NEAR EAST UNIVERSTY

Faculty of Engineering

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DETAILED TELEPHONE BILL SYSTEM

Graduation Project Com- 400

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ABSTRACT

In this century technology is in everywhere. Specially computer takes a important place for the people. They are using to develop their business, experience, in the school, manage thinks

This project is a complete billing system program for telecom managements, which covers all the services necessary for the billing, such as customer related information, encrypt or decrypt fo bill information, send and take bill information over internet etc.

I made this project on Visual Basic 6.0 which is the most powerfull Visual Programming Language in the world.

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INTRODUCTION

Now a day's the computer science both hardware and software is being developed over the previous years, programming is always providing the scients by a systematic development. In my project we did construct special programmed related to billing system for telecom management. By using a computer every things become easier then before and if developed the human in all it's range, now we can do what every want in a short period.

In begining of the project I look about my topics on Internet . I found some product and archive about billing system which also include my topics. After search, I collect my resource for my program which will be use in program. I carry about one of the rule for my program ,that is to make it *user friendly*.

In my project there are many functions which helps to manage billing system. Some of functions are customer information track, talk detail track, billing information track and service track.

In billing part, bill amount of each customer must be calculated automaticaly. First total speak time must be calculated, then program will calculate these total time(second) to amount to how many subscriber's meter. Then result will multiply by subscriber's meter price so we will calculate gross bill amount. Then we will have to calculate tax amount; for this operation program will select tax rate which is saved in customer record for each customer, this result will be added fixed fee of company automaticaly, finally gross bill amount added tax and fixed fee.

Sample Calculation;

Datas;

Total Speak Time(minute) = TST(min) Subscriber's Meter Time = SMT(sec) Subscriber's Meter Price = SMP Tax Rate Fixed Fee Process;

First;

TST(min) / 60 "This process gives Total Speak Time in second (TST (sec))" Second;

TST(sec) / SMT(sec) " This process gives amount of Subscriber's Meter(SMA)"

Third;

SMA * SMP " This process gives gross bill amount (GBA)"

Fourth;

GBA * % Tax Rate " This procee gives total tax amount (TTA)" Fifth;

TTA + GBA + Fixed Fee " This process gives toal amount of bill "

General formula;

Tax = (((TST / 60) / SMT) * SMP) * % Tax Rate

Bill Amount = (((TST / 60) / SMT) * SMP) + Tax + Fixed Fee

In my program customer's bill information to recording to text file (bill.txt). this text file included Customer GSM No, name, surname, due date, bill amount, customer 's status sections. This text file must be encypted before send to bank, it is necessary for bill information security. This encrypted text file to be sends to bank in regular time periods in a month. Text file to send via Internet, absolutely bank have to has Receiver Program, this small program is necessary to accept to file transfer between GSM companty and bank. When the bank to send back this text file my Receiver program will be saved the text file in setup directory of Mobile Phone Billing System Program. This incoming encrypted text file have to decoded. This decode process are going to make by releated part of my program. Decrypted text file's content will save in main database of Mobile Phone Billing System Program. Thus which customer paid or not paid own bill we can see and we can do necessary operation about customer phone account. Who did not pay own bill program have to send caution message to releated customer. By this way all customer account has to be controlled.

I used one of the powerfull Object Oriented programming language which is Visual Basic 6.0.

Visual Basic is a much-enhanced version of the BASIC programming language and the BASIC Integrated Development Environment (IDE). The bottom line of the enhancement is the VB can create Windows programs where as BASIC could only create DOS programs so the modifications are **very** major, but the idea holds true that Visual Basic is BASIC for Windows. One of the many significant improvements is that VB provides massive support for easily creating the user interface to your applications. This is accomplished within the VB Integrated Development Environment (IDE), in which you use a mouse to "draw" your application and use the keyboard to type in the code that is to be executed. When I write a VB program, I almost always create the user interface "shell". This approach, made so simple by the VB IDE, allows me to evaluate how the user will interact with the program. It especially is beneficial in that you can demonstrate to the users just exactly what they will see.

The single largest effect on coding that VB introduced was the concept of an event-driven programming model. VB performs that function for you, and in fact, the **only** time code will execute in VB is in response to such an event!

And finally, the other major concept that VB has incorporated is the concept of **objects**. Objects provides a way to link together both code and data into a "package" in such a way as to make handling and saving the code/data more intuitively. VB forms are objects, menus are objects, and the so are the intrinsic VB controls.

VB has also provided a wide variety of built-in code that programmers once had to handle themselves. Of most significance is the built-in database handling features of VB. It is generally accepted that over half of all VB applications are written to handle databases! You'll find the built-in database features of VB to be very powerful, and that you can tap into them at whatever level of programming skill you possess.

A second area in which VB has begun to provide built-in support is that of Internet access. The VB features are still maturing, but with the tools available we can create very useful applications.

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1.MOBILE PHONE BILLING SYSTEM PROGRAM CONTENT

Before starting the explanation of program, I want to list below content in my Mobile Phone Billing System.

1. Database Content - MSAccess 2002

2. Explenation of Forms which used in Mobile Phone Billing System.

1.1 Database Content – MsAccess2002

Microsoft Access is a database application that may be installed alone or as part of Microsoft Office.

A database is a collection of information stored somewhere for easy organization and exploration. Databases are used in various situations such as keeping a record of friends, registering employees job attendance, counting the number of students in a classroom and keeping a record of their grades. This means that we have been using databases all our life.

I learnt how to use the computer to create and exploit databases. I used Microsoft Access. Learning how to use Microsoft Access and some programming is just a matter of applying your already tremendous knowledge on information storage and retrieval. Microsoft Access is a software product used for desktop database applications. You can use it for personal stuff, for home, or for your business/company

MS Access is actually an enterprise level programming toolkit that uses the Visual Basic Language for its code base. MS Access it is designed to integrate with other enterprise level database systems as well as the Jet Database System (that is included with MS Access for free) as one possible backend solution.

Access is also a powerful Windows database application probably the best enduser /developer product ever writen. Microsoft Access brings the productivity of database management to the usability and consistency of Microsoft Windows. Because both Windows and Access are from Microsoft, the two products work well together. Access runs on Windows 95, Windows 98, Windows ME, Windows 2000 or Windows NT platforms, so all the advantages of Windows are aviable in Access. You can cut, copy and paste from any Windows application to and from Access.

Database help us to store our information in diffirent ways. There are many database programming language like Fox – Pro, Paradox, Dbase, Oracle and soo on. In my Program I used the MsAccess 2002. This program help me to store my data in easy and secure way. In MsAccess we can create tables, query, forms, moduls and many things.

Mobile Phone Billing System program include 4 database and 6 tables below :

1.1.1. Database : dbbilling.mdb

Tables :

1.1.1.1.tblebill1.1.1.2transaction

Details:

1.1.1.1. tblebill Table :

Field Name	Data Type	Description
givenno	Text	Gsm No given by the program automatically to the customer
surName	Text	Customer Surname
First_Name	Text	Customer Firstname
Due_Date	Text	Last day for pay Bill amount
Bill	Text	Bill amount
Status	Text	Customer status(connected or disconnected)
Service_Address	Text	Customer home address
totalspktime	Text	Total speak time between chosen two date
tell	Text	Customer telephone
Tel2	Text	Customer telephone
familyName	Text	Customer familyname
jobadress	Text	Customer job address
Billing_Period1	Text	Start date of billing period
Billing_Period2	Text	End date of billing period
Subscriber_Meter_Time	Text	One subscriber meter's time
Subscriber_Meter_Price	Text	One subscriber meter's price
tax	Text	Taxs
fixedf	Text	Fixed fee

1.1.1.2. transaction Table :

Field Name	Data Type	Description		
billID	AutoNumber	Bill ID number it gives by the program automatically		
givenno	renno Text Gsm No make relation beetween tran table and tblebill			
tlkdate	Text	When the talks are made		
tlktimesn	Text	Talk time (sec)		
who	Text	Which number customer call		

1.1.2. Database : Pas.mdb

Tables:

1.1.2.1. admin Table :

Field Name	Data Type	Description	
username	Text	Administrator name	
password	Text	Administrator password	

1.1.2.2. user Table

Field Name	Data Type	Description		
name	Text	User name		
address	Text	User address		
phone	Number	User Phone		
Userid	Text	User ID		
password	Text	User password		

1.1.3. Database : gsmno.mdb

Tables:

1.1.3.1. gsm Details 1.1.3.1. gsm Table :

Field Name	Data Type	Description
no	Text	This fields gives me which number have
		to give to the new customer

1.1.4. Database BILLING.mdb

This database is keeping bill information which is returned from bank.. Tables:

1.1.4.1. billinfo

Details

1.1.4.1. billinfo Table :

Field Name	Data Type	Description
RefID	AutoNumber	Referance ID
sid	Text	Customer GSM No
sname	Text	Customer surname
name	Text	Custormer name
duedate	Text	Last day for pay Bill amount
bill	Text	Bill amount
status	Text	Customer status(Connected or Disconnect)

2. EXPLANATION OF FORMS

2.1. Splash Screen (frmSplash.frm)



Figure 2.1. Splash Screen Window

2.2 Log-in to Program Window (frmpass.frm)

In this form user must type his/her Log-in Name and Password to enter the Mobile Phone Billing System program. If the log-in information is wrong, user can not enter to the Mobile Phone Billing System program. By this way program is not allowing for everyone to use, only staff can use Mobile Phone Billing System program. You can see the view of Log-in to program (**Figure 2.2**).



