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'Class to INSERT Transaction records in Transaction Table of FAMSDB database
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'First written 1/9/05
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Public Class Transaction
    Public Shared Sub InsertTransaction(ByVal type As String, ByVal amount As String, _
        ByVal balance As String, ByVal sortCode As String, ByVal accountNo As String)

        Try
            'first create connection to FAMSDB database

            'Declare connection to FAMSDB database
            Dim FAMSDBConnection As OleDb.OleDbConnection

            'create connectionString
            Dim connectionString As String = "Jet OLEDB:Global Partial Bulk Ops=2;Jet OLEDB
:Registry Path=;Jet OLEDB:Database L" & _
            "ocking Mode=1;Data Source=""C:\MSc Project\FAMSDB and FAMS Application\FAMSDB.mdb"
& _
            """;Jet OLEDB:Engine Type=5;Provider=""Microsoft.Jet.OLEDB.4.0"";Jet OLEDB:System
da" & _
            "tabase=;Jet OLEDB:SFP=False;persist security info=False;Extended Properties=;Mod
& _
            "e=Share Deny None;Jet OLEDB:Encrypt Database=False;Jet OLEDB:Create System Datab
& _
            "ase=False;Jet OLEDB:Don't Copy Locale on Compact=False;Jet OLEDB:Compact Without"
& _
            " Replica Repair=False;User ID=Admin;Jet OLEDB:Global Bulk Transactions=1"

            'Create FAMSDBConnection
            FAMSDBConnection = New OleDb.OleDbConnection(connectionString)

            'Now declare transaction data adapter
            Dim TransactionDataAdapter As OleDb.OleDbDataAdapter

            'create transactionDataAdapter
            TransactionDataAdapter = New OleDb.OleDbDataAdapter("SELECT * FROM
[Transaction]", FAMSDBConnection)

            'create command builder for configuring the transactionDataAdapter
            Dim cmdBuilder As New OleDb.OleDbCommandBuilder(TransactionDataAdapter)

            'Now add an INSERT Command
            TransactionDataAdapter.InsertCommand = cmdBuilder.GetInsertCommand()

            'Declare and create transactionDataSet
            Dim TransactionDataSet As DataSet = New DataSet

            'Now declare staff Data Adapter
            Dim StaffDataAdapter As OleDb.OleDbDataAdapter

            'Create StaffDataAdapter
            StaffDataAdapter = New OleDb.OleDbDataAdapter("SELECT * FROM [Staff]",
FAMSDBConnection)

            'Declare and create StaffDataSet
            Dim StaffDataSet As DataSet = New DataSet

            '+++++
            +++++

            'Now declare staffNumber variable to hold current users staffNo
            Dim staffNumber As String

            'Now declare transactionNumber variable to hold maximum transaction number
            Dim transactionNumber As String

            'Open Database Connection
            FAMSDBConnection.Open()

            'Return DataSet to it's original state
            TransactionDataSet.Reset()
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'Create SELECT query to get maximum number of transactions carried out
'on the account
TransactionDataAdapter.SelectCommand.CommandText = _
"SELECT COUNT(*) FROM [Transaction] WHERE sortCode = '" & _
sortCode & "' AND accountNo = '" & accountNo & "'"

'Fill TransactionDataSet
TransactionDataAdapter.Fill(TransactionDataSet)

'Close Database Connection
FAMSDBConnection.Close()

'Put results of query into datatable with which to work
Dim datatable As DataTable = TransactionDataSet.Tables(0)

'If there have been any previous transactions....
If datatable.Rows.Count <> 0 Then

    'Increment the maximum transaction number and assign it to
    'transactionNumber variable
    transactionNumber = Convert.ToString(Convert.ToInt32(datatable.Rows(0)(0)) + 1)

Else

    'Set TransactionNumber to 1 as there are no previous transactions
    'on the account
    transactionNumber = "1"

End If

'Open database Connection
FAMSDBConnection.Open()

'Return DataSet to it's original state
StaffDataSet.Reset()

'Create SELECT query to get the currently logged in member of staff's
'staffNo
StaffDataAdapter.SelectCommand.CommandText = _
"SELECT staffNo FROM [Staff] WHERE localIPAddress = '" & _
frmLogin.GetIPAddress() & "'"

'Fill StaffDataSet
StaffDataAdapter.Fill(StaffDataSet)

'Close database Connection
FAMSDBConnection.Close()

'Put results of query into datatable with which to work
Dim datatable1 As DataTable = StaffDataSet.Tables(0)

'Assign staffNo of logged in member of staff to variable
'staffNumber
staffNumber = Convert.ToString(datatable1.Rows(0)(0))

'+++++++
+++++++
'Now INSERT Transaction Record into Transaction Table of FAMSDB

Select Case type
    Case "CashDeposit" 'Transaction being a cash deposit

        'Open Database Connection
        FAMSDBConnection.Open()

        'Create INSERT Command
        TransactionDataAdapter.InsertCommand.CommandText = _
        "INSERT INTO [Transaction] VALUES('" & sortCode & "', " & _
        "'" & accountNo & "', " & _
        "'" & transactionNumber & "', " & _
        "'" & Convert.ToString(DateTime.Now.ToString("d")) & "', " & _
        "'Cash', " & _
        "'" & amount & "', " & _
        "'", " & _

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        "" & balance & ", " & _
        "" & staffNumber & ", " & _
        ""))"

        'Execute INSERT Command
        TransactionDataAdapter.InsertCommand.ExecuteNonQuery()

        'Close Database Connction
        FAMSDBConnection.Close()

    Case "ChequeDeposit" 'Transaction being a Cheque Deposit

        'Open Database Connection
        FAMSDBConnection.Open()

