Excel on the fairway

Here's an end to your problems of scheduling golf rounds. Stephen Wells tees off with a cunning spreadsheet. And, how to put some balance back into your bank account.

There's a book token waiting here for the best solution to a reader's problem. John Proud writes: "Each year 12 golfers visit Scotland. All of us are very good friends and have known each other for some years. We play six rounds of golf over four days. My problem is that I need to produce a formula so that each golfer plays with and against as many partners as possible. Round one is easy: A + B *vs* C + D, E + F *vs* G + H, and I + J *vs* K + L. Any help would be gratefully received".
 In a follow-up message, John revealed that he uses Excel and that the golfers names are Bob, Dave A., Dave H., Duncan, Ed, Graham, John C., John H., John P., Kelvin, Mike, and Steve.

There can be 66 different pairs...each golfer has a different partner for every round

The first thing I did was to figure out the potential number of teams. The COMBIN function, =COMBIN(12,2), gives the answer that there can be 66 different pairs. Then I laid out the table shown in Fig 1. The Excel 97 file is golf.xls in the *Hands On* software section of this month's cover CD. The starting formula is

=B4&" & "&D$3

and it replicates, with minor variations, across the rows and down the columns. It avoids the cells which would create the anomaly of A & B also being scheduled as B & A, and so on. The table solves half the problem, showing that each golfer has a different partner for every round. The only suggestion I can make for opposing teams is that each pair continues to play the next.

So, in Round 1, A & B play C & D, and in Round 2, B & C play D & E, and so on. There must be a better solution which would list the players in a data table and give the results, probably with an array formula, in a columnar format.
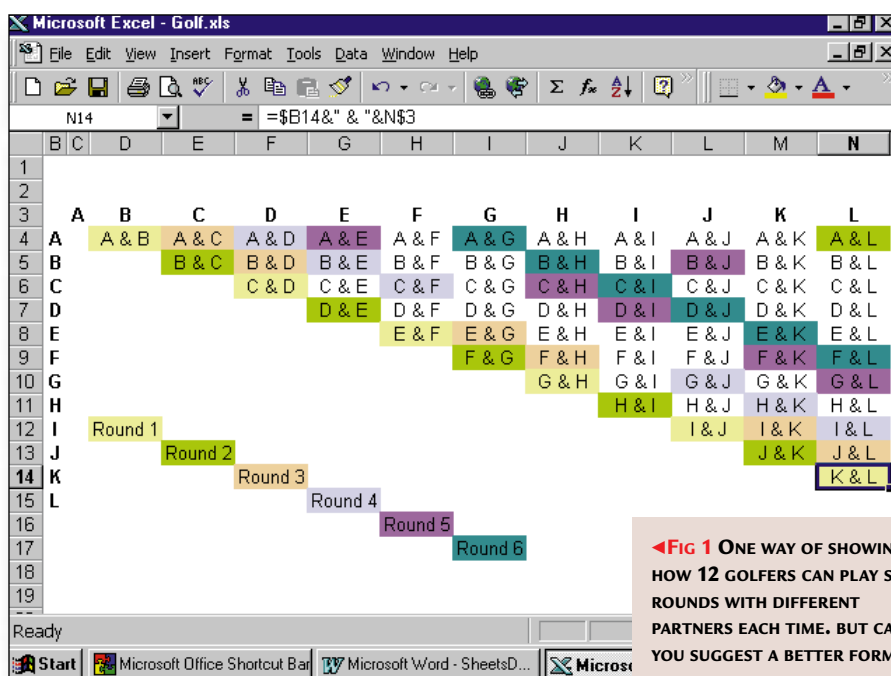
● **I know there are** many excellent personal accounts packages these days but I've been keeping track of my finances on spreadsheets for so long now that I'm reluctant to switch. I recently added a useful macro to this year's Excel 97 expenses workbook which I thought I'd share with you. To instantly reconcile my month's running balance with that of my current account, I need to bring forward the bottom figure on my bank statement's balance column. (This is a worksheet which duplicates my Barclays PC Banking statement and is always up-to-date.) You could use this macro in any workbook where you want to bring a value forward from one sheet to another:

☛ **Open** the Visual Basic Editor using Alt+F11.
☛ **Choose** Insert, Module, then enter the procedure shown in Fig 2.
☛ **Save** your work and close VBA. Specifically, in this instance what the macro does is go to the top of column F on my Barclays sheet, then drops to the last used cell, copies it and pastes the value in cell AJ49 on the named month's Expenses sheet. If you used the macro, you would change the listing to suit. You can run the macro any one of a number of ways. As there is only one macro in my workbook, I just press Alt+F8 and then Enter.