Figure 2.2. Log-in to Program Window

2.3. Main window (MDIForm1.frm):

After passing the Log-in Window, user will see the Main Window (Figure 2.3). It is including all part of menu below the list:

2.3.1. File Menu

2.3.1.1. Customer Record

2.3.1.2. Talk Detail

2.3.1.3. Dis/Connection

2.3.1.4. Exit

2.3.2. Database Menu

2.3.2.1. Import / Export File

2.3.2.2. Enrypt / Decrypt

2.3.3. Send Bill Menu

2.3.4. File Maintenance Menu

2.3.4.1. Make Backup

2.3.4.2. Change Password

2.3.4.3. Administrator Area

2.3.5. Utilities

2.3.5.1. Calculator

2.3.6. Logoff

2.3.7. Windows

2.3.8. About

2.4. Delete window (frmdelete.frm)



Figure 2.3. Main Window

2.3.1. File Menu

2.3.1.1. Customer Record (frmbilling.frm)

Here user can enter data about the customer and store them into the table in dbbilling Database. User must type all information about below list as name, surname, adress, phone, Due date and Billing period date of customer. If user will not complete all information Add Button is not going to add new data into database. User have to now administrator password for add to new customer. After storing data into database, data can be edit, cancelled, search by GSM No or Family Name. User can change

basic charges of this account; these are subscriber meter time, subscriber meter price, tax and fixed fee. These charges are using to calculate of bill amount. Also user can take printout of customer information. (Figure 2.4.)

Note : Gsm No are given automatically by program. User can not change this number. (Figure 2.5.)

] 6)	Zeom 1033			
	TÙÉ		TRIS -	
		1	Telephone Bill	
		19	and the second second second second second second second second second second second second second second second	
	Dear This is your bis for	r telephone con	nsumed in the billing period. Please bring the bill when pa	ving,
	CGM No.	8560018		
	Noise: Service_Address:	unsal Silosa	Taylen	
	Osing Periodi.	06.06.20	(5.(5.20	
			Jadeal Speciely Terrey (seec'): C	
	Oue_Date: 350	6.2003	Tatel Spece: The form) C	
	Oue_Dete: 350	8.2003	Total Speak Tines (spec) C BASK CHARGES	
	Oue Date: 350	8.203	Tatal Speak Time (cec): C BASK CHARGES Subscriber Mater Time: S Subscriber Mater Time: S	
	Oue_Pete: 350	6.203	Todal Speciel Timer (seec): C SASIC CHARGES Subscriber Meter Time: 5 Subscriber Meter Trico: 17000 tex: 35	
	.0.10. Date: 35.9	8.2003	Total Speak Time faec): C BASK CHARGES Subscribes Meter Time: S Subscriber Meter Proc. 17009 bas: 30 bass1: 2580008	
	Oue Date: 350	8.203	Total Speak Time (sec.): C BASK: CHARGERS Subscriber Meter Time: S Subscriber Meter Time: S Subscriber Meter Time: 30 tex: 30 Strest: 2560008 V8 Advants; 3	

Figure 2.4. Printout of Bill



Figure 2.5. Customer Record Window

2.3.1.2. Talk Detail (frmall.frm)

This menu provide user to have transaction history for a customer by entering his/him GSM No and date interval to see his transaction history and his total amount of pay to the company. User can sort transaction history by GSM No or date, also can see count of record. (Figure 2.6.) User can select date interval to see detailed transaction history of customer by pressing Sort Date button. User have to enter GSM NO and date interval to list talk detail in window. When user press the Show Detail button customer bill amount calculate and shown in right bottom of window. User also can see tax and total speak time of chosen customer. Calculation of bill amount; first of all total speak time converts minutes into second, secondly total speak time(sec) divide to subscriber's

meter time so we find how many subscriber's meter used. Then result multiply by subscriber's meter price so we calculate gross bill amount. Then we have to calculate tax amount; for this operation program select tax rate which is saved in customer record for each customer, this result added fixed fee of company automaticaly, finally gross bill amount added tax and fixed fee

When user press the Update Account button Bill amount added to main customer record (tblebill in dbbilling). (Figure 2.7.) Calculated bill amount will be recorded to customer database which is to report to the customer.

Pressing Print button user can take detailed printout of Call Detail of which customer chosen. (Figure 2.8.)

			Decan		
<u>Find</u> Soft	ISM No.(asc) Sort GS	M Na (desc)	Count Vew Al	Sod Dele	Fort
1 9600000 2 9600000 3 9600000 4 9600009 5 9600000	01 64 2003 01 01 2003 01 01 2003 02 01 2003 02 01 2003 02 01 2003	D 234 45 45 45 45 45 34 534	etails 8557938 455554 5454555 4545455 4545455 4545455	(1134 No Shido (14) tebases 07.06.20 and 07.06.20 Sha	ded stansion 103 103 w Detail ancel

Figure 2.6. Talk Detail Window

5 × 1	Dref Sponsos	SM Notjacoj – <u>K</u> ort GSN	AINIO (doko) (Court View Al	Sot Date Pirs
]	1 - 0600000 2 - 0600000 3 - 0600000	01.01.2003 01.01.2003 01.01.2003	Dat 234 45 45	olia 07537/8990 4055554 5454555	EStat No. BEGOOOD Selected Sectors For Acceler Petroses D1.D1.2003 211 01:01.2003 Show Detail Exercel
		Tived Speek Yes	e Samen Dain	î az	SS Appred .

Figure 2.7. Talk Detail Window with Update Account Button

	Zoom (100%	•		
	(Call D	etail	
			11.	Haziran 2003
Bill ID: 6	Đ	ate: 1.01.2003	Talk Time (sec): 55	Call Number 5558899
Bill ID: 7	0	1.01.2003	60	5455656
Bill ID: 6	0.	2.01.2003	54	5566655
Bill ID; 9	0	2.01.2003	88	5846565



2.3.1.3. Dis/Connection (frmdisconnect.frm)

In this menu user can see returned bill information of customer from bank. Bank sent these bill information in text document on a specific day in a month (Figure 2.12.). This document is include GSM No,customers name, customers surname, payment date, bill amount and status of customer(paid or not paid). User have to check Import / Export File menu (see page.16) to see bill information text is come. User can select which customer paid or not paid own bill so which customer did not pay bill user send attention notice to this customer(Figure 2.10.). With Disconect and Connect buttons user can controllable customer's phone account.

This information can sort in accordance with Gsm No. due Date, surname, status (which customer did not pay his own bill) or all record of customers. Pressing Print Disconnection Notice button user can take printout of disconnection notice to send to customer. (Figure 2.9.) and (Figure 2.10.)

Important Note: Users have to press Update All Acccount button to all information be saved in our main database (dbbilling). It is important to know which customer's account will continue.



Figure 2.9. Disconnection Window

9 Di - 2	oon (1100), **;	in the second second second second second second second second second second second second second second second				
			785			
	Dissonneti	on Notice			******	
	Servi	ce_Address: kalosa				
	Hames	UNSAL	TAYLAN			
	Dear customer:					
	ive would be to	iolonn you that you have) an urpaid accord w	als us		
	corresponding to below	the samply of telephony i	and you have contracts	al with us, delaiss of which	are presented	
	We request that	you collective account o	n og 05.08.2003	, of anythin between	NA UC:51	
	and SUPRI. Otherwise, we will be constrained, much to ou regret, to disconnect yeur laiophone service without further notice.					
	A reconnection fee of **** is also required for disconnectors services prior to reconnection.					
	ff paymente ha	s beun made, please	discegard this notic	e and accept our thanks	ð.	
	GSM Ho:	SELECTIS	Dill;	Ø		
145.45						

Figure 2.10. Disconnection Notice

2.3.2. Database Menu

2.3.2.1. Import / Export File (frmimpexp.frm)

In this menu user can create a text file (bill.txt) (Figure 2.11.) from dbbilling database to send to bank by pressing Export DB to Text File button This will convert tblebill table to a comma delimited text file. This text files includes customer GSM No, surname, name, duedate, bill amount, status fields in table.

If user wants to see this file, have to press Read File and Display button. Also user can create a database for returned bill information from bank by clicking Import to DB button. Dis /connection menu This button is used to load data from text file (bill) and add it to billinfo table in BILLING database for further use. (Figure 2.12.)





