Subject: Keyboard events

Posted by dsreyn on Fri, 28 Jul 2000 07:00:00 GMT

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I've never tried to do this before in IDL (previously I've been content to handle mouse events), so I went looking through the manuals to figure out how to do it. Unfortunately, the event handling routines seem to be limited to mouse and focus events. The closest thing I could find was the get_kbrd function; someone here suggested putting a call to get_kbrd in the event handling function. However, it would seem that this would cause keyboard events to queue up, unprocessed, until the user wiggled the mouse. In other words, it doesn't seem to be quite what I need.

Is there something in the documentation that I have overlooked? Any ideas would be most appreciated.

Doug

Subject: Re: Keyboard events
Posted by John-David T. Smith on Thu, 03 Aug 2000 07:00:00 GMT
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By the way, are people aware that you can trap control keys with the hack (either version). At least for me, Control+a-z map to keys 1B-26B. C-p for print anyone? Haven't tried this one on anything but Unix. Just in case people couldn't find the post I've reattached the latest hack with this modification. Just run tt and try various keys, including control+letter and arrows. If people want to experiment along these lines on other platforms/os's, I'd be willing to collect the results and bundle the routine into something generically useable and distributeable. Maybe then RSI would take notice and work to include a less hackish alternative.

JD

J.D. Smith /*\ WORK: (607) 255-6263 Cornell University Dept. of Astronomy */ (607) 255-5842 304 Space Sciences Bldg. /*\ FAX: (607) 255-5875 Ithaca, NY 14853 */ pro catch_text,ev

```
type=tag_names(ev,/STRUCTURE_NAME)
 erase
 case type of
   'WIDGET_TEXT_SEL': begin
     widget_control, ev.id, get_uvalue=ulrdo
     widget_control, ev.id,SET_TEXT_SELECT=ulrdo[4],SENSITIVE=0
     case ev.offset of
      ulrdo[0]: xyouts,.5,.5,/NORMAL,'Up', CHARSIZE=2.,ALIGNMENT=.5
      ulrdo[1]: xyouts,.5,.5,/NORMAL,'Left', CHARSIZE=2,,ALIGNMENT=.5
      ulrdo[2]: xyouts,.5,.5,/NORMAL,'Right',CHARSIZE=2.,ALIGNMENT=.5
      ulrdo[3]: xyouts..5,.5,/NORMAL,'Down', CHARSIZE=2.,ALIGNMENT=.5
      else:
     endcase
     widget_control, ev.id,/SENSITIVE,/INPUT_FOCUS
   end
   'WIDGET TEXT CH': begin
     if ev.ch le 26 then $
     xyouts,.5,.5,/NORMAL,'C-'+strtrim(ev.ch+96b,2),CHARSIZE=2.,$
     ALIGNMENT=.5$
     else $
     xyouts,.5,.5,/NORMAL,string(ev.ch),CHARSIZE=2,,ALIGNMENT=.5
   end
 endcase
end
pro tt event, ev
 type=tag_names(ev,/STRUCTURE_NAME)
 widget control, ev.top, GET UVALUE=info
 if type eq 'WIDGET_TRACKING' then begin
   widget_control, info.key,/INPUT_FOCUS
   return
 endif
 if ev.type le 1 then widget_control, info.key,/INPUT_FOCUS
 str=string(format='(2(I2.2,:,":"))',ev.X,ev.Y)
 case ev.type of
   0:str='P'+str
   1:str='R'+str
   2:str='M'+str
   else:str='*'
 endcase
 xyouts,.5,.5,/NORMAL,str, CHARSIZE=1.,ALIGNMENT=.5
end
```

```
pro tt
 base=widget base()
  draw=widget_draw(base,XSIZE=60,YSIZE=60,/TRACKING_EVENTS,/MO TION_EVENTS, $
          /BUTTON EVENTS)
 case !VERSION.OS FAMILY of
   'unix': ulrdo=[1,3,5,7,4]
   'Windows': ulrdo=[1,4,6,9,5]
   else: message, 'Not supported.'
 endcase
 kev=widget_text(base./ALL_EVENTS.FRAME=0.XSIZE=2.YSIZE=3. $
          VALUE=['**','**'], EVENT_PRO='catch_text',UVALUE=ulrdo)
 widget_control, base,SET_UVALUE={draw:draw,key:key},/REALIZE
 widget_control, key, SET_TEXT_SELECT=ulrdo[4], /INPUT_FOCUS
 XManager, 'tt', base, /NO_BLOCK
end
File Attachments
1) tt.pro, downloaded 59 times
Subject: Re: Keyboard events
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Posted by John-David T. Smith on Thu, 03 Aug 2000 07:00:00 GMT
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Doug Reynolds wrote:
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> Doug
```

I think I recently posted a follow-on entitled "More keyboard events" to my hack

of many years ago which allows cursor key widget events. It increases the hackery to some degree and has cross-platform issues, but sometimes, you just need them.

An example program is included in the post. My original hack is widely used in a variety of programs, including popular ones such as atv, so it's stability is probably pretty good. The new hack has undergone limited testing, so beware. I've been using it with success under Unix, but your mileage may vary.

Good luck,

JD

/*\ WORK: (607) 255-6263 J.D. Smith Cornell University Dept. of Astronomy */ (607) 255-5842 304 Space Sciences Bldg. **/***\ FAX: (607) 255-5875

Ithaca, NY 14853 */