TIPS 'N TECHNIQUES

Double window Menu

A smart menu program that lets you organize your programs by category

ate scrolling through long lists of disk directories, looking for the program you want? Organize your programs with Double Window Menu. You can divide the programs on each disk into categories, and see only the programs associated with the category you've selected.

USING THE PROGRAM

Using Double Window Menu couldn't be easier. The upp of the screen is used to identify the series of programs being displayed and provides instructions on how to advance the cursor bur and select the program desired. Below the title, the screen is divided by wate looks like an oversized T. See Figure 1. On the left side is the primary menu, and the right side contains the secondary menu.

As you move the cursor har from one category to another in the primary mean area with the arrow keys, the secondary mem is automatically updated to display the programs associated with selected primary mem item. Once you have chosen the eategory to want, press Return and the cursor jumps to the right window, where the escondary mem is, Again to the turnor large to the felicit of desired the feedings key while using the secondary mem, you will be transferred back to the primary mem.

Since the program in Listing 1 is just a demonstration, the program you select is not actually run; to use Double Window Menu with your own programs, see the Customization section.

ENTERING THE PROGRAM

To key in the program, type in Listing 1 and save it with the command

SAVE DUBL . WINDO . MENU

You may want to name the program STARTUP if you want this program to be run when you boot your ProDOS disk. DOS 3.3 users may want to initialize their disk with this program as their HELLO program. Remember that Double Window Mena program is not meant to be a general purpose menu but must be set up with the data statements appropriate for the filenames on your disk.

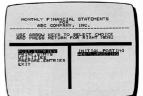


Figure 1: Double Window Menu in Action

HOW THE PROGRAM WORKS

When the program is run, the data statements at the end of the program are READ into a two-dimensional array, OPTNS(NC,NR), where NC represents the number of columns in your table of choices and NR represents the number of rows or choices in the primary

menu.

Once the initialization phase is complete, the screen displays the primary menu on the left, the right side displays the program names associated with the first category in the primary menu.

The program then scans the keyboard for an arrow or Escape or Return keypress (lines 150-260). The program will ignore any input other than those keys. If an arrow keypress is detected, the cursor bar will select another category in the primary menu and the secondary menu will display the choices applicable to that category.

Here is where the windows come in. By POKEing memory locations 32 and 33, you control which part of the screen you want to be active. The rest of the screen remains frozen. After the highlighted item in the primary window is changed, the right window is activated and allows a fast update of the new

choices. Then the primary menu regains control.

When you press Return, the secondary menu becomes active. Now when you press the arrow keys, the cursor on the left side of the screen remains frozen while the secondary cursor moves. If you press Escape, you will be returned to the primary menu. A Return keypress will attempt to run the program currently highlighted in the secondary menu

CUSTOMIZATION

To set up your own choices you will have to organize your data statements so they will be properly read into the array named OPTNS(). Column zero of the array represents the primary menu choices: column one represents programs associated with the first category in the primary menu: column two represents programs associated with category two, and so on

Remember to make the last item in your primary menu EXIT. The program will exit to BASIC when you choose the last item in the primary menu.

When entering the data statements, you should use quotation marks and pad each name with spaces so that the cursor bar will have the same length when it passes from one item to the next When you use Double Window Menu with your own files, change

line 520 to read

```
CHRS (4) - "RIIN " OPTNS (CL K) - END
```

will allow you to BRUN binary files. EXEC text files, and boot system programs such as AppleWorks.

CR

B9

AF

CB

24

27

00

0.7

84

88

DB

53

16

41

FO

21

CO 210 DI S -

320 VTAB 9

```
520 TEXT : HOME : PRINT OPTNS(CL,K): PRINT : PRINT
If you are using ProDOS, you can replace "RUN" with "-". This
LISTING 1: DUBL.WINDO.MENU
               ......
          REM
               . DUBL . WINDO . MENU
          REM
               . BY FRED V. AMUNDSEN
               · COPYRIGHT (C) 1988
          REM
          DEM
               . BY MICROSPARC. INC.
     60
          REM
               . CONCORD, NA 81742
          DEM
               TEXT : HOME : GOSUB 568: GOTO 488
          REM
              SHOW CHOICES
     100
           GOSUB 450: HOME : FOR KK = 1 TO C(K): PRIN
          T OPTNS (K,KK): NEXT KK: GOSUB 460: RETURN
REM GET CHOICE
     110
     120 V = VT + 2: NORMAL
     120
           LET K = 1
          HTAB 1: VTAB V: INVERSE : PRINT OPTNS (CL.K.): NORMAL : IF CL = 0 THEN GOSUB 130
     140
20
     150
           LET C = PEEK (KYBD): IF C < 128 THEN 150
     160
           POKE STROBE, 0
7B
     170
           IF (C = 141 AND CL = 0 AND K = MAX) THEN
               : HOME : END
           IF C = 141 AND CL = 0 THEN : VTAB (21):

ALL - 958: PRINT "PRESS "ESC" TO": PRINT
"RETURN TO": PRINT "THE LEFT WINDOW":
AØ
          CALL
          RETURN
          IF C = 155 AND CL > 0 THEN POP :CL = 0:MA
          X = C(0): GOTO 490
          IF C = 141 THEN RETURN
           IF C = 149 OR C = 138 OR C = 136 OR C = 13
          9 THEN 230
     220
           GOTO 150
           VTAB V: HTAB HT: PRINT OPTNS (CL.K)
     230
     240 IF C = 149 OR C = 138 THEN V = V + 1:K = K
+ 1: IF K > MAX THEN V = VT + 2:K = 1
     250 IF C = 136 OR C = 139 THEN V = V - 1:K = K
          - 1: IF K = 0 THEN V = VT + 2 + WAX - 1:K
          = MAX
     260
           GOTO 140
           REM SHOW HEADINGS
     280 HOME : PRINT TAB( 20 - LEN (L15) / 2):L1
          $: PRINT TAB( 20 - LEN (L2$) / 2):L2$:
PRINT TAB( 20 - LEN (L3$) / 2):L3$: FOR
          K = 1 TO 40: PRINT -- :: NEXT
           PRINT
```