Parta S	
LAP	art miliont
File Name:	
***************************************	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Make Database	Export D8 to Text File
Import to DB	Read File and Display
Ma	n Nenu

Figure 2.12. Import / Export File Window

2.3.2.2. Enrypt / Decrypt (frmencdec.frm)

In this window user can encrypt or decrypt selected file(bill.txt). This file must be created in Import / Export menu. It is necessary for bill security; user have to first open textfile (bill.text) to encrypt. When user press Encrypt button program will be asked enter an encryption code which user have to remember. Than user can save the file to send to bank. At the time of decryption user have to enter the code which user entered at the time of encryption. (Figure 2.13.)



Figure 2.13. Encrypt / Decrypt Window

2.3.3. Send Bill Menu

2.3.3.1. Sender (frmSender.frm)

This menu allows user to send and recieve binary file (bill.txt) to the bank in a very little time. It uses TCP port 50, so user must check system firewall to enable the messenging on the port. When user press the Send a file over the net button program will automatically send bill.txt file to the bank. bill.txt file must be in working directory of Mobile Phone Billing System Program and also it must encrypted with Encrypt / Decrypt menu used.

When user press Enable File Reciever button start connection for incoming file transfers to the bank. When the bank send the file (bill.txt) program will be asked "Accept incoming file ", user have to accept this warning if file is expecting. Incoming file will be saved in setup directory of Mobile Phone Billing System Program. (Figure 2.14.)

Phone	e Billing
This Section ellows you to send en little time. It uses TCP part 50, so of messenging on this part.	frecieve brugo files in a vego wok yosu finiwali to eristila file
Please Select Bank to send bill information Send a file over the net	Main Menu
Enable File Reciever	Exil

Figure 2.14. Sender Window

2.3.4. File Maintenance Menu

2.3.4.1. Make Backup (frmbck.frm)

In this part user can take backup of customer record and keep it in floopy disk.

(Figure 2.15.)



Figure 2.15. Backup Window

2.3.4.2. Change Password (Change.frm)

User can change his/her own login password in this section. (Figure 2.16.)

	Change Passw	vord
÷	Old Password USER NAME :	

Figure 2.16. Chance Password Window

2.3.4.3. Administrator Area (frmadmin.frm)

Only administrator can use this window. When clicked the administrator area in main window program will ask administrator password, administrator have to supply this password for enter this area. In this area administrator can add new user, edit existing user or edit own account. (Figure 2.17.)

Select User	taulan •	
User Name	1:62:	
Password	1,520	
Add E	dit Delete cta	
Add E User U	dit Delete Clev ser User Clev	ar
Add E User U Admindstrater ID (Admin ID	dit Delete Clea ser User Clea Management : Ed	ar lit

Figure 2.17. Administrator Area Window

2.3.5. Utilities Menu

2.3.5.1. Calculator

User can use calculator to any aritmetical operation. (Figure 2.18.)

)
	Backs	úace [ĽÆ		C
MC	7	8	9	7	S CB
MR	4	5	6	(a.	2
MS	1	2	3		14

Figure 2.18. Calculator

2.3.6. Logoff Menu

This option help us to change user for the Mobile Phone Billing Program

2.3.7. Windows Menu

This menu is useful for user because user can see which window or windows open and user can easly select one of them.

2.3.8. About

This menu inform the user about who programmed the Mobil Phone Billing System Program. (Figure 2.19.)



Figure 2.19. About Window

2.4. Delete window (frmdelete.frm):

This window is animation of delete record. (Figure 2.20.)



Figure 2.20. Delete Window

CONCULUSION

This project help me to increase my knowledge about Object Oriented Programming and how to use Visual Basic 6.0. Traditional programming languages obligates the programmer to write a lots of code and procedure to develop to similar program that includes data functions, buttons, different types of text-boxes ... etc. But in Object Oriented Language does not obligate programmer to write a lots of code it has in own library.

The aim of this project was to create a program that should be used for automation at billing control of any telecom management. The reason behind this to make the operation accurate, organized and faster which in saving time and efforts.

In project I found specific solution to my problem. I improve my programming language in this project.

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APPENDIX

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Splash screen (frmSplash.frm)
 Private Sub Form_Click()
 Load frmpass
 Unload Me
 frmpass.Show 1
 End Sub

Private Sub Form_KeyPress(KeyAscii As Integer) Load frmpass Unload Me frmpass.Show 1 End Sub

'Private Sub Label1_Click(Index As Integer)'Call Shell("start mailto:taylanunsal@hotmail.com")'End Sub

2. Log - in to program window codes (frmpass.frm)

Dim db As Database Dim rs As Recordset

Private Sub Command1_Click() With Data2 .Recordset.MoveFirst Do Until .Recordset.EOF If (.Recordset.Fields(0) = Text1.Text) And (.Recordset.Fields(1) = Text2.Text) Then 'If Text1.Text = Data1.Recordset("userid") Then '& Text2.Text = Data1.Recordset("password") Then Unload Me frmadmin.Show Exit Sub Else .Recordset.MoveNext End If

Loop

'Label4.Caption = "Invalid username or ID.Try again.. "
MsgBox "Invalid Username or password.Try again...", vbCritical, "HMS"
Text1.Text = ""
Text2.Text = ""
Text1.SetFocus
End With
End Sub

Private Sub Command2_Click()

With Data1

.Recordset.MoveFirst

Do Until .Recordset.EOF

```
If (.Recordset.Fields("userid") = Text1.Text) And (.Recordset.Fields("password") =
```

Text2.Text) Then

```
'If Text1.Text = Data1.Recordset("userid") Then '& Text2.Text =
```

Data1.Recordset("password") Then

Unload Me

MDIForm1.Show

Exit Sub

Else

.Recordset.MoveNext

End If

Loop

'Label4.Caption = "Invalid username or ID.Try again.. "

MsgBox "Invalid Username or password. Try again ... ", vbCritical, "HMS"

Text1.Text = ""

Text2.Text = ""

Text1.SetFocus

End With

End Sub

Private Sub Command3_Click() Close Databases

End

End Sub

Private Sub Form_Load() Data1.DatabaseName = App.Path & "\Pas.mdb" Data1.RecordSource = "select * from user" Data2.DatabaseName = App.Path & "\Pas.mdb" Data2.RecordSource = "select * from admin" End Sub

Private Sub Text1_KeyPress(KeyAscii As Integer) If KeyAscii = 13 Then Text2.SetFocus SendKeys "{home}+{end}" Text1.Text = LCase(Text1.Text) End If End Sub

Private Sub Text2_KeyPress(KeyAscii As Integer) If KeyAscii = 13 Then Command2.SetFocus SendKeys "{home}+{end}" Text1.Text = LCase(Text1.Text) End If End Sub

3. Main window code (MDIForm1.frm)

Option Explicit

Private Sub about_Click() Load frmAbout frmAbout.Show End Sub Private Sub backup_Click() Load frmbck frmbck.Show End Sub

Private Sub billing_Click() Load frmbilling frmbilling.Show End Sub

Private Sub calc_Click() On Error Resume Next Dim ray ray = Shell("CALC.EXE", 1) End Sub

Private Sub chnpass_Click() Load Change Change.Show End Sub

Private Sub cpas_Click() Dim n n = InputBox("Please supply password or type 'cancel' to undo", "Message") n = LCase(n) If n = "1" Then Load frmadmin frmadmin. Show ElseIf n = "cancel" Then MsgBox "Adding new service ID number cancel", vbInformation, "Message" ElseIf n = "" Then 'do nothing Else MsgBox "Invalid password", vbCritical, "Message" End If End Sub

Private Sub custrec_Click() Load frmall frmall.Show End Sub

Private Sub discon_Click() Load frmdisconnect frmdisconnect.Show End Sub

Private Sub exit_Click() Dim a a = MsgBox("Are you sure you want?", vbQuestion + vbYesNo, "Exit") If a = vbYes Then Beep End End If End Sub

Private Sub impex_Click() Load frmimpexp frmimpexp.Show End Sub

```
Private Sub MDIForm_QueryUnload(Cancel As Integer, UnloadMode As Integer)
Dim a
a = MsgBox("Are you sure you want to Quit?", vbYesNo + vbQuestion, "Exit")
If a = vbYes Then
End
Else
Cancel = True
End If
```

End Sub

Private Sub sender_Click() Load frmSender frmSender.Show End Sub

Private Sub stan_Click() Load frmencdec frmencdec.Show End Sub

4. Customer record window code (frmbilling.mdb)

Option Explicit Dim f

Private Sub cmddisabled Click() On Error Resume Next Text2.Enabled = FalseText3.Enabled = False Text4.Enabled = False Text5.Enabled = False Text6.Enabled = FalseText7.Enabled = False Text8.Enabled = FalseText9.Enabled = False Text10.Enabled = False Text13. Enabled = False Text14.Enabled = False Text17.Enabled = False XPCalendar1.Enabled = False XPCalendar2.Enabled = False XPCalendar3.Enabled = FalseEnd Sub
Private Sub cmdenabled_Click() On Error Resume Next Text2.Enabled = True Text3.Enabled = True Text4.Enabled = True Text5.Enabled = True Text6.Enabled = True Text7.Enabled = True Text9.Enabled = True Text10.Enabled = True Text13.Enabled = True Text14.Enabled = True Text14.Enabled = True Text17.Enabled = True

