Subject: Re: Keeping objects fixed in function graphics Posted by lecacheux.alain on Thu, 19 Dec 2013 14:25:44 GMT View Forum Message <> Reply to Message

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Le jeudi 19 décembre 2013 15:14:53 UTC+1, Helder a écrit :
> On Thursday, December 19, 2013 2:56:51 PM UTC+1, alx wrote:
>> Le jeudi 19 décembre 2013 14:10:03 UTC+1, Helder a écrit :
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>>> On Thursday, December 19, 2013 1:40:06 PM UTC+1, Helder wrote:
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>>>> Hi,
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>>> since I spent the last half an hour trying to figure this out, I thought I might as well share
this.
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>>>> The reason and idea behind this, was to draw in a window where I have an image some
sort of markers that stay where they are. For example a grid or an aiming target or crosshair.
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> One should be able to pen and zeem the image below it, but not those objects on ten
>>>> One should be able to pan and zoom the image below it, but not these objects on top.
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>>> Well, this is how I did it. Let me know if you know of a better/cleaner way, otherwise I'll stick
to this.
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>>>> What I did was basically turn off the event handlers for mouse movements and any other
sort. Here is the code:
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>>>> FUNCTION AvoidMovingObj::MouseDown, oWin, x, y, iButton, KeyMods, nClicks
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>>
>>>> RETURN, 1
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>>>> END
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>>>> FUNCTION AvoidMovingObj::MouseMotion, oWin, x, y, KeyMods
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>>
>>>> RETURN, ~ISA(oWin.GetSelect(), 'ELLIPSE')
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>>>> END
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>>>> FUNCTION AvoidMovingObj::MouseUp, oWin, x, y, iButton
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>>>> RETURN, ~ISA(oWin.GetSelect(), 'ELLIPSE')
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>>>> END
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>>>> FUNCTION AvoidMovingObj::MouseWheel, oWin, x, y, Delta, KeyMods
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>>
>>>> RETURN, ~ISA(oWin.GetSelect(), 'ELLIPSE')
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>>>> END
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>>>> PRO AvoidMovingObj___define
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>>
>>> void = {AvoidMovingObj, inherits GraphicsEventAdapter}
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>>>> END
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>>
>>>> PRO AvoidMovingObjTest
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>>
>>>> p = PLOT(/test)
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>>
>>> e = ellipse(0.5,0.5, '-r2', FILL_BACKGROUND=0, /norm)
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>
>>
>>> e.window.EVENT_HANDLER=Obj_New('AvoidMovingObj')
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>>>> END
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>>> There are two clear drawbacks in this way of working:
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>>> 1) if there are ellipses that one would like to move, than I should make sure that the correct
ellipse (or object) is not moved and the rest is moved. I think this is solvable, but I didn't spend
time on it yet
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>>> 2) this seems to be an intrinsic drawback of this method: when clicking on the "unmovable"
object, the mouse cursor will stay as it is until another object has been clicked. Not terrible, but no
elegant.
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>>>> I hope I'm not the only one in need for this and if you have suggestion on how to improve
this... very welcome!
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>>>> Cheers,
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>>>> Helder
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>>> Ok,
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>>> So the solution for problem 1) (see above) is to substitute the lines with:
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>>
>>> RETURN, ~ISA(oWin.GetSelect(), 'ELLIPSE')
>
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>>
>>> with this line:
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>>
>>> o = oWin.GetSelect()
>>
>
>>>
>
>>
>>> IF ISA(oWin.GetSelect(), 'ELLIPSE') && (o.NAME EQ self.Name) THEN RETURN, 0 $
>>
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>>>
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>>
                                        ELSE RETURN, 1
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>>
>>> and to add an Init method:
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>
>>
>>> FUNCTION AvoidMovingObj::Init, Name
>>
>
>>>
>
>>
>>> self.Name = Name
>>
>
>>>
>
>>
>>> RETURN, 1
>
>>
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>>>
>>
>>> END
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>>>
>
>>
>>> PRO AvoidMovingObj__define
>>
>
>>>
>
>>
>>> void = {AvoidMovingObj, inherits GraphicsEventAdapter, Name:"}
>
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>>
>>> END
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>>
>>> and then to set the event_handler property like this:
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>>
>>> e.window.EVENT_HANDLER=Obj_New('AvoidMovingObj', 'Obj1Name')
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>>> That solves that...
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>>> Cheers,
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>> If you put your "steady" objects as "annotation" objects (TEXT, ELLIPSE, POLYLINE, etc) bu using /RELATIVE keyword, I guess that you will get what you want.
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>
>> alx.
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>
> Nice, thanks.
>
 However, you can still select, pan, move and rotate the object by clicking on it. This is not very useful when overlaying a grid and the mouse is constantly going over the grid and if you click on it you might move/change it.
> But yes, coordinates are now normalize for this object and don't change when the underlying object is changing in size or position (pan).
>
>
>
> Cheers,
>
> Helder

Please note that by using WINDOW handler functions combined with HitTest function, you might get a finer control over what should be moved and what should be not. alx.