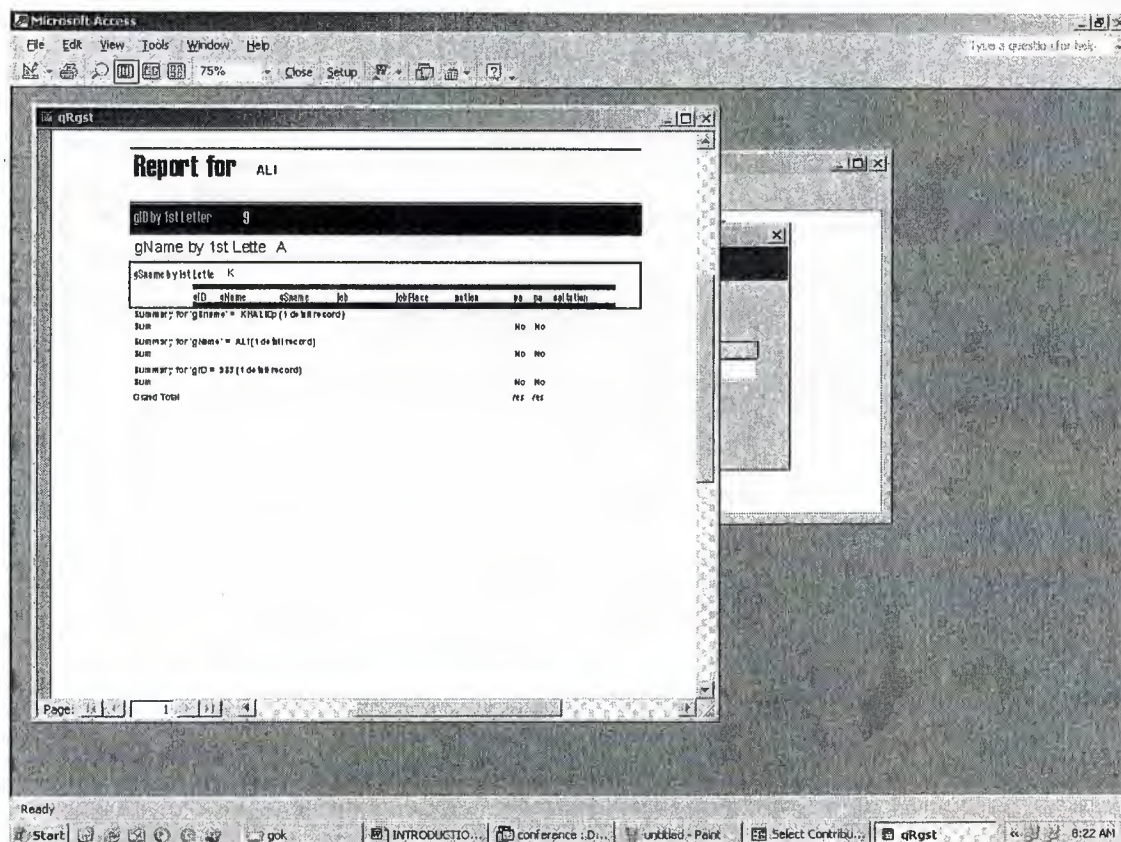


Figure 4.28. Report for a select Guest.

This guest is selected through a lookup form which is shown below, after seeing that required person is being found the data is being send to a query and then result set of query is being sent to the customized report. This way a dynamic report is available.

The screenshot shows a software interface with two windows. The main window is titled 'Report for ALI'. It contains a table with columns 'gID', 'gName', and 'gSName'. The table has three rows of data, each followed by a 'Sum' row. The first row is for 'gID by 1st Letter 9', the second for 'gName by 1st Letter A', and the third for 'gSName by 1st Letter K'. The first row shows a summary for 'gSName' = KHALIDp (1 detail record). The second row shows a summary for 'gName' = ALI (1 detail record). The third row shows a summary for 'gID' = 983 (1 detail record). The table ends with a 'Grand Total' row. A dialog box titled 'Select guest for report' is open over the table. It has a title bar 'Select Guest' and a 'Guests ID' dropdown menu showing '983'. Below the dropdown are two text boxes: 'cName' with the value 'ALI' and 'cSName' with the value 'KHALIDp'. At the bottom of the dialog are two icons: a left arrow and a document icon.

gID	gName	gSName
Summary for 'gSName' = KHALIDp (1 detail record)		
Sum		
Summary for 'gName' = ALI (1 detail record)		
Sum		
Summary for 'gID' = 983 (1 detail record)		
Sum		
Grand Total		

Figure 4.29. Form for looking up guest.

Next is a report for payments for all the contributors. That helps if you would like to print a list at any instant and compare with some accounts.