Private Sub Command1_Click() Dim bill Dim tax On Error Resume Next If Text7.Text = "" Then MsgBox "Enter talk time first", vbInformation, "Message" End If bill = ((Val(Text7.Text) * 60) / 6) * 17000 tax = (bill * 20) / 100 txtbill.Text = bill + tax + 1700000 'txtbill.Text = Format(txtbill.Text, ".00") End Sub

Private Sub Command2_Click() Frame4.Enabled = True Text12.Enabled = True Text11.Enabled = True Text15.Enabled = True

Text16.Enabled = True Label2(8).Enabled = True Label2(9). Enabled = True Label4(10). Enabled = TrueLabel4(11). Enabled = True Label2(10).Enabled = True Label2(3). Enabled = True Command1.Visible = False 'Command3.Visible = True Text11.SetFocus Toolbar1.Buttons(5).Enabled = FalseToolbar1.Buttons(4).Enabled = False Toolbar1.Buttons(2).Enabled = TrueData1.Recordset.Edit Data1.Recordset.Fields("Subscriber Meter Time") = Text11.Text Data1.Recordset.Fields("Subscriber Meter Price") = Text12.Text Data1.Recordset.Fields("tax") = Text15.Text Data1.Recordset.Fields("fixedf") = Text16.Text Data1.Recordset.Update End Sub Private Sub Command3 Click() Dim bill Dim tax On Error Resume Next If Text7.Text = "" And Text12.Text = "" Then MsgBox "Enter necessary information first", vbInformation, "Message" End If bill = ((Val(Text7.Text) * 60) / Val(Text12.Text)) * Val(Text11.Text) tax = (bill * Text15.Text) / 100If Text16.Text = "" Then txtbill.Text = bill + tax + 1700000Else

txtbill.Text = bill + tax + Text16.Text

End If 'txtbill.Text = Format(txtbill.Text, ".00") Data1.Recordset.Edit End Sub

Private Sub Command4_Click() On Error Resume Next Data1.Recordset.CancelUpdate Data1.Recordset.MovePrevious Command4.Visible = False cmddisabled_Click End Sub

Private Sub Form_Load() Data1.DatabaseName = App.Path + "\dbbilling.mdb" Data1.RecordSource = ("select * from tblebill") Data2.DatabaseName = App.Path + "\Counter.mdb" Data2.RecordSource = ("select * from Counter") Data3.DatabaseName = App.Path + "\gsmno.mdb" Data3.RecordSource = ("select * from gsm") Toolbar1.Buttons(2).Enabled = False Text2.Enabled = False Text3. Enabled = False Text4.Enabled = FalseText5.Enabled = False Text6.Enabled = FalseText7.Enabled = FalseText8. Enabled = False Text9.Enabled = FalseText10. Enabled = False Text11. Enabled = False Text12. Enabled = False Text13. Enabled = False Text14. Enabled = False

Text17.Enabled = False txtbill.Enabled = False Text10.Text = XPCalendar1.Value Text14.Text = XPCalendar2.Value Text9.Text = XPCalendar3.Value XPCalendar1.Visible = False XPCalendar2.Visible = False XPCalendar3.Visible = False End Sub

Private Sub Form_QueryUnload(Cancel As Integer, UnloadMode As Integer) On Error Resume Next If Text2.Enabled = True Then If MsgBox("Record has been changed. Do you want to save it ?", vbYesNo + vbQuestion, "Message") = vbNo Then Cancel = True Data1.Recordset.CancelUpdate Data1.Recordset.MovePrevious Me.Hide End If Else If MsgBox("Close Customer Record?", vbYesNo + vbQuestion, "Message") = vbNo Then Cancel = True Else Cancel = False End If End If End Sub

Private Sub mnuclac_Click() On Error Resume Next Dim ray ray = Shell("CALC.EXE", 1)

End Sub

Private Sub mnudelete_Click() On Error Resume Next If Text8.Enabled = True Then MsgBox "Record has been changed. Do you want to save it", vbInformation, "Message" ElseIf Text8.Text = "" Then MsgBox "There are no record to delete", vbInformation, "Message" Else

If MsgBox("Delete this record?", vbYesNo + vbQuestion, "Message") = vbYes Then Data1.Recordset.Delete Data1.Recordset.MoveNext Load frmdelete frmdelete. Show 1 End If End If 'End If End Sub Private Sub mnuedit_Click() On Error Resume Next If txtstatus.Text = "Disconnected" Then MsgBox "Cannot edit GSM number status disconnected", vbCritical, "Message" Else Data1.Recordset.Edit Text8.Enabled = False XPCalendar1.Visible = True XPCalendar2. Visible = True XPCalendar3.Visible = TrueToolbar1.Buttons(5).Enabled = False Toolbar1.Buttons(4).Enabled = False Toolbar1.Buttons(2).Enabled = True cmdenabled Click

Text2.SetFocus End If End Sub Private Sub mnufind_Click() On Error Resume Next If Text8.Enabled = True Then MsgBox "Record has been changed. Do you want to save it", vbInformation, "Message" Else Dim f f = InputBox("Input GSM No. or Family name", "Find") If $f \Leftrightarrow$ "" Then Data1.RecordSource = ("select * from tblebill where givenno = " & f + " or FamilyName= '" & f + "'") Data1.Refresh End If If Text8.Text = "" Then MsgBox "Record does not exist", vbInformation, "Message" Data1.RecordSource = "select * from tblebill where givenno <> """" Data1.Refresh End If End If End Sub Private Sub mnunew Click() **On Error Resume Next** Dim n n = InputBox("Please supply password or type 'cancel' to undo", "Message") n = LCase(n)If n = "1" Then Data1.Recordset.AddNew

Command4.Visible = True

Text8.Enabled = False

Text7.Enabled = True

Text10.Visible = False Text14. Visible = False Text9. Visible = False XPCalendar1.Visible = TrueXPCalendar2.Visible = True XPCalendar3.Visible = True Toolbarl.Buttons(5).Enabled = FalseToolbar1.Buttons(4).Enabled = False Toolbar1.Buttons(2).Enabled = True Textgsm.Text = Val(Textgsm.Text) + 1Text8.Text = Format\$(Textgsm.Text) cmdenabled Click txtstatus.Text = "Connected" Text2.SetFocus ElseIf n = "cancel" Then MsgBox "Adding new GSM number cancel", vbInformation, "Message" ElseIf n = "" Then 'do nothing Else MsgBox "Invalid password", vbCritical, "Message" mnunew Click End If End Sub Private Sub mnupreview_Click() On Error Resume Next If Text8.Enabled = True Then MsgBox "Save record first", vbInformation, "Message" Else DataEnvironment1.Commands(1).CommandText = "Select * from tblebill where givenno = " & Text8. Text & " " DataEnvironment1.Commands(1).Execute Load DataReport1 DataReport1.Show 1

DataEnvironment1.rsCommand1.Close End If End Sub

Private Sub mnuprint_Click() On Error Resume Next If Text8.Enabled = True Then MsgBox "Save record first", vbInformation, "Message" Else DataEnvironment1.Commands(1).CommandText = "Select * from tblebill where givenno = ''' & Text8.Text & ''' " DataEnvironment1.Commands(1).Execute DataReport1.PrintReport CommonDialog1.Copies DataEnvironment1.rsCommand1.Close End If End Sub

Private Sub mnusave_Click() On Error Resume Next Data1.Refresh Data1.Recordset.Edit Data1.Recordset.Update Data1.Refresh Toolbar1.Buttons(5).Enabled = True Toolbar1.Buttons(4).Enabled = True Toolbar1.Buttons(2).Enabled = False cmddisabled_Click End Sub

Private Sub Text1_KeyPress(KeyAscii As Integer) On Error Resume Next If KeyAscii = 13 Then Text2.SetFocus End If

End Sub

Private Sub Text10_KeyPress(KeyAscii As Integer) On Error Resume Next If KeyAscii = 13 Then Text14.SetFocus End If End Sub

Private Sub Text14_KeyPress(KeyAscii As Integer) On Error Resume Next If KeyAscii = 13 Then Text7.SetFocus End If End Sub

Private Sub Text2_KeyPress(KeyAscii As Integer) On Error Resume Next If KeyAscii = 13 Then Text3.SetFocus End If End Sub

Private Sub Text3_KeyPress(KeyAscii As Integer) On Error Resume Next If KeyAscii = 13 Then Text5.SetFocus End If End Sub

