Subject: Re: Q: A good way to interrupt and kill procedures?
Posted by rivers on Fri, 22 May 1998 07:00:00 GMT
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In article <3564D53A.7B3B970B@astro.berkeley.edu>, Nancy Levenson <levenson@astro.berkeley.edu> writes:
> I am looking for a sensible way to set up a time-consuming program so
> it can be interrupted.
>
> The time-consuming tasks are image manipulations for astronomical data
> reduction. They are run with a widget. Ideally, I would like to have
> a 'kill process' button whose events could be recognized while the
> data reduction is in progress.

Here is an example of how I do that. This is an excerpt from an IDL widget application which goes into a long loop when collecting data. There is a ABORT_SCAN button which remains active when the loop is running.

This is the code which causes an event to be generated if that button is pressed. This is done in the "inner loop" of the scan routine, outside the context of XMANAGER

```
  ; See if an ABORT_SCAN widget event has happened
  if (widget_info(sd.abort_scan_widget, /VALID_ID)) then $
        event = widget_event(/NOWAIT, sd.abort_scan_widget)

  ; Has the scan been aborted?
  if (sd.abort_scan ne 0) then return
```

If there is an abort scan event in the event queue, then the above statement will cause the event handler routine to be called. Here is the code for the event handler:

```
pro abort_scan, event
    ;  This routine gets called when the ABORT_SCAN button is pressed
    ; It sets the abort_scan flag in the scan descriptor, which the scan
    ; routines look at after each point and abort the scan
    @scan_common
    sd.abort_scan = 1
end
```

This event handler simply sets a flag which says that the scan should be aborted. The scan routine looks at this flag to decide whether the user wants to abort the scan, and stops the operation if he does.

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