
Subject: RE: Updateable Message Widget
Posted by [mallozzi](#) on Thu, 03 Aug 1995 07:00:00 GMT
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Here is a simple widget program that mimics IDL's WMENU.
It is useful to provide a message notification or to query
the user for a response. You call it just like WMENU, and there
are a couple extra keywords, too.

-Bob Mallozzi

----- SNIP, SNIP -----

```
; *****  
;  
;+  
; NAME:  
; WIDMENU  
;  
; PURPOSE:  
; Widget version of WMENU, plus optional SCROLL bar  
;  
; CATEGORY:  
; WIDGETS  
;  
; CALLING SEQUENCE:  
; RESULT = WIDMENU(SELECTIONS, [TITLE = , INITIAL = , /SCROLL, SIZE = ])  
;  
; INPUTS:  
;     SELECTIONS: STRARR of the menu selections  
;  
; KEYWORD PARAMETERS:  
;     TITLE:  the title  
;     INITIAL: the initial cursor selection  
;     SCROLL: adds a scroll bar  
;     WIDTH:  width of the widget in pixels (height is set automatically  
;           based on the number of buttons)  
;  
; OUTPUTS:  
;     RESULT = index of the menu item (including TITLE, if supplied)  
;  
; COMMON BLOCKS:  
; NONE  
;  
; SIDE EFFECTS:  
;     Creates a button widget  
;  
; RESTRICTIONS:  
; TITLE can only be a single line on the widget
```

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;
; PROCEDURE:
;   Mimics WMENU
;
;
; EXAMPLES:
;   Error notification message:
;   INDEX = WIDMENU(['ERROR Opening File to Read', 'OK'], $
;               title = 0, initial = 1)
;
;   QUIT confirmation:
;   INDEX = WIDMENU(['Do you really want to QUIT?', 'Yes', 'No'], $
;               title = 0, initial = 1)
;
; MODIFICATION HISTORY:
; Written, mallozzi@gibson.msfc.nasa.gov, Dec 1994.
;-

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FUNCTION WIDMENU, SELECTIONS, TITLE = TITLE, SCROLL = SCROLL, $
    INITIAL = INITIAL, WIDTH = WIDTH

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; Save the device, in case it's not 'X'
DEVICE_SAVE = !D.NAME
SET_PLOT, 'X'

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NUM_BUTTONS = N_ELEMENTS(SELECTIONS)

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IF (N_ELEMENTS(TITLE) NE 0) THEN BEGIN
    IF (TITLE GT NUM_BUTTONS) THEN TITLE = NUM_BUTTONS - 1
    TTITLE = SELECTIONS(TITLE)
    LOCAL_SELECTIONS = SELECTIONS(WHERE(INDGEN(NUM_BUTTONS) NE TITLE))
    TCHECK = 1
ENDIF ELSE BEGIN
    TTITLE = "
    LOCAL_SELECTIONS = SELECTIONS
    TCHECK = 0
ENDELSE

```

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; Parent
IF (N_ELEMENTS(WIDTH) NE 0) THEN BEGIN
    MENU_BASE = WIDGET_BASE(TITLE=' ', /COLUMN, XSIZE = WIDTH)
ENDIF ELSE BEGIN
    MENU_BASE = WIDGET_BASE(TITLE=' ', /COLUMN)
ENDELSE

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; Add the title, if it's supplied
IF (N_ELEMENTS(TITLE) NE 0) THEN T_BASE = WIDGET_LABEL(MENU_BASE,
VALUE=TTITLE)

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; Selection buttons
IF (KEYWORD_SET(SCROLL)) THEN BEGIN
    SUB_BASE = WIDGET_BASE(MENU_BASE, /COLUMN, /FRAME, /SCROLL)
ENDIF ELSE BEGIN
    SUB_BASE = WIDGET_BASE(MENU_BASE, /COLUMN, /FRAME)
ENDELSE

M_BUT = LONARR(NUM_BUTTONS)
FOR i=0, N_ELEMENTS(LOCAL_SELECTIONS)-1 DO BEGIN
    M_BUT(i) = WIDGET_BUTTON(SUB_BASE, VALUE = LOCAL_SELECTIONS(i), UVALUE = i)
ENDFOR

; Make it so
WIDGET_CONTROL, MENU_BASE, /REALIZE

; An attempt to get the widget to appear in the center of the screen.
; Disabled because it causes the widget to flash in the UL corner, and
; then reappear in the center of the screen. One should be able to
; use the command WIDGET_CONTROL, MENU_BASE, /REALIZE, MAP = 0, but
; this does not do what one expects. When a widget is /REALIZED, apparently
; it MUST make an appearance on the screen...
;
;DEVICE, GET_SCREEN_SIZE = CURRENT_SCREEN
;WIDGET_CONTROL, MENU_BASE, TLB_GET_SIZE = MENU_SIZE
;MENU_CENTER = [(CURRENT_SCREEN(0) / 2.0) - (MENU_SIZE(0) / 2.0), $
;               (CURRENT_SCREEN(1) / 2.0) - (MENU_SIZE(1) / 2.0)]
;WIDGET_CONTROL, MENU_BASE, $
;               TLB_SET_XOFFSET = MENU_CENTER(0), $
;               TLB_SET_YOFFSET = MENU_CENTER(1)

; Place the cursor
LNUM = N_ELEMENTS(LOCAL_SELECTIONS)
IF (N_ELEMENTS(INITIAL) NE 0) THEN BEGIN
    IF (TCHECK EQ 1) THEN BEGIN
        CASE 1 OF
            (TITLE GE INITIAL) : SPOT = INITIAL
            (TITLE LT INITIAL) : SPOT = INITIAL - 1
            (INITIAL GT LNUM)  : SPOT = LNUM - 1
            ELSE                : SPOT = 0
        ENDCASE
    ENDIF ELSE BEGIN
        CASE 1 OF
            (INITIAL GT LNUM) : SPOT = LNUM - 1
            ELSE              : SPOT = INITIAL
        ENDCASE
    ENDELSE
    IF (SPOT LT 0) THEN SPOT = 0

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ENDIF ELSE BEGIN
    SPOT = 0
ENDELSE
WIDGET_CONTROL, M_BUT(SPOT), /INPUT_FOCUS

; Get the event, without using XMANAGER
EVENT = WIDGET_EVENT(MENU_BASE)

; Process the event
TYPE = TAG_NAMES(EVENT, /STRUCTURE)
CASE TYPE OF

; The button widget events
'WIDGET_BUTTON': BEGIN
    WIDGET_CONTROL, EVENT.ID, GET_VALUE = VALUE, GET_UVALUE = UVALUE

    FOR I=0, N_ELEMENTS(LOCAL_SELECTIONS)-1 DO BEGIN
        IF (UVALUE EQ I) THEN BEGIN
            WIDGET_CONTROL, EVENT.TOP, /DESTROY
            IF (TCHECK EQ 1) THEN BEGIN
                IF (I GE TITLE) THEN ADD_I = TCHECK ELSE ADD_I = 0
            ENDIF ELSE ADD_I = 0
            SET_PLOT, DEVICE_SAVE
            RETURN, I + ADD_I
        ENDIF
    ENDFOR
END

ENDCASE ; for TYPE

END
.*****
,

```