PRINT TAB(4): "USE ARROW KEYS TO SELECT C

HOICE": PRINT TAB(4); AND PRESS RETURN FO R RIGHT MENU." BLS = ": INVERSE : REM BLANK SPACE

```
PRINT 'IN A REAL APPLICATION.': PRINT 'YOU
WOULD NOW BE': PRINT 'RUNNING '';OPTNS(CL.
K);"": PRINT : PRINT 'PRESS RETURN TO REST
          ART/ESCAPE TO QUIT ':: POKE - 16368.0: GET
      538
           IF AS < > CHRS (27) THEN RUN
55
      540
           FND
FC
      550
           REM INITIALIZATION
F2
          PRINT CHR$ (21): TEXT : HOME
      560
25
      570 DS = CHR$ (4)
      588 LIS = "MONTHLY FINANCIAL STATEMENTS"
AF
      590 L25 = "FOR"
33
AI
      600 L35 = "ABC COMPANY, INC."
49
      610
          REM CHANGE NEXT LINE FOR YOUR MENU
02
      620 NC = 5:NR = 20: REM NUMBER OF COLUMNS AND
          ROWS
49
      630
           LET KYBD = - 16384: LET STROBE = - 16368
           WT = 3
           DIM OPTHS (NC. NR)
49
      640
DA
      650
           DIM C(NC)
           FOR I - 6 TO NO
44
      660
57
      678
           READ C(J)
CA
     680
           FOR K = 1 TO C(J)
85
      698
           READ OPTNS(J.K)
40
      780
           NEXT K: NEXT J
           LET MAX = C(0)
FØ
      710
CE
      790
           RETURN
75
      730
      748
35
      750
30
      778
88
      788
           DATA
A2
      798
           DATA "EXIT
84
      800
           DATA
ES
      810
           DATA
      828
           DATA
AB
      838
           DATA
CE
           DATA
      842
50
      858
DA
      868
           DATA
      878
           DATA
52
           DATA
      889
CZ
      898
           DATA
58
      900
CB
      918
           DATA
      928
           DATA
6B
      938
CF
      948
           DATA
5E
      950
           DATA
DA
      968
           DATA '
                  RESTART
or
           DATA
C8
      988
E7
           DATA
63
      1000
            DATA
90
      1010
                  "00S . UP
      1020
74
      1838
80
      1848
25
      1858
            DATA
      1868
           DATA
            STATEMENT
TOTAL - STAF
END OF LISTING 1
```

220

472 REM MAINLINE

10 240

A8 350

62 250 HEYT K

E4 370 VTAB 1

23 290 MADMAI

70 398 RETURN

28 488 DEM SHOW MENU

3F 410 V = 11 02 420

D2 430

20 ... RETURN

03 450

FF 460

F6 480

B3

20

B4

84

FOR K = 1 TO 40: PRINT BLS:: NEXT

HTAB HT: VTAB V: PRINT OPTNS(CL.K)::V = V + 1: NEXT K

POKE 32 22: POKE 33 18: POKE 34.10: RETURN

POKE 32.2: POKE 33.17: POKE 34.10: RETURN

FOR K = 1 TO 14

FOR K = 1 TO MAX

GOSUB 280

REM SETUP RIGHT WINDOW

498 CL = 8:VT = 9:HT = 1: GOSUB 468: HOME :

528 TEXT : HOME : PRINT OPTNS (CL.K): VTAB 23:

REM SETUP LEFT WINDOW

GOSUB 410: GOSUB 120 500 GOSUB 450:CL = K:MAX = C(K): HOME : FOR KK = 1 TO MAX: PRINT OPTNS(CL,KK): NEXT

518 GOSUB 128: REM GET CHOICE

HTAB 21: PRINT BLS

```
REM DATA STATEMENTS FOR FILES ON DISK
      5: REM COLUMN ZERO
DATA "PREPARE ENTRIES
DATA "POST ENTRIES
DATA "PRINT STMTS
    "UTILITIES
      2: REM COLUMN.ONE
      STANDARD ENTRIES
      SPECIAL ENTRIES
      INITIAL POSTING
DATA "ADD' L. POSTING
      4: REM COLUMN. THREE
     ONE . PAGE . STMT
     PRINT LEDGER
DATA 'DIVISION ANALYSIS'
      13: REM COLUMN. FOUR
      ADD . ACCOUNTS
DATA "NEW ENTRIES
    "CLEAR . ACCOUNTS
    DIRECTORY ADJUST
      GENERAL LEDGER
DATA "MERGE ENTRIES
      TRANSFER DATA
      COPY FILES
DATA "COPY DISK
DATA "INITIALIZE DISK
DATA 'INSTRUCTIONS
      1: REM COLUMN FIVE
       "EXIT.TO.BASIC": REM REQUIRED LAST
```