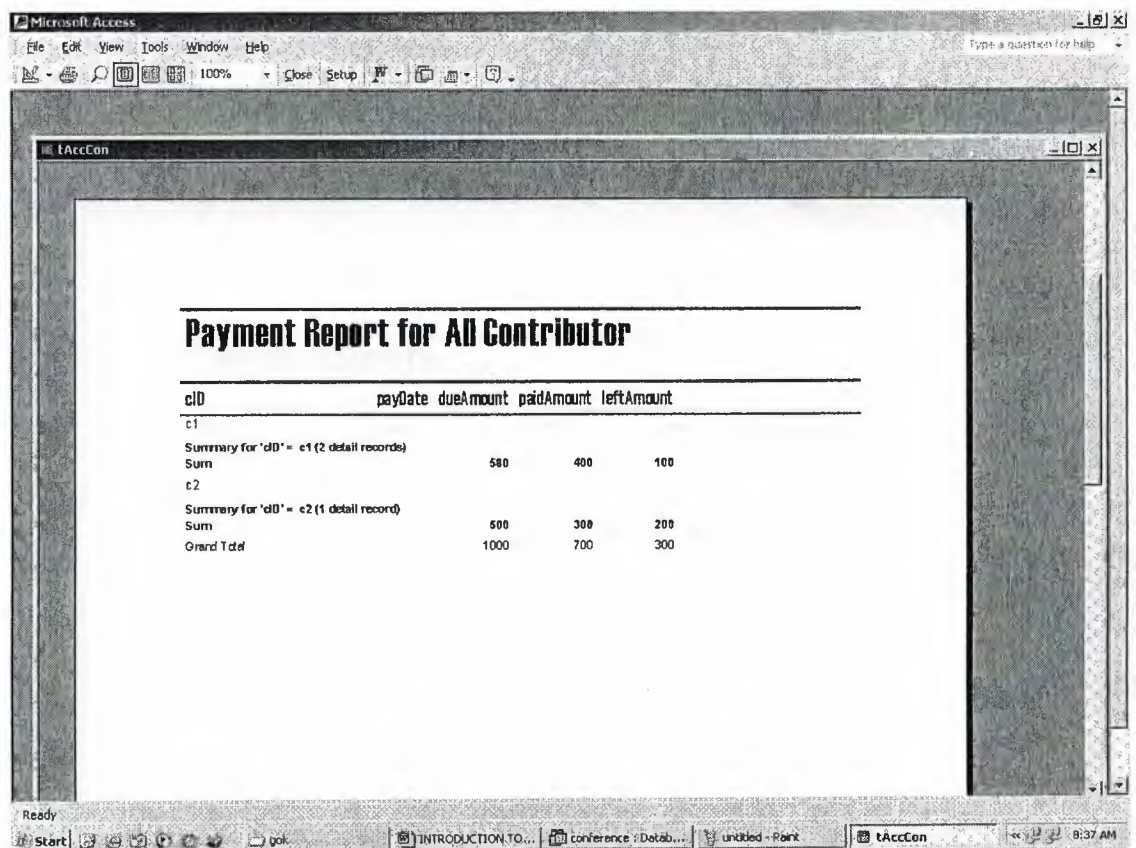


Figure 4.30. Payment report for all contributors.

Now if a person just wants to know about a particular contributors payment history then he employees the following report.