Private Sub Text4_KeyPress(KeyAscii As Integer) On Error Resume Next If KeyAscii = 13 Then Text5.SetFocus End If End Sub

Private Sub Text5_KeyPress(KeyAscii As Integer) On Error Resume Next If KeyAscii = 13 Then Text10.SetFocus End If End Sub

Private Sub Text6_KeyPress(KeyAscii As Integer) On Error Resume Next If KeyAscii = 13 Then Text7.SetFocus End If End Sub

Private Sub Text7_KeyPress(KeyAscii As Integer) On Error Resume Next If KeyAscii = 13 Then Text9.SetFocus Text8.Text = Text14.Text End If End Sub

Private Sub Text8_KeyPress(KeyAscii As Integer) On Error Resume Next If KeyAscii = 13 Then Text9.SetFocus End If End Sub

Private Sub Text9_KeyPress(KeyAscii As Integer) On Error Resume Next If KeyAscii = 13 Then End If End Sub

Private Sub Toolbar1_ButtonClick(ByVal Button As MSComctlLib.Button) On Error Resume Next Select Case Button.Key Case "tnew" mnunew Click

Case "tedit" mnuedit_Click

Case "tsave" mnusave_Click

Case "tdelete" mnudelete Click

Case "tfirst" If Text8.Enabled = True Then MsgBox "Record has been changed. Do you want to save it", vbInformation, "Message" Else Data1.Recordset.MoveFirst MarDen "Eiset meand", 14.6 and 19.6

MsgBox "First record", vbInformation, "Message" End If

Case "tprevious" If Text8.Enabled = True Then MsgBox "Record has been changed. Do you want to save it", vbInformation, "Message" Else Data1.Recordset.MovePrevious

If Data1.Recordset.BOF = True Then

MsgBox "First record already", vbInformation, "Message"

End If End If

Case "tnext" If Text8.Enabled = True Then MsgBox "Record has been changed. Do you want to save it", vbInformation, "Message" Else Data1.Recordset.MoveNext If Data1.Recordset.EOF = True Then MsgBox "Last record already", vbInformation, "Message" End If End If Case "tlast" If Text8.Enabled = True Then MsgBox "Record has been changed. Do you want to save it", vbInformation, "Message" Else Data1.Recordset.MoveLast MsgBox "Last record", vbInformation, "Message"

End If

Case "tfind" mnufind Click

Case "tpreview" mnupreview Click

Case "tprint" mnuprint_Click

End Select End Sub Private Sub XPCalendar1_Click() Text10.Text = XPCalendar1.Value End Sub

Private Sub XPCalendar2_Click() Text14.Text = XPCalendar2.Value End Sub

Private Sub XPCalendar3_Click() Text9.Text = XPCalendar3.Value End Sub

5. Talk detail window code (frmall.frm)

Option Explicit Dim f

Private Sub Command1 Click() On Error Resume Next f = InputBox("Input GSM NO ", "Find") If $f \Leftrightarrow$ "" Then Data1.RecordSource = ("select * from transaction where givenno = " & f + "") Data1.Refresh End If End Sub Private Sub Command10 Click() Dim s As String s = "select * from tblebill where givenno=" & Text2.Text & "" Data2.Refresh Data2.Recordset.Edit Data2.Recordset.Fields("totalspktime") = Text1.Text Data2.Recordset.Fields("Bill") = Text4.Text Data2.Recordset.Update

End Sub

Private Sub Command2_Click() On Error Resume Next Data1.RecordSource = ("select * from transaction order by givenno asc") Data1.Refresh End Sub

Private Sub Command3_Click() On Error Resume Next Dim a As String a = Data1.Recordset.RecordCount MsgBox ("Total record " + a), vbInformation, "Message" End Sub

Private Sub Command4_Click() On Error Resume Next Data1.RecordSource = ("Select * from transaction where givenno <> ' ''') Data1.Refresh End Sub

Private Sub Command5_Click() On Error Resume Next Data1.RecordSource = ("select * from transaction order by givenno desc") Data1.Refresh End Sub

Private Sub Command6_Click() Frame3.Visible = True Text2.Text = "" Text2.SetFocus End Sub

Private Sub Command7_Click()

On Error Resume Next Dim s As String Dim str As String Dim tp As String Dim i Dim net Dim total If Text2.Text = "" Then MsgBox ("Please Enter GSM No"), vbInformation, "Message" ElseIf Data1.Recordset.Fields("givenno") <> Text2.Text Then MsgBox ("Record does not found.."), vbInformation, "Message" Else s = ("select * from transaction where givenno="" & Text2.Text & "" and tlkdatebetween" & txtfirst.Text & " and " & txtlast.Text & "") Data1.RecordSource = sData1.Refresh tp = 0With Data1 .Recordset.MoveFirst Do Until .Recordset.EOF tp = Val(.Recordset.Fields("tlktimesn")) + Val(tp) .Recordset.MoveNext Loop End With Text3.Text = Val(tp)Text1.Text = Text3.Text net = (((Text1.Text / Text5.Text) * Text6.Text) + Text8.Text) Text9.Text = (net * (Text7.Text / 100)) 'tax total = net + Text9.TextText4. Text = Int(total)Frame5. Visible = TrueLabel15.Visible = True Frame3.Visible = False End If

End Sub

Private Sub Command8_Click() On Error Resume Next If Text2.Text = "" Then MsgBox ("Please Enter GSM No and Interval of Date"), vbInformation, "Message" Else DataEnvironment1.Commands(2).CommandText = "select * from transaction where givenno='" & Text2.Text & "' and tlkdate between'" & txtfirst.Text & "' and '" & txtlast.Text & "'" DataEnvironment1.Commands(2).Execute Load DataReport3 DataReport3.Show 1 End If End Sub

Private Sub Command9_Click() Frame4.Visible = False End Sub

Private Sub Form_Load() Frame3.Visible = False Data1.DatabaseName = App.Path + "\dbbilling.mdb" Data1.RecordSource = ("select * from transaction order by givenno") Data2.DatabaseName = App.Path + "\dbbilling.mdb" Data2.RecordSource = ("select * from tblebill ") End Sub

Private Sub Form_QueryUnload(Cancel As Integer, UnloadMode As Integer) On Error Resume Next End Sub

Private Sub XPCalendar1_Click() txtfirst.Text = XPCalendar1.Value End Sub

Private Sub XPCalendar2_Click() txtlast.Text = XPCalendar2.Value End Sub

6. Dis / connection window code (frmdisconnect.frm)

Private Sub Command1_Click() On Error Resume Next s = "select * from tblebill where givenno='" & Text5.Text & """ If MsgBox("Disconnect " + Text5.Text + " GSM no.", vbYesNo + vbQuestion, "Message") = vbYes Then Iblstatus.Caption = "Disconnect" Data2.Recordset.Edit Data2.Recordset.Fields("status") = Iblstatus.Caption Data2.Recordset.Update MsgBox "GSM No " + Text5.Text + " disconnected", vbInformation, "Message" End If End Sub

Private Sub Command2_Click() On Error Resume Next If MsgBox("Connect " + Text5.Text + " GSM ID no.", vbYesNo + vbQuestion, "Message") = vbYes Then Iblstatus.Caption = "Connected" Data2.Recordset.Edit Data2.Recordset.Fields("status") = Iblstatus.Caption Data2.Recordset.Update MsgBox "GSM No " + Text1.Text + " connected", vbInformation, "Message" End If End Sub

Private Sub Command3_Click()

On Error Resume Next f = InputBox("Input GSM No. or Surname", "Find") If $f \Leftrightarrow$ "" Then Data1.RecordSource = ("select * from billinfo where sid = " & f + " or sname= " & f + (""") Data1.Refresh End If If Text1.Text = "" Then MsgBox "Record does not exist", vbInformation, "Message" Data1.RecordSource = "select * from billinfo where sid <> """" Data1.Refresh End If End Sub Private Sub Command4 Click() On Error Resume Next If lblstatus.Caption = "Connected" Then MsgBox "Cannot print Bill ID number status connected", vbCritical, "Message" Else DataEnvironment1.Commands(1).CommandText = "Select * from tblebill where givenno = " & Text5.Text & " " DataEnvironment1.Commands(1).Execute Load DataReport2 DataReport2.Show 1 DataEnvironment1.rsCommand1.Close End If End Sub Private Sub Command5 Click() On Error Resume Next Data1.RecordSource = "select * from billinfo where sid <> """" Data1.Refresh

