
Subject: Re: Filename order: interactive arranging

Posted by [marc schellens\[1\]](#) on Mon, 02 Oct 2000 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

amacphee@my-deja.com wrote:

> Hi,
> A little problem with list sorting:
> I'm trying to produce an animation from data reduced from several files.
> I can now home in on the data (thanks to David Fanning), isolate the
> subsets of interest from each file and produce an MPEG movie. Great!
> However, because I simply choose the files in a dialog_pickfile, the
> order of the files in the animation is determined by the OS's standard
> file sort mechanism (I think). I've considered using a listbox to get
> the indices of the selected filenames in order of the users clicking
> and use these values to re-arrange the filenames in the array returned
> by dialog_pickfile. I have not delved into widget programming yet
> though...
>
> I expect that this may not be too uncommon a thing for people to want to
> do, so maybe again there is a solution waiting out there somewhere?
>
> Thanks for any advice,
> Andrew
>
> Sent via Deja.com <http://www.deja.com/>
> Before you buy.

I have a very simple interactive list sorter. I think it might be just what you are looking for.

You have to provide an array of strings and the click on two list elements to swap them.

It returns the sorted indices. Index your array with it and that's it.

It is derived from another very ancient program I wrote, therefore the programming style is not so up to date.

Cheers,

:-) marc

Example use:

```
IDL> a=['123','abc','456','def']
```

```
IDL> ix=L_Sorter(a)
```

clicking around....

```
IDL> print,ix
```

```
      2   3   1   0
IDL> print,a[ix]
456 def abc 123
```

```
:: function L_Sorter
;; Let the user sort a list (a string array)
;;
;; variables:
;; theList Stringarray to sort
;;
;; keywords:
;; group the Groupleaders ID, should be provided, since this
;; is a modal dialog (if not provided, it works nevertheless,
faking a main base)
;; title The windows title
;;
;; return:
;; the sorted index
```

```
:: eventhandler for L_SelectfromList
pro L_Sorter_EVENT,event
```

```
common L_SorterCommon,sortIx,listID,list,last
```

```
WIDGET_CONTROL,Event.Id,GET_UVALUE=Ev
```

```
CASE Ev OF
  'OK': BEGIN
    widget_control,Event.top,/destroy
  END
  'REVERSE': BEGIN
    sortIx=reverse(sortIx)
    widget_control,listID,SET_VALUE=list[sortIx]
    last=-1
  END
  'CANCEL': BEGIN
    widget_control,Event.top,/destroy
    sortIx=-1
  END
  'LIST': BEGIN
    if last ne -1 then begin
      tmp=sortIx[last]
      sortIx[last]=sortIx[event.index]
      sortIx[event.index]=tmp
      widget_control,listID,SET_VALUE=list[sortIx]
      last=-1
    endif else begin
```

```

        last=event.index
    endelse
END
ENDCASE
end

;; L_SelectFromList main function
function L_Sorter,theList,TITLE=Title,$
    GROUP=group,INIT=init

common L_SorterCommon

;; set default title if TITLE keyword is not set
if( n_elements(TITLE) ne 0) then $
    actTitle=Title $
else $
    actTitle='Define the sort order'

actNum=n_elements(theList)
list=theList

;; limit the number of visible lines
actYsize = actNum < 30

;; main base
if n_elements(group) ne 0 then begin
    MAIN_Sorter = WIDGET_BASE( GROUP_LEADER=group, /col, TITLE=actTitle,
/modal)
endif else begin
    RealMAIN_Sorter=widget_base()
    MAIN_Sorter = WIDGET_BASE( GROUP_LEADER=RealMAIN_Sorter, /col,$
        TITLE=actTitle, /modal)
endelse

if n_elements(init) eq 0 then sortIx=indgen(actNum) else sortIx=init
last=-1

;; the list widget
listID=WIDGET_LIST(MAIN_Sorter, VALUE=list[sortIx],YSIZE=actYsize,$
    UVALUE='LIST')

;; the cancel button
bb=widget_base(MAIN_Sorter,/row,XPAD=0,YPAD=0)
b = WIDGET_BUTTON( bb, VALUE=' Ok ', UVALUE='OK')
b = WIDGET_BUTTON( bb, VALUE='Reverse', UVALUE='REVERSE')
b = WIDGET_BUTTON( bb, VALUE='Cancel', UVALUE='CANCEL')

;; realize and handle by xmanager

```

```
WIDGET_CONTROL, MAIN_Sorter, /REALIZE  
XMANAGER, 'L_Sorter', MAIN_Sorter
```

```
return,sortlx  
END
```