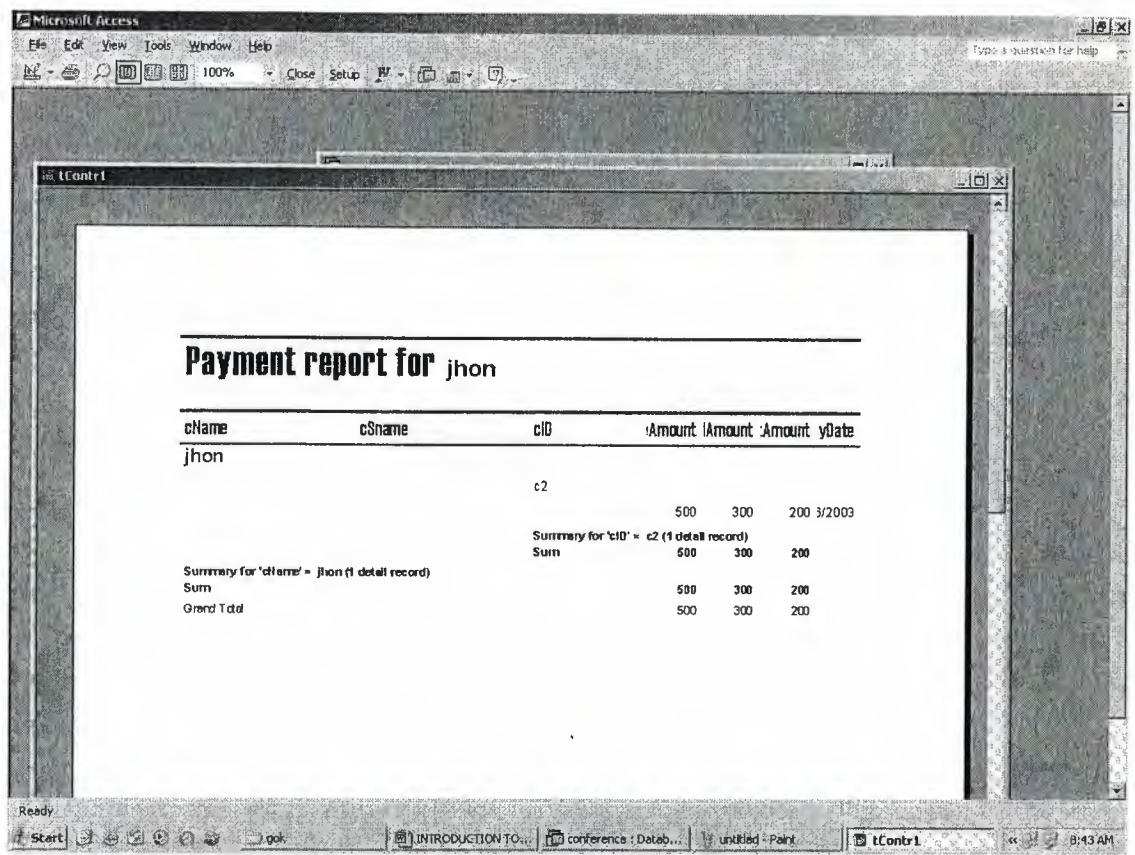


Figure 4.31. Report for a selected contributor and history of his payments.

Similarly one can need the report of any particular guest and his payment history.

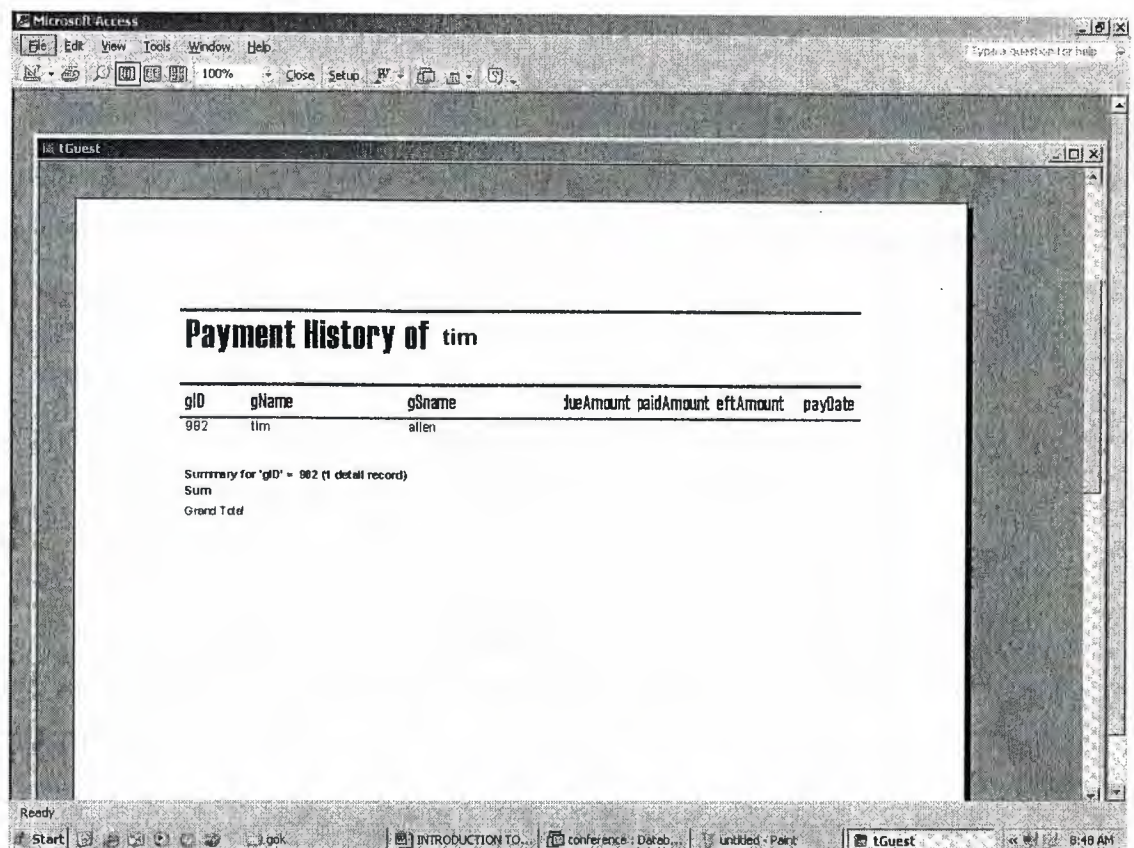


Figure 4.32. Report for a selected guest.

Many other reports are being employed in the system, and many more can be created according to the need of a particular customer. I will rap up this section of reports now and go to the next section which is very important in any kind of database application that is queries.

4.3. CUSTOM QUERIES

Queries are the workhorses of database applications. You can apply them to achieve many different kinds of objectives. Queries allow you to manipulate the data in database tables. You can use them to specify the content for forms and reports. Queries can also designate the data source for a web page.

While you may think of queries as tools for extracting information from one or more databases, there is a phenomenal amount of diversity in how they can accomplish this task. In addition, queries can perform other kinds of functions especially if you include the data definition features of SQL and linking to remote data sources.