        'Create INSERT Command
        TransactionDataAdapter.InsertCommand.CommandText = _
        "INSERT INTO [Transaction] VALUES('" & sortCode & "', " & _
        "" & accountNo & ", " & _
        "" & transactionNumber & "', " & _
        "" & Convert.ToString(DateTime.Now.ToString("d")) & "', " & _
        "'Cheque', " & _
        "" & amount & "', " & _
        "", " & _
        "" & balance & ", " & _
        "" & staffNumber & ", " & _
        ""))"

        'Execute INSERT Command
        TransactionDataAdapter.InsertCommand.ExecuteNonQuery()

        'Close Database Connction
        FAMSDBConnection.Close()

    Case "Interest" 'Transaction being Interest Posting

        'Open Database Connection
        FAMSDBConnection.Open()

        'Create INSERT Command
        TransactionDataAdapter.InsertCommand.CommandText = _
        "INSERT INTO [Transaction] VALUES('" & sortCode & "', " & _
        "" & accountNo & ", " & _
        "" & transactionNumber & "', " & _
        "" & Convert.ToString(DateTime.Now.ToString("d")) & "', " & _
        "'Interest', " & _
        "" & amount & "', " & _
        "", " & _
        "" & balance & ", " & _
        "" & staffNumber & ", " & _
        ""))"

        'Execute INSERT Command
        TransactionDataAdapter.InsertCommand.ExecuteNonQuery()

        'Close Database Connction
        FAMSDBConnection.Close()

    Case "Charges" 'Transaction being charges being deducted

        'Open Database Connection
        FAMSDBConnection.Open()

        'Create INSERT Command
        TransactionDataAdapter.InsertCommand.CommandText = _
        "INSERT INTO [Transaction] VALUES('" & sortCode & "', " & _
        "" & accountNo & ", " & _
        "" & transactionNumber & "', " & _
        "" & Convert.ToString(DateTime.Now.ToString("d")) & "', " & _
        "'Charges', " & _
        "", " & _
        "" & amount & "', " & _
        "" & balance & ", " & _
        "" & staffNumber & ", " & _
        ""))"
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    """)

    'Execute INSERT Command
    TransactionDataAdapter.InsertCommand.ExecuteNonQuery()

    'Close Database Connction
    FAMSDBConnection.Close()

Case "PayTransfer" 'Paying Transfer to other A/c

    'Open Database Connection
    FAMSDBConnection.Open()

    'Create INSERT Command
    TransactionDataAdapter.InsertCommand.CommandText = _
    "INSERT INTO [Transaction] VALUES('" & sortCode & "'", " & _
    "'" & accountNo & "'", " & _
    "'" & transactionNumber & "'", " & _
    "'" & Convert.ToString(DateTime.Now.ToString("d")) & "'", " & _
    "'Transfer', " & _
    "'" & _
    "'" & amount & "'", " & _
    "'" & balance & "'", " & _
    "'" & staffNumber & "'", " & _
    """)

    'Execute INSERT Command
    TransactionDataAdapter.InsertCommand.ExecuteNonQuery()

    'Close Database Connction
    FAMSDBConnection.Close()

Case "ReceiveTransfer" 'Recieving Transfer from other A/c

    'Open Database Connection
    FAMSDBConnection.Open()

    'Create INSERT Command
    TransactionDataAdapter.InsertCommand.CommandText = _
    "INSERT INTO [Transaction] VALUES('" & sortCode & "'", " & _
    "'" & accountNo & "'", " & _
    "'" & transactionNumber & "'", " & _
    "'" & Convert.ToString(DateTime.Now.ToString("d")) & "'", " & _
    "'Transfer', " & _
    "'" & _
    "'" & amount & "'", " & _
    "'" & balance & "'", " & _
    "'" & staffNumber & "'", " & _
    """)

    'Execute INSERT Command
    TransactionDataAdapter.InsertCommand.ExecuteNonQuery()

    'Close Database Connction
    FAMSDBConnection.Close()

Case "BankersDraft" 'Paying Banker's draft to customer

    'Open Database Connection
    FAMSDBConnection.Open()

    'Create INSERT Command
    TransactionDataAdapter.InsertCommand.CommandText = _
    "INSERT INTO [Transaction] VALUES('" & sortCode & "'", " & _
    "'" & accountNo & "'", " & _
    "'" & transactionNumber & "'", " & _
    "'" & Convert.ToString(DateTime.Now.ToString("d")) & "'", " & _
    "'Bankers Draft', " & _
    "'" & _
    "'" & amount & "'", " & _
    "'" & balance & "'", " & _
    "'" & staffNumber & "'", " & _
    """)
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'Execute INSERT Command
TransactionDataAdapter.InsertCommand.ExecuteNonQuery()

'Close Database Connction
FAMSDBConnection.Close()

Case "CashWithdrawal" 'Cash Withdrawal to customer

'Open Database Connection
FAMSDBConnection.Open()

'Create INSERT Command
TransactionDataAdapter.InsertCommand.CommandText = _
"INSERT INTO [Transaction] VALUES('" & sortCode & "', " & _
"'" & accountNo & "', " & _
"'" & transactionNumber & "', " & _
"'" & Convert.ToString(DateTime.Now.ToString("d")) & "', " & _
"Cash', " & _
"'" & amount & "', " & _
"'" & balance & "', " & _
"'" & staffNumber & "', " & _
"')"

'Execute INSERT Command
TransactionDataAdapter.InsertCommand.ExecuteNonQuery()

'Close Database Connction
FAMSDBConnection.Close()

Case Else

    MessageBox.Show("Problem with Select Case structure in class
Transaction")

End Select

Catch ex As Exception

    MessageBox.Show(ex.ToString())

End Try

End Sub 'InsertTransaction

End Class 'Transaction
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