End Sub

Private Sub Command6_Click() On Error Resume Next f = InputBox("Input Date", "Find") If $f \Leftrightarrow$ "" Then Data1.RecordSource = ("select * from billinfo where duedate = " & f + "") Data1.Refresh End If If Text5.Text = "" Then MsgBox "Due date do not exist", vbInformation, "Message" Data1.RecordSource = "select * from billinfo where sid <> """" Data1.Refresh End If End Sub Private Sub Command7_Click() On Error Resume Next Data1.RecordSource = "select * from billinfo where status="" & Text4.Text & """ Data1.Refresh Data2.DatabaseName = App.Path + "\dbbilling.mdb" Data2.RecordSource = ("select * from tblebill") Data2.Refresh Data1.Recordset.MoveFirst Do Until Data1.Recordset.EOF Data2.Recordset.MoveFirst Do Until Data2.Recordset.EOF If Data1.Recordset.Fields("sid").Value = Data2.Recordset.Fields("givenno").Value Then Data2.Recordset.Edit Data2.Recordset.Fields("Status").Value = Data1.Recordset.Fields("status").Value Data2.Recordset.Update End If Data2.Recordset.MoveNext Loop Data1.Recordset.MoveNext



Loop

End Sub

Private Sub Command9_Click() On Error Resume Next Data1.RecordSource = "select * from billinfo " 'where status='" & Text4.Text & "" Data1.Refresh Data2.DatabaseName = App.Path + "\dbbilling.mdb" Data2.RecordSource = ("select * from tblebill") Data2.Refresh Data1.Recordset.MoveFirst Do Until Data1 Recordset EOF Data2.Recordset.MoveFirst Do Until Data2.Recordset.EOF If Data1.Recordset.Fields("sid").Value = Data2.Recordset.Fields("givenno").Value Then Data2.Recordset.Edit Data2.Recordset.Fields("Status").Value = Data1.Recordset.Fields("status").Value Data2.Recordset.Update End If Data2.Recordset.MoveNext Loop Datal.Recordset.MoveNext Loop

End Sub

Private Sub Form_Load()

Data1.DatabaseName = App.Path + "\BILLING.mdb"

Data1.RecordSource = ("select * from billinfo")

Data2.DatabaseName = App.Path + "\dbbilling.mdb"

Data2.RecordSource = ("select * from tblebill")

End Sub

Private Sub Form_QueryUnload(Cancel As Integer, UnloadMode As Integer) On Error Resume Next If Text1.Enabled = True Then MsgBox "Save record first", vbInformation, "Message" Cancel = True Else If MsgBox("Exit?", vbYesNo + vbQuestion, "Message") = vbNo Then Cancel = True Else Unload Me Cancel = False End If End If End If

Private Sub Form_Resize() 'DBGrid1.Height = Me.ScaleHeight 'DBGrid1.Width = Me.ScaleWidth End Sub

Private Sub Timer1_Timer() On Error Resume Next If Timer1.Interval = 1000 Then Iblstatus.FontItalic = True

Timer1.Enabled = False Timer2.Enabled = True End If End Sub

Private Sub Timer2_Timer() On Error Resume Next If Timer1.Interval = 1000 Then Iblstatus.FontItalic = False Timer2.Enabled = False Timer1.Enabled = True End If End Sub

7. Import / export file window code (frmimpexp.frm)

Option Explicit

Private Type PersonalRec sid As String sname As String name As String duedate As String bill As String status As String End Type

Dim MyRec As PersonalRec

Private Sub cmdExit_Click() Unload Me End Sub

Private Sub cmdExport_Click()
Dim DB1 As Database
Dim RS1 As Recordset
Dim sOutput As String
Dim FP1 As Integer
Dim i As Integer
Dim J As Integer
Dim FileType As Integer
txtOutput.Text = "bill"
Set DB1 = OpenDatabase(App.Path & "\dbbilling.mdb", False, False)
Set RS1 = DB1.OpenRecordset("tblebill")

```
RS1.MoveLast
RS1.MoveFirst
If InStr(1, txtOutput.Text, ":\") = 0 Then
txtOutput.Text = App.Path & "\" & txtOutput.Text
End If
FP1 = FreeFile
Open txtOutput. Text For Output As #FP1
For i = 1 To RS1.RecordCount
With MyRec
  .sid = RS1.Fields(0)
  .sname = RS1.Fields(1)
  .name = RS1.Fields(2)
  .duedate = RS1.Fields(3)
  .bill = RS1.Fields(4)
  .status = RS1.Fields(5)
  Print #FP1, .sid & "," & .sname & "," & .name & "," & .duedate & "," & .bill & "," &
status
End With
sOutput = ""
RS1.MoveNext
Next
Close
Set RS1 = Nothing
Set DB1 = Nothing
MsgBox "Done creating output file."
End Sub
Private Sub cmdImport Click()
Dim DB1 As Database
Dim RS1 As Recordset
Dim FP1 As Integer
Dim DBName As String
Dim i As Integer
```

```
On Local Error GoTo ErrHandler
```

```
txtResults.Text = ""
  cmdMakeDB Click
  DBName = App.Path & "\billing.mdb"
  FP1 = FreeFile
  txtFileName.Text = App.Path & "\" & "bill"
  Open txtFileName. Text For Input As FP1
  Set DB1 = OpenDatabase(DBName, False, False)
  Set RS1 = DB1.OpenRecordset("billinfo")
  Do Until EOF(FP1)
  With MyRec
   Input #FP1, .sid, .sname, .name, .duedate, .bill, .status
   RS1.AddNew
  RS1.Fields("sid").Value = .sid
  RS1.Fields(2).Value = .sname
   RS1.Fields(3).Value = .name
 RS1.Fields(4).Value = .duedate
 RS1.Fields(5).Value = .bill
   RS1.Fields(6).Value = .status
   RS1.Update
  End With
 Loop
 RS1.MoveLast
 RS1.MoveFirst
For i = 1 To RS1.RecordCount
  With RS1
txtResults.Text = txtResults.Text & .Fields(0) & " " & .Fields(1) & " " & .Fields(2)
& " " & .Fields(3) & " " & .Fields(4) & " " & .Fields(5) & " " & .Fields(6) & vbCrLf
  MoveNext
  End With
Next
Close '
Set DB1 = Nothing
Exit Sub
```

ErrHandler:

If err.Number = 62 Then

MsgBox "the end of the file was reached an it had a linefeed and/or a carriage return(s) at the end."

Resume Next

Else

MsgBox "There was an error in the Read And Import Into Database procedure. Here is the error data:" & vbCrLf & err.Number & ": " & err.Description End If End Sub

Private Sub cmdMakeDB_Click() Dim DBE1 As DBEngine Dim WS1 As Workspace Dim NewDB As Database Dim TD1 As TableDef Dim Field1 As Field Dim IDX1 As Index **Dim DBName As String** On Local Error GoTo ErrHandler DBName = App.Path & "\billing.mdb" If Len(Dir\$(DBName, 16)) Then Kill DBName End If Set WS1 = DBEngine.Workspaces(0) Set NewDB = CreateDatabase(DBName, dbLangGeneral, dbVersion20) Set TD1 = NewDB.CreateTableDef("billinfo") Set IDX1 = TD1.CreateIndex("RefIDX") IDX1.Primary = True IDX1.Fields.Append IDX1.CreateField("RefID") TD1.Indexes.Append IDX1 Set Field1 = TD1.CreateField("RefID", dbLong) Field1.Attributes = dbAutoIncrField TD1.Fields.Append Field1

Set Field1 = TD1.CreateField("sid", dbText, 25) TD1.Fields.Append Field1 Set Field1 = TD1.CreateField("sname", dbText, 25) TD1.Fields.Append Field1 Set Field1 = TD1.CreateField("name", dbText, 50) TD1.Fields.Append Field1 Set Field1 = TD1.CreateField("duedate", dbText, 35) TD1.Fields.Append Field1 Set Field1 = TD1.CreateField("bill", dbText, 35) TD1.Fields.Append Field1 Set Field1 = TD1.CreateField("status", dbText, 10) TD1.Fields.Append Field1 NewDB. TableDefs. Append TD1 Set NewDB = Nothing Set TD1 = Nothing Set Field1 = Nothing Set IDX1 = Nothing Exit Sub ErrHandler: MsgBox "There was an error in the Make Database procedure. Here is the error data:" & vbCrLf & err.Number & ": " & err.Description Exit Sub End Sub

Private Sub cmdReadDisplay_Click() Dim FP1 As Integer Dim LB As String Dim fname As String Dim IName As String Dim sAddress As String Dim scity As String Dim sZip As String txtResults.Text = "" FP1 = FreeFile

txtFileName.Text = App.Path & "\" & "bill" On Local Error GoTo ER1 Open txtFileName Text For Input As FP1 Do Until EOF(FP1) With MyRec Input #FP1, .sid, .sname, .name, .duedate, .bill, .status txtResults.Text = txtResults.Text & .sid & " " & .sname & " " & .name & " " & .duedate & " " & .bill & " " & .status & vbCrLf End With Loop Close #FP1 Exit Sub ER1: If err. Number = 62 Then MsgBox "End of file " & txtFileName.Text & " has been reached and there was a linefeed and/or cariage return at the end!" Exit Sub End If End Sub