Let us go through some of the custom queries that I built or that were needed to be build for searching or finding information, or creating resultant record sets for other forms and reports.

I will show all the queries which were employed by the previous two sections.

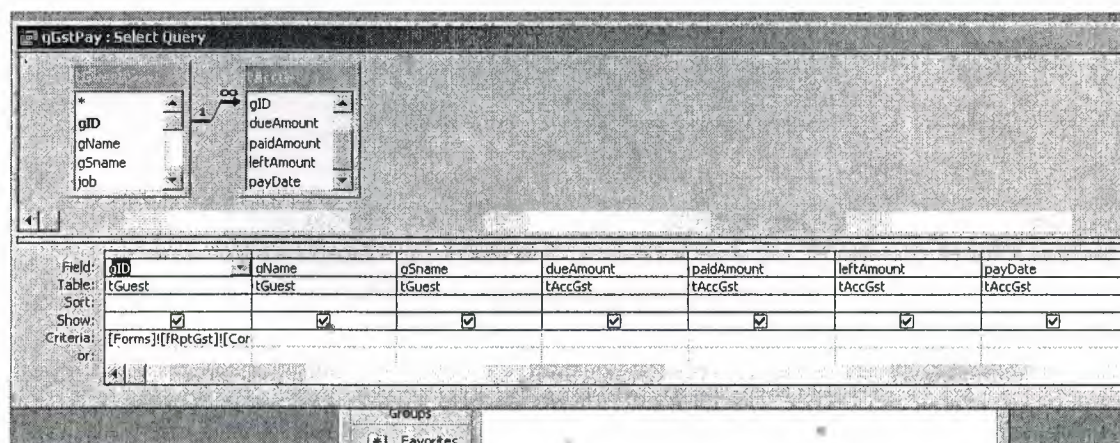


Figure 4.33. Query providing result set for guest payment report.

qPayContri : Select Query

Field:	cID	cName	cSname	dueAmount	paidAmount	leftAmount	payDate
Table:	tAccCon	tContr	tContr	tAccCon	tAccCon	tAccCon	tAccCon
Sort:							
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:	[Forms]![fRptContri]!(<						
or:							

Figure 4.34. Query for contributor payment report.

qRcontri : Select Query

Field:	tContr.*	cID
Table:	tContr	tContr
Sort:		
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:		[Forms]![fRptContri]!(<
or:		

Figure 4.35. Query for general information report for a contributor.

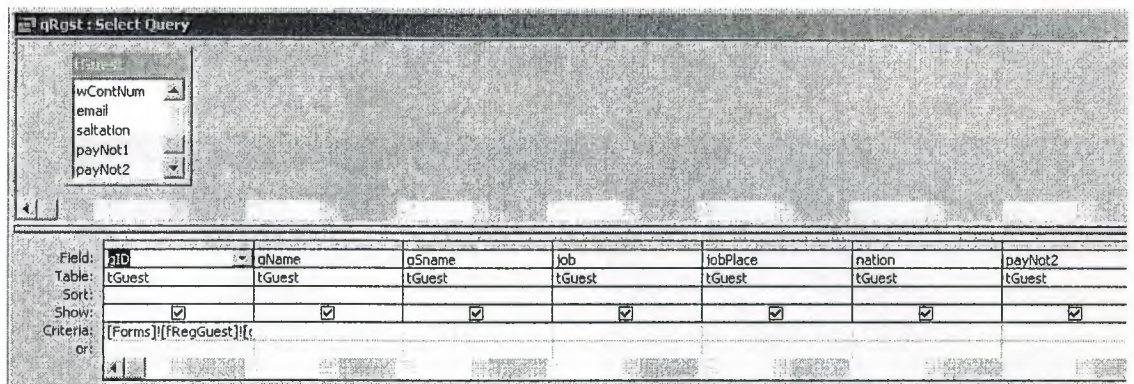


Figure 4.36. Query giving result set to guest information report.

There are many other queries that were being used through out the system and I described earlier many more can be used but due to the limited amount of space I described few which were implemented using some criteria. Let us see how Ms Access gives us different views of a query.

