

Chapter 25. Detail General Ledger

Perhaps you are keeping your bank deposits and withdrawals in Alpha Five. You have set up three tables:

- checkbk.dbf - to record transactions
- payee.dbf - a lookup table of payee names
- account.dbf - a lookup table of account names

Your set that ties them all together is checkbook.set, with one-to-one links from checkbk to payee and account. The structure of the checkbk.dbf table is fairly straightforward:

Name	Type	Width	Decimal
Date	Date	8	0
Type	Character	1	0
Payee_No	Numeric	3	0
Amount	Numeric	9	2
Reference	Numeric	6	0
Comment	Character	75	0
Account_No	Numeric	3	0
Cleared	Logical	1	0

Checkbk.dbf structure

Payee.dbf is simply:

Name	Type	Width	Decimal
Payee_Num	Numeric	3	0
Payee_Nm	Character	30	0

The fields in account.dbf are simply acct_num and acct_name.

You have been diligently recording all your deposits, interest payments, withdrawals, checks, and bank fees, and are pleased that you can generate reports listing total deposits, payments by payee, payments by date, by account, by phase of moon (just checking to see if you're still awake) C but how can you generate a running balance? You know, a list that looks like:

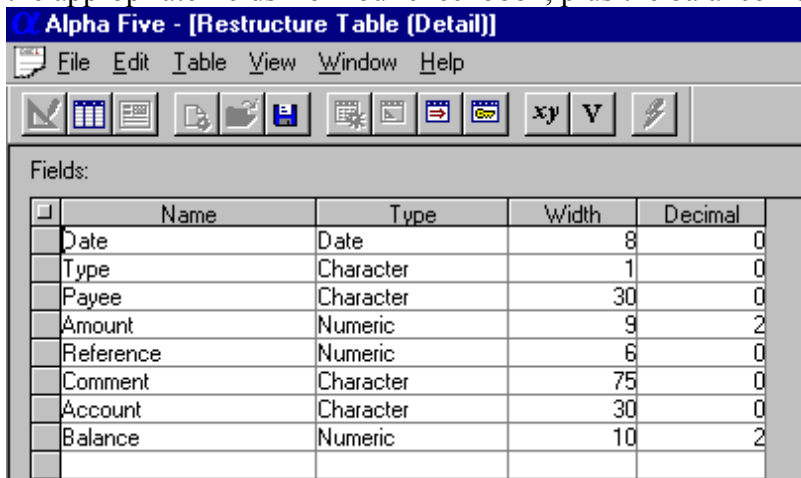
Date	Type	Referenc e	Payee	Accoun t	Amou nt	Balanc e
1/1/96	D			income	1200.50	2030.33
1/3/96	C	1256	Edison Elec.	utilities	70.56	1959.77
1/4/96	C	1257	NYNEX	telephon e	123.45	1836.32
1/4/96	W		Cash	draw	200.00	1636.32
1/8/96	I			interest	12.05	1748.37
1/9/96	C	1258	Landlady	rent	450.00	1398.37

Date	Type	Reference	Payee	Account	Amount	Balance
1/10/96	C	1259	Computer City	equipment	225.00	1173.37

In this checkbook, we have 6 transaction types:

- "C" C a check, results in a debit
- "W" C a withdrawal, results in a debit
- "E" C electronic funds transfer, results in a debit
- "D" C deposit, results in a credit
- "I" C interest payment, results in a credit
- "F" C bank fee, results in a debit

To create a detail general ledger report, we need to create another temporary table. This result table will hold the appropriate fields from our checkbook, plus the balance field:



We will fill our detail table from the checkbook transaction table. Here is our pseudocode:

```

ask the user for the beginning date of the detail
ask the user for the ending date of the detail
ask the user for the balance as of the beginning date
open the detail table
empty the detail table
open the checkbook set
create a query encompassing the checkbook's beginning and ending dates
fetch the first checkbook records
while there are still more checkbook records
select on record type
case of "C": balance=balance-amount
case of "W": balance=balance-amount
case of "E": balance=balance-amount
case of "F": balance=balance-amount
case of "I": balance=balance+amount
case of "D": balance=balance+amount
end select
fill in the detail fields from the balance and from the checkbook set
fetch the next checkbook record

```

```
end while
close all tables
end
```

To get the beginning date, ending date, and opening balance from the user, we will employ Xbasic's built-in user interface functions. These functions are of the form

result_string = ui_get_type(title , message , optional_default_value)

For example:

```
end_date = ui_get_date("Ending date","Enter date: ",dtoc(date()))
```

Although the function, ***ui_get_date()***, will guarantee that a result is properly formatted as a date, it is important to recognize that the function returns a character value. Therefore, the result has to be converted into a date before it can be used in a date calculation or date comparison. All the ***ui_get_val()*** functions return character variables. We will use the two functions:

ctod(char_var) - **Character TO Date**

and:

val(char_var) -**VALue**

to transform character variables into date and number variables.

In Xbasic, then, our script to prepare the detail general ledger becomes:

```
option strict
dim checkbook as p
dim payee as p
dim account as p
dim detail as p
dim dstr as c
dim begindate as d
dim enddate as d
dim obal as n
dim balance as n
dim ip as p
dim nrecs as n
dim i as n
dim query.description as c
dim query.order as c
dim query.options as c
dim query.filter as c

checkbook=table.current(1)
payee=table.current(2)
account=table.current(3)

dstr = ui_get_date("Beginning Date","Enter the date to begin at:","01/01/96")
if dstr="" then
    end
end if
begindate=ctod(dstr)
dstr = ui_get_date("Ending Date","Enter the date to end at:",dtoc(date()))
if dstr="" then
```