[FIG 2] You can bank on it

```
Sub Balance()
    Sheets("Barclays").Select
    Range("F1").Select
    Selection.End(xlDown).Select
    Selection.Copy
    Sheets("December Expenses").Select
    Range("AJ49").Select
    Selection.PasteSpecial Paste:=xlValues
End Sub
```


◄**Fig 1** One way of showing how **12** golfers can play six rounds with different partners each time. but can you suggest a better format?

Questions
& answers

Q When I filter a list based on a column, how can I create a cell which tells me how many items there are in that filtered list?

JONATHAN SCOTT

a *You don't say what version of which spreadsheet you are using, nor how you are filtering. But if you are using Excel 97, you can do this. Click on your table, then choose Data, AutoFilter. Click the new arrow at the top of the preferred column, choose your option and filter. Initially, the Status Bar will show on the left, 12 of 52 records found, or whatever the results are. After that, you can click on the column letter and right-click on the Status Bar and choose Count, or Count Numbers.*

If the Status Bar is not showing, press Alt+V, S.

To insert the number of items in a cell, select the short list in the column produced by AutoFilter, then click the AutoSum tool. It will put the total in a blank cell. But if you look in the Formula Bar it will read something like =SUBTOTAL(9,D3:D30). In other words, for a filtered list, the AutoSum tool changes from SUM to SUBTOTAL. This function starts with a number from 1 to 11. If the listed values are cash amounts, with a number 9 it will total the range. To get a count of the items, change the 9 to a 2. With a 1 you would get an average.

Excel can also sort a list and count the number of different types of one field. In the same example, we can quickly sort all the invoices by customer and count how

many have been sent to each customer. *Click anywhere in the list. Choose Data, Sort, then the field, "Customer". Once the sort has been made you can add the counts. Choose Data, Subtotal. In the "At each change in" box select "Customer". In the "Use function" box select "Count". In the "Add subtotal to" box check "Customer". Then check "Summary below data". You should then see a result like* **Fig 3**.

▲**FIG 3** EXCEL CAN QUICKLY SORT A LIST OF INVOICES BY CUSTOMER AND THEN COUNT THE NUMBER OF INVOICES SENT TO EACH

Q Using Lotus 1-2-3 '97 I was a bit worried when I typed in a "/" and the computer seemed to whirr around a bit. After a few seconds a little window was displayed, similar to a menu, and it called itself "1.2.3 Classic". I was wondering if you knew anything about this feature, and if anyone else who may be new to Lotus products has come across it. It doesn't seem to do much.

KIERAN BANKS

The computer seemed to whirr around a bit...

a *1-2-3 Classic is one of the most famous formats for spreadsheet entry. Although a little dated now, it is much loved by millions of ageing Lotus 1-2-3 fans. If you don't want to use 1-2-3 Classic, you can turn it off by choosing File, User Set-up, 1-2-3 Preferences in 1-2-3 97 and then clicking the Classic*

Keys tab. When 1-2-3 Classic is turned off, pressing / (slash) or < (less-than symbol) enters the appropriate character in the current cell. However, you can continue to use your keystroke macros.*

Q How can I show negative numbers in brackets in Excel 97, rather than use a minus sign? The help file says that this option depends on selecting negative numbers in brackets in Windows 95 Regional settings. I have done this for both numbers and currency but when I go to Format, Number, in Excel the negative numbers in brackets option is not available.

ROBIN BAXTER

a *Look under format, Cells, Custom and you'll find several currency options using brackets. Pick the one you want or edit an existing one.*

Q Please can you tell me how to change the default Options in Excel 97? Specifically I would like firstly, in Tools-Options-View, the "Zero values" box to default as clear, and secondly, in Tools-Options-Calculations, the default to be "Manual".

JIM BEDFORD

a *Open a blank workbook. Choose the settings you want. Save this workbook as Book.xlt in the XLSTART folder. When you open a new workbook it will use your new settings as the default. This way, if you or another user of your PC wants to restore the original factory defaults you can just delete the Book.xlt file or move it from the start-up directory.*

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