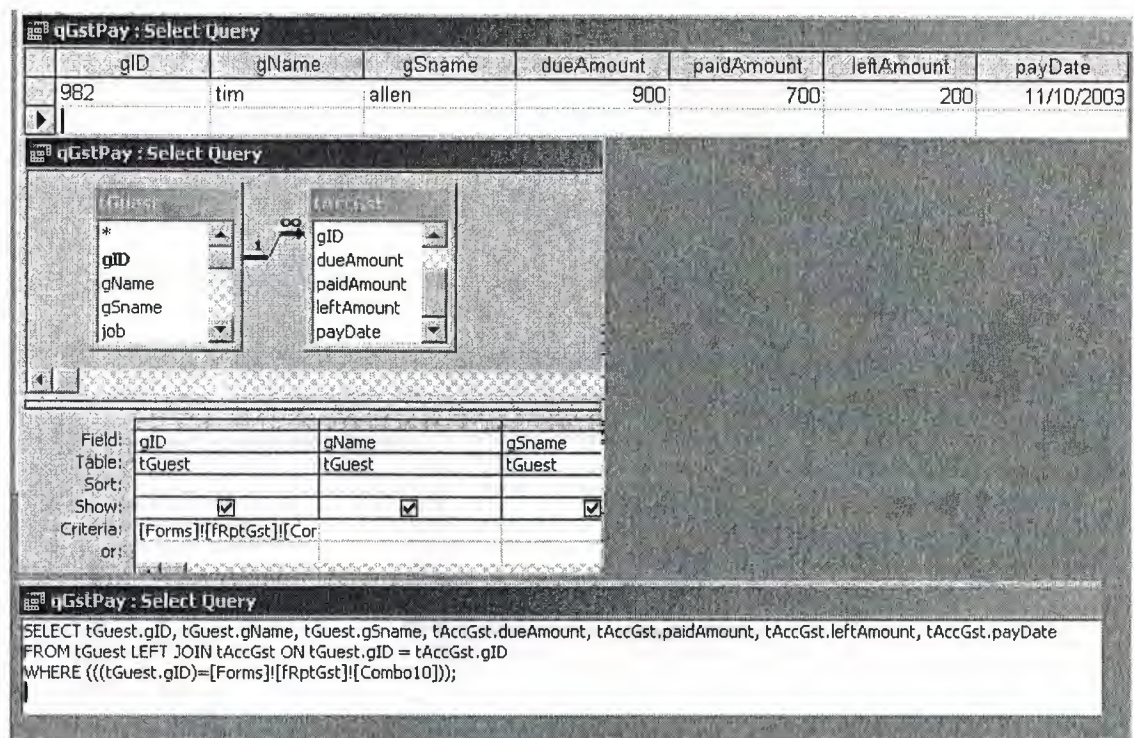


Figure 4.36. Run, Design and SQL view for queries.

Let us finish this section with these queries and go to another important section of the project that is code for performing task.

4.4. VBA CODING

Over a decade ago, Bill Gates proposed a universal macro language for desktop applications. Microsoft Visual Basic for Applications (VBA) is the fulfillment of that dream and more. The VBA in Microsoft Access 2000 is common to all Microsoft Office components as well as scores of third-party packages. Its syntax is also consistent with the stand-alone Visual Basic programming language. VBA's ubiquity enables developers to use a single programming language in dozens of contexts simply by learning a new object model. VBA is like glue for an Access application. VBA holds everything together and gives an application form.

Access 2000 includes a new interface, the Visual Basic Editor (VBE), that brings it more in line with other Office components. However, you'll probably find yourself inserting VBA code behind the familiar Access forms instead of behind the user forms used in the rest of Office. This marriage of technologies will feel very natural.

Now let us surf through some of the code that is being used in the project.

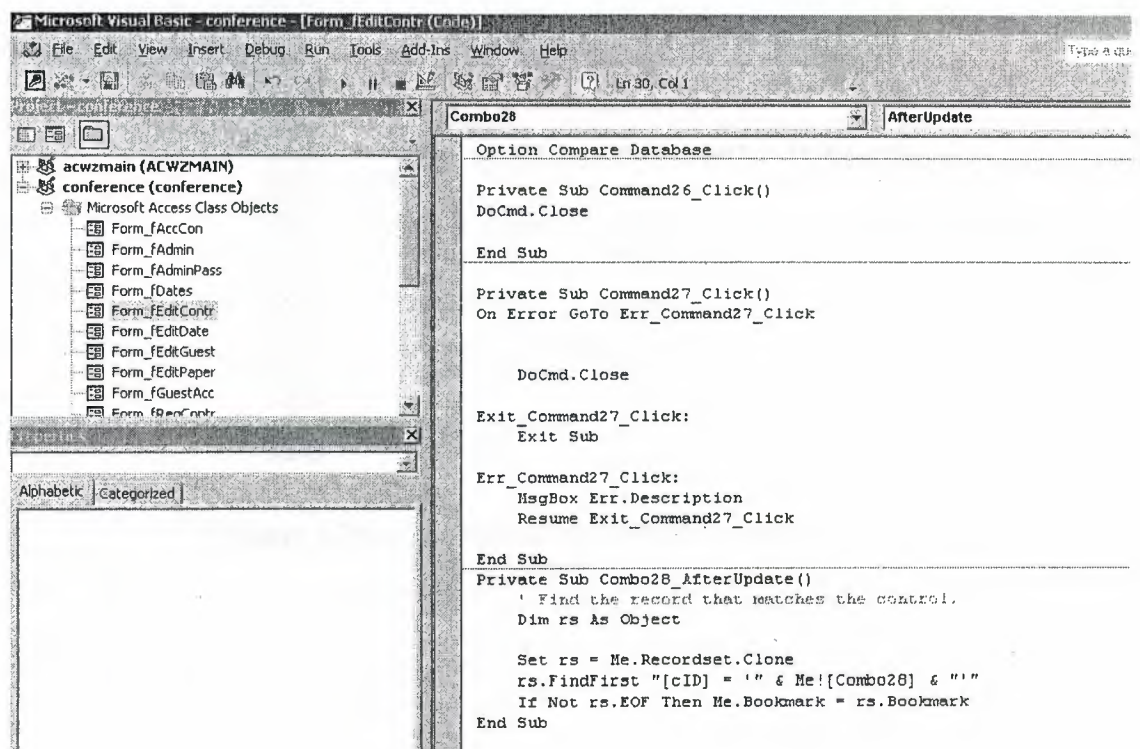


Figure 4.37. Basic VBA window for coding.