8. Encrypt / decrypt file window code (frmencdec.frm)

Dim openfile Dim a(30), b(10), aa As String Dim bb, u As String Dim cc, ree As Double Dim t, f, re, Y As Double Dim ann, anss As String

Private Sub Command1_Click() Dim FNum As Integer Dim txt As String RichTextBox2.Text = "" RichTextBox1.Text = ""

```
On Error GoTo FileError
  CommonDialog1.CancelError = True
 CommonDialog1.Flags = cdlOFNFileMustExist
 CommonDialog1.DefaultExt = "TXT"
 CommonDialog1.Filter = "Text files|*.TXT|All files|*.*"
 CommonDialog1.ShowOpen
 FNum = FreeFile
 Open CommonDialog1.FileName For Input As #1
 txt = Input(LOF(FNum), #FNum)
 Close #FNum
 RichTextBox1.Text = txt
 openfile = CommonDialog1.FileName
Exit Sub
FileError:
If err.Number = cdlCancel Then Exit Sub
MsgBox "Unkown error while opening file " & CommonDialog1.FileName
openfile = ""
End Sub
Private Sub Command2 Click()
\mathbf{f} = \mathbf{0}
Command2.Enabled = False
Command3.Enabled = False
ans = InputBox("Enter Encryption code (less than 10 digits):")
length = Len(ans)
ann = ""
For p = 1 To length
ann = ann \& Chr(Asc(Mid(ans, p, 1)) + 7)
Next
If length > 0 And length < 10 Then
t = Len(RichTextBox1.Text)
RichTextBox2.Text = ""
```

```
For i = 1 To t
bb = Mid(RichTextBox1.Text, i, 1)
cc = Asc(bb)
u = Chr(cc + 10)
RichTextBox2.Text = RichTextBox2.Text & u
Next
RichTextBox2.Text = RichTextBox2.Text & ann & length
Command4.Enabled = True
Else
MsgBox "Either password is empty or exceeds 9 digits"
Command2.Enabled = True
End If
End Sub
Private Sub Command3 Click()
f = 0
Command3. Enabled = False
Command2.Enabled = False
anss = InputBox("Enter decryption code:")
length = Len(anss)
If length > 0 Then
For i = 1 To length
b(i) = Chr(Asc(Mid(anss, i, 1)) + 7)
Next
t = Len(RichTextBox1.Text)
RichTextBox2.Text = ""
x = Mid(RichTextBox1.Text, t - 2, 1)
\mathbf{x} = \mathrm{Val}(\mathbf{x})
\mathbf{Y} = \mathbf{x}
For i = t - 3 - Y + 1 To t - 3
a(i - (t - Y - 3)) = Mid(RichTextBox1.Text, i, 1)
Next
cou = 0
For i = 1 To Y
```

```
If a(i) \Leftrightarrow b(i) Then
   cou = cou + 1
   End If
   Next
   If cou > 0 Then
  MsgBox "wrong code"
  RichTextBox1.Text = ""
  Else
  'End
  For i = 1 To t - Y - 3
  bb = Mid(RichTextBox1.Text, i, 1)
  uu = Asc(bb) - 10
  u = Chr(uu)
  RichTextBox2.Text = RichTextBox2.Text & u
  Next
  Command4.Enabled = True
 Command3 Enabled = True
 End If
 End If
 End Sub
 Private Sub Command4_Click()
 Dim FNum As Integer
 Dim txt As String
If MsgBox("Are you sure to save the encrypted data?", vbYesNo) = vbYes Then
On Error GoTo FileError
CommonDialog1.CancelError = True
CommonDialog1.Flags = cdlOFNOverwritePrompt
CommonDialog1.DefaultExt = "TXT"
CommonDialog1.Filter = "Text files|*.TXT|All files|*.*"
CommonDialog1.ShowSave
FNum = FreeFile
Open CommonDialog1.FileName For Output As #1
Print #FNum, RichTextBox2.Text
```

```
Close #FNum
openfile = CommonDialog1.FileName
Exit Sub
FileError:
If err.Number = cdlCancel Then Exit Sub
MsgBox "Unkown error while saving file " & CommonDialog1.FileName
openfile = ""
End If
End Sub
```

Private Sub Command5_Click() RichTextBox1.Text = "" RichTextBox2.Text = "" Command4.Enabled = 0 End Sub

Private Sub Command6_Click() Unload Me End Sub

Private Sub Form_Load() Command2.Enabled = 0 Command3.Enabled = 0 Command4.Enabled = 0 End Sub

Private Sub RichTextBox1_Change() If Len(RichTextBox1.Text) > 3 Then Command2.Enabled = True Command3.Enabled = True End If End Sub

9. Send bill window code (frmSender.frm)

Private file As String Private Reset As Boolean

Private Sub BNS_Close() On Error Resume Next BNS.Close End Sub

Private Sub BNS_DataArrival(ByVal bytesTotal As Long) Dim leng As String, x As String leng = FileLen(file) Open file For Binary Access Read As #1 If leng > 102400 Then 'LARGE FILE > 10 KB Dim Y As String, c As Long, iB As Long Do Until c = lengIf $c + 102400 \le leng$ Then 'Single 124000 to take Y = Input(102400, 1)c = c + 102400Else Y = Input(leng - c, 1)c = lengEnd If x = x & Y**DoEvents** BState = "Opening file " & c & " bytes out of " & leng **DoEvents** Loop Else x = Input(LOF(1), 1)End If

' Done with input BNS.SendData x Close #1 End Sub

Private Sub BNS_Error(ByVal Number As Integer, Description As String, ByVal Scode As Long, ByVal Source As String, ByVal HelpFile As String, ByVal HelpContext As Long, CancelDisplay As Boolean) BNS.Close

End Sub

Private Sub cmdConnect_Click() Dim host As String host = InputBox("Insert destination IP:") If host = "" Then Exit Sub If Combol.Text = "Is Bank" Then MsgBox "is secildi", vbInformation, "Message" If Combo1.Text = "Turk Bank" Then MsgBox "turk secildi", vbInformation, "Message" file = App.Path & "\bill" 'If file = "" Then Exit Sub BNS.Close BNS.RemoteHost = host BNS.RemotePort = 50**BNS**.Connect wait: DoEvents If BNS.State <> 7 Then GoTo wait On Error GoTo error BNS.SendData FileLen(file) Exit Sub error: MsgBox err Description BNS.Close End Sub

Private Sub cmdExit_Click() Me.Hide End Sub

Private Sub cmdReciever_Click() Select Case cmdReciever.Caption Case "Enable File Reciever" 'WNS.LocalPort = 50 WNS.Listen Case "Disable File Reciever" WNS.Close End Select End Sub

Private Sub Command1_Click() Unload Me End Sub

Private Sub Form_Load() Combo1.AddItem "Is Bank" Combo1.AddItem "Turk Bank" Combo1.AddItem "Akbank" End Sub

Private Sub tmrState_Timer() Select Case WNS.State Case 2 status = "Reciever Listening" 'Status.ForeColor = RGB(55, 175, 55) If cmdReciever.Enabled = False Then cmdReciever.Enabled = True If LCase(Left(cmdReciever.Caption, 6)) = "disabl" Then GoTo doagain cmdReciever.Caption = "Disable File Reciever" Case 6 Or 7

status = "Recieving Data" cmdReciever.Enabled = False 'Status.ForeColor = vbRed Case 0 status = "Reciever Disabled" If cmdReciever.Enabled = False Then cmdReciever.Enabled = True 'Status.ForeColor = vbBlue If LCase(Left(cmdReciever.Caption, 6)) = "enable" Then GoTo doagain cmdReciever.Caption = "Enable File Reciever" End Select doagain: Select Case BNS.State Case 0 BState = "" cmdConnect.Enabled = True Case sckConnecting BState = "Connecting..." cmdConnect.Enabled = False Case 7 cmdConnect.Enabled = False End Select End Sub

Private Sub WNS_ConnectionRequest(ByVal requestID As Long) WNS.Close WNS.Accept requestID Reset = True End Sub

Private Sub WNS_DataArrival(ByVal bytesTotal As Long) Static BC As Long Static Second As Boolean Dim x As String, xC As Long If Reset Then BC = 0: Second = False: x = "": Reset = False If Not Second Then Call WNS.GetData(xC, vbLong, bytesTotal) If xC = 0 Then WNS.Close: Exit Sub Second = TrueBC = xCDim res As VbMsgBoxResult res = MsgBox("Accept incoming file (" & BC & ") bytes?", vbQuestion + vbYesNo) If res = vbNo Then WNS.Close: Exit Sub WNS.SendData "ok" Else If bytesTotal \bigcirc BC Then Exit Sub 'x = InputBox("Insert path where to save the file:") Open bill For Binary Access Write As #1 **Dim Y As String** Call WNS.GetData(Y, vbString, bytesTotal) Put #1, , Y Close #1 WNS.Close WNS.Listen MsgBox "Done" End If End Sub Private Sub WNS Error(ByVal Number As Integer, Description As String, ByVal Scode As Long, ByVal Source As String, ByVal HelpFile As String, ByVal