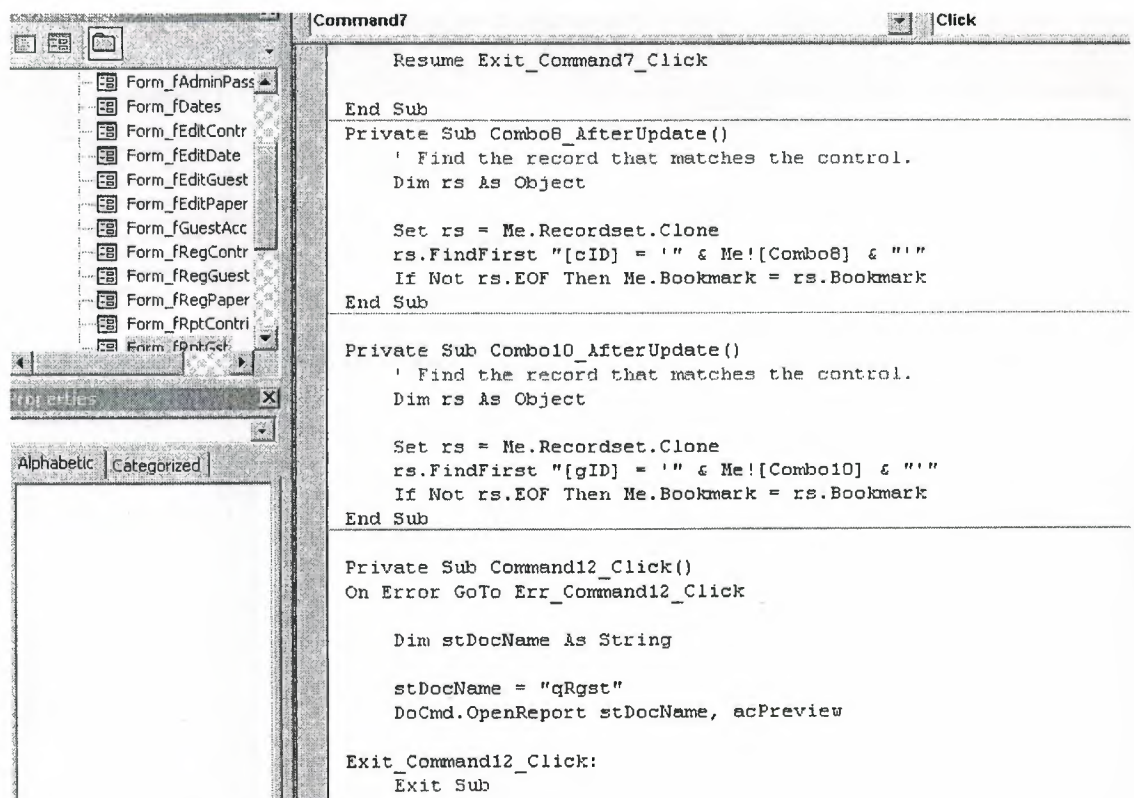


Figure 4.38. codes behind report form for guest.

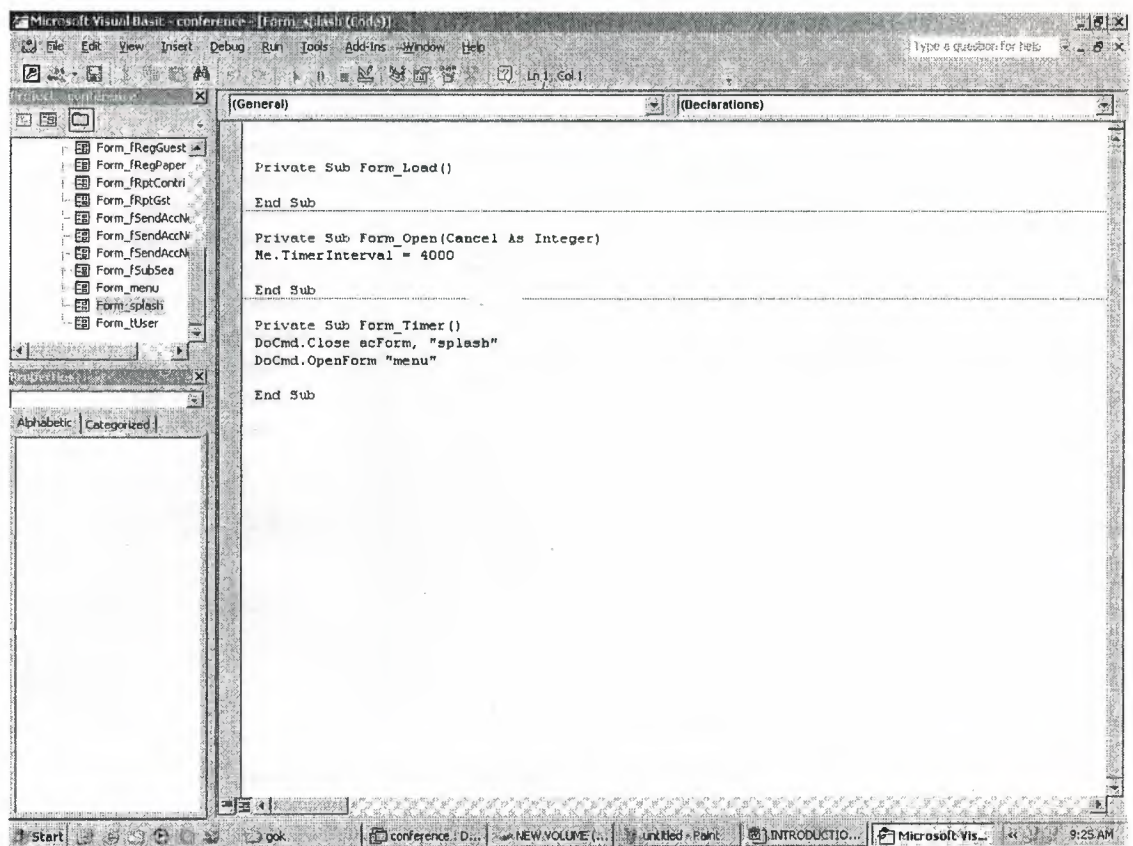


Figure 4.39. Code for splash screen.

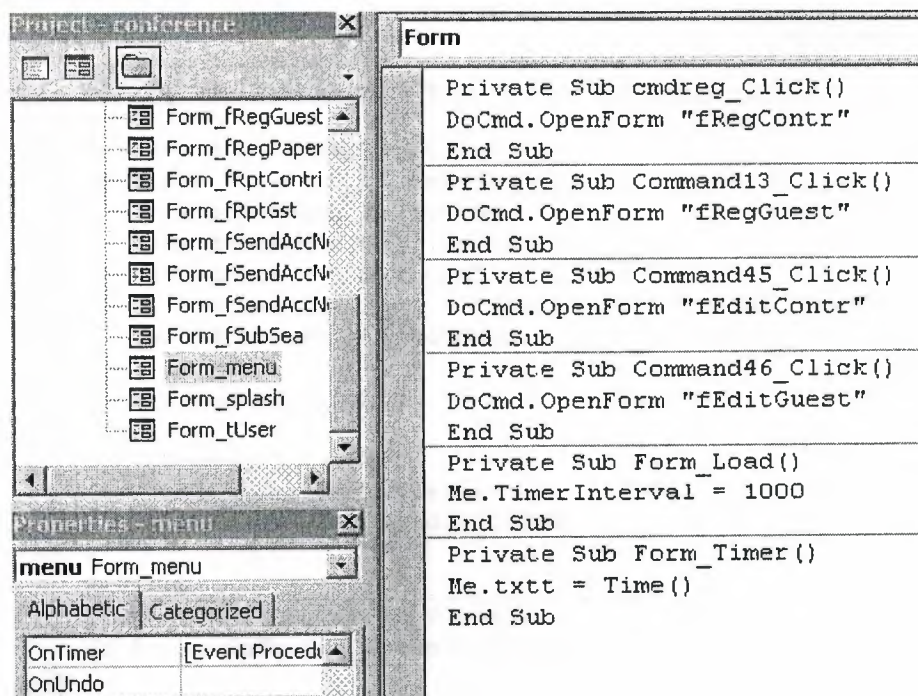


Figure 4.40. Some code for the main menu.

Command14	Click
Option Compare Database	
<pre>Private Sub Command13_Click() On Error GoTo Err_Command13_Click Dim stDocName As String Dim stLinkCriteria As String stDocName = "fSeReCon" stLinkCriteria = "[cID]=" & "'" & Me![Text11] DoCmd.OpenForm stDocName, , , stLinkCriteria Exit_Command13_Click: Exit Sub Err_Command13_Click: MsgBox Err.Description Resume Exit_Command13_Click End Sub</pre>	
<pre>Private Sub Command14_Click() On Error GoTo Err_Command14_Click Dim stDocName As String Dim stLinkCriteria As String stDocName = "fSeReCon" stLinkCriteria = "[cName]=" & "'" & Me![Text11] & DoCmd.OpenForm stDocName, , , stLinkCriteria Exit_Command14_Click: Exit Sub Err_Command14_Click: MsgBox Err.Description Resume Exit_Command14_Click End Sub</pre>	

Figure 4.41. Some code for search form.