HelpContext As Long, CancelDisplay As Boolean)

WNS.Close

WNS.Listen

End Sub

10. Make backup window code (frmbck.frm)

Private Sub Command1_Click() On Error GoTo theo Dim a, b, c
Beep

c = MsgBox("Insert a Disk in Drive a:\", vbInformation) Rich1.FileName = App.Path + "\dbbilling.mdb" Rich2.FileName = App.Path + "\Pas.mdb" a = FreeFileOpen "a:\dbbilling.mdb" For Output As a Print #1, Rich1.Text Close a b = FreeFile Open "a:\Pas.mdb" For Output As b Print #1, Rich2.Text Close b Exit Sub theo: MsgBox err.Description, vbCritical Exit Sub End Sub

Private Sub Command2_Click() Unload Me End Sub

11. Change password window code (Change.frm)

Private Sub Form_Load() Data1.Visible = False Data1.DatabaseName = App.Path + "\Pas.mdb" Data1.RecordSource = ("select * from user") End Sub

Private Sub Label2_Click() On Error Resume Next If Frame3.Visible = True Or Frame2.Visible = True Then Data1.Recordset.CancelUpdate Frame1.Visible = True Frame2.Visible = True Text1.Text = "" Text2.Text = "" Change.Height = 2340 Unload Change End If End Sub

Private Sub Text1_KeyPress(KeyAscii As Integer) If KeyAscii = 13 Then If LCase(Text1.Text) = "verify" Then Change.Height = 4890Else Text2.SetFocus SendKeys "{home}+{end}" End If End If End Sub Private Sub Text2_KeyPress(KeyAscii As Integer) If KeyAscii = 13 Then If LCase(Text1.Text) = "add" And LCase(Text2.Text) = "add" Then Frame1. Visible = False Text3.SetFocus Else Data1.RecordSource = ("select * from User where password="" & Text2.Text & """) Data1.Refresh If Text5.Text = "" Then MsgBox "Invalid Username and Password!!!", vbCritical, "Error" Text1.SetFocus SendKeys "{home}+{end}" Else Frame1.Visible = False Text3.SetFocus

End If End If End If End Sub Private Sub Text3_KeyPress(KeyAscii As Integer) If KeyAscii = 13 Then LCase (Text3.Text) Text4.SetFocus End If End Sub Private Sub Text4_KeyPress(KeyAscii As Integer) If KeyAscii = 13 Then Data1.RecordSource = ("select * from User where password="" & Text4.Text & """) Data1.Refresh If Text5.Text = "" Then If Text1.Text = "add" Then LCase (Text4.Text) Frame2. Visible = False Data1.Recordset.AddNew Text5.SetFocus Else Data1.RecordSource = ("select * from User where password="" & Text2.Text & """) Data1.Refresh LCase (Text4.Text) Data1.Recordset.Edit Frame2. Visible = False Text5.Text = "" Text6.Text = "" Text5.SetFocus End If Else

MsgBox "Password Duplicated !!!", vbCritical, "Error"

Text3.Text = "" Text4.Text = "" Text3.SetFocus Data1.RecordSource = ("select * from User where password="" & Text2.Text & """) Data1.Refresh End If End If End Sub

Private Sub Text5_KeyPress(KeyAscii As Integer) If KeyAscii = 13 Then Text6.SetFocus End If End Sub

Private Sub Text6_KeyPress(KeyAscii As Integer) On Error GoTo err If KeyAscii = 13 Then If LCase(Text5.Text) = Text3.Text And LCase(Text6.Text) = Text4.Text Then Data1.Recordset.Update Text1.Text = "" Text2.Text = "" Frame1. Visible = True Frame2. Visible = True Text1.SetFocus Data1.RecordSource = ("select* from User order by userid") Me.Hide Else Data1.Recordset.CancelUpdate MsgBox "Not Valid!!!, Check your Username and Password", vbCritical Frame2.Visible = True Text3.SetFocus Exit Sub End If

End If

err: MsgBox "Try Again" End Sub

12. Administrator area window code (frmadmin.frm)

Dim i As Integer

Private Sub Combo1_Click() With Data1 Refresh .Recordset.MoveFirst Do Until .Recordset.EOF If .Recordset.Fields(0) = Combo1.Text Then Text1.Text = .Recordset.Fields(3) Text2.Text = .Recordset.Fields(4) Exit Sub Else .Recordset.MoveNext End If Loop End With End Sub Private Sub Command1_Click()

Unload Me

MDIForm1.Show

'Form2.Caption = "Welcome Administrator..." End Sub

Private Sub Command10_Click() Frame3.Visible = False Frame1.Visible = True End Sub Private Sub Command11_Click() Data2.RecordSource = "select * from admin" Data2.Recordset.MoveFirst Text3.Text = Data2.Recordset.Fields(0) Text4.Text = Data2.Recordset.Fields(1) Text4.SetFocus Text3.Enabled = False MsgBox "please edit the password", vbInformation, "HMS" End Sub

Private Sub Command12_Click() With Data2 .RecordSource = "select * from admin" .Refresh .Recordset.Edit .Recordset.Fields(0) = Text3.Text .Recordset.Fields(1) = Text4.Text .Recordset.Update End With MsgBox "Administrator password has been changed", vbInformation, "HMS" Command1.SetFocus End Sub

Private Sub Command2_Click() Frame3.Visible = True Frame1.Visible = False Text5.SetFocus End Sub

Private Sub Command3_Click() Text1.Enabled = True Text2.Enabled = True Command2.Enabled = False Command4.Visible = False Command6.Visible = True Command3.Enabled = False End Sub

Private Sub Command4_Click() MsgBox "Are u sure want to delete user", vbYesNoCancel, "HMS" Data1.Recordset.Delete End Sub

Private Sub Command5_Click() Text1 = "" Text2 = "" Command2.Enabled = True Command3.Enabled = True Command6.Visible = False Command4.Visible = True Command4.Enabled = True End Sub

Private Sub Command6_Click() Data1.Recordset.Edit Data1.Recordset.Fields(3) = Text1.Text Data1.Recordset.Fields(4) = Text2.Text Data1.Recordset.Update MsgBox "User Id or password updated", vbInformation, "HMS" Command6.Visible = False Command4.Visible = True End Sub

Private Sub Command8_Click() Data1.Recordset.AddNew Data1.Recordset.Fields(0) = Text5.Text Data1.Recordset.Fields(1) = Text6.Text Data1.Recordset.Fields(2) = Text7.Text Data1.Recordset.Fields(3) = Text8.Text Data1.Recordset.Fields(4) = Text9.Text Data1.Recordset.Update MsgBox "New User added", vbInformation, "HMS" 'Command8.enable = False Command10.SetFocus End Sub

Private Sub Command9_Click() Text5 = "" Text6 = "" Text7 = "" Text8 = "" Text9 = "" Text5.SetFocus End Sub

Private Sub Form_Load() Data1.DatabaseName = App.Path & "\Pas.mdb" Data1.RecordSource = "select * from user"

Data2.DatabaseName = App.Path & "\Pas.mdb" Data2.RecordSource = "select * from admin" 'Data1.Refresh 'Data1.Recordset.MoveFirst 'Do Until Data1.Recordset.EOF 'For i = 0 To 3 'len(.Recordset.BatchSize) 'Combo1.AddItem "Data1.Recordset.Fields(0).Value" 'Data1.Recordset.MoveNext 'Next i 'Loop Text1.Enabled = False Text2.Enabled = False Command6.Visible = False 'Command8.Visible = False Frame3.Visible = False 'Call admindetails End Sub

Private Sub admindetails() Text3.Text = Data2.Recordset.Fields(0) Text4.Text = Data2.Recordset.Fields(1) Exit Sub End Sub

13. About window code (frmAbout.frm)

Option Explicit

Private Sub cmdOK_Click() Me.Hide End Sub

Private Sub Form_KeyDown(KeyCode As Integer, Shift As Integer) If KeyCode = 13 Then Unload Me End If End Sub

Private Sub Label4_Click() On Error Resume Next 'call Shell("start mailto:taylanunsal@hotmail.com") Call Shell("C:\Program Files\Outlook Express\msimn.exe,") End Sub

Private Sub Label4_MouseMove(Button As Integer, Shift As Integer, x As Single, Y As Single) Label4.FontUnderline = True

End Sub

14. Deleting Window code (frmdelete.frm)

Private Sub Form_Load() Animation1.Open App.Path + "\FILEDEL.AVI" Animation1.Play End Sub

Private Sub Timer1_Timer() On Error Resume Next Bar1.Value = Bar1.Value + 5 'Label1.Caption = Bar1.Value If Bar1.Value = 150 Then Unload frmdelete End If End Sub