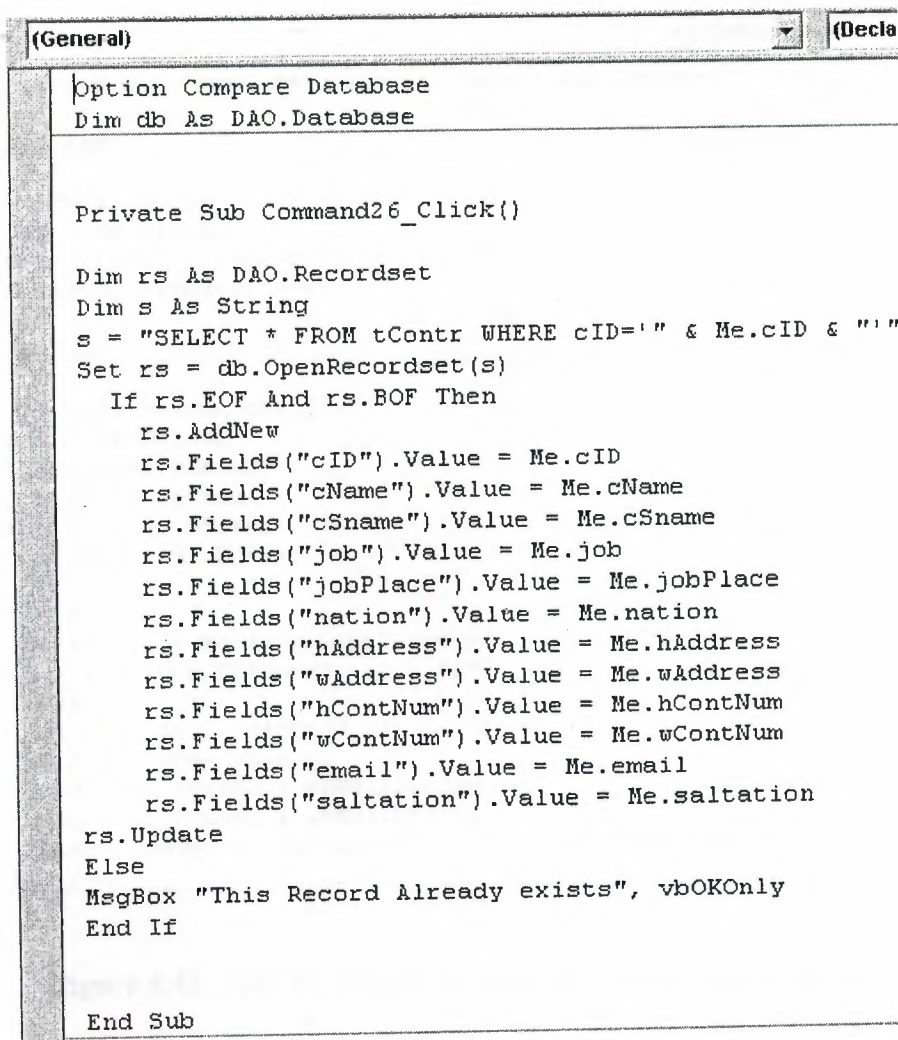


Figure 4.42. Some code for adding, registration forms.

lstm	AfterUpdate
<pre> Private Sub cmbdn_BeforeUpdate(Cancel As Integer) End Sub </pre>	
<pre> Private Sub cmbdn_Click() Dim s As String s = "SELECT p_name FROM per WHERE p_dep='" & Me.cmbdn & "'" Me.lstm.RowSource = s End Sub </pre>	
<pre> Private Sub cmdsend_Click() Dim t As String Dim att As String Dim ad As String Dim subj As String Dim masg As String t = " " For i = 0 To Me.lstm.ListCount - 1 t = t & lstm.Column(0, i) & ";" Next i att = Me.lstr.Column(0, 1) ad = t & vbNullString subj = Me.txtsub & vbNullString masg = Me.txtmsg & vbNullString DoCmd.SendObject acSendReport, att, acFormatHTML, ad, , , subj, masg End Sub </pre>	

Figure 4.43. code for sending an email using SendObject Function.

Before that the code starts to more long and long and difficult to show I will close my report for the project. Other reason for not providing full list of code is also that almost same procedures and functions are being used again and again and that are not required to display.

CONCLUSION

The program developed by me is not the perfect solution for the conference tracking but it leads a way towards a fare application that can be developed and used at any institution or organization. Many things can more be included in this application. I can improve the code for sending the emails by automating the ms access with the outlook express, now I just used a built in macro which is also vary flexible. The security level is not vary high because this application is not developed for multiple users at same time, but the security can be increased by sing Ms Access on the front end and some advanced database server on the back end like ORACLE or SQL SERVER.

But still the application is quite stable and perform the duty what it is meant for, and MS Access proves its critics that it is not only best and most widely used DESKTOP RDBMS system but also a great actually excellent development tool .

I want to remark that Access 2000 is a major upgrade in several important areas. The new VBE is just the tip of the iceberg. We alluded to a couple of major issues in this article. These are the new ADO models and the new database format. Both of these can have profound effects on how you work with Access.

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