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Subject: Keeping objects fixed in function graphics

Posted by [Helder Marchetto](#) on Thu, 19 Dec 2013 12:40:06 GMT

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Hi,  
since I spent the last half an hour trying to figure this out, I thought I might as well share this.  
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.  
One should be able to pan and zoom the image below it, but not these objects on top.  
Well, this is how I did it. Let me know if you know of a better/cleaner way, otherwise I'll stick to this.  
What I did was basically turn off the event handlers for mouse movements and any other sort.  
Here is the code:

```
#####  
FUNCTION AvoidMovingObj::MouseDown, oWin, x, y, iButton, KeyMods, nClicks  
RETURN, 1  
END  
  
FUNCTION AvoidMovingObj::MouseMotion, oWin, x, y, KeyMods  
RETURN, ~ISA(oWin.GetSelect(), 'ELLIPSE')  
END  
  
FUNCTION AvoidMovingObj::MouseUp, oWin, x, y, iButton  
RETURN, ~ISA(oWin.GetSelect(), 'ELLIPSE')  
END  
  
FUNCTION AvoidMovingObj::MouseWheel, oWin, x, y, Delta, KeyMods  
RETURN, ~ISA(oWin.GetSelect(), 'ELLIPSE')  
END  
  
PRO AvoidMovingObj__define  
void = {AvoidMovingObj, inherits GraphicsEventAdapter}  
END  
  
PRO AvoidMovingObjTest  
p = PLOT(/test)  
e = ellipse(0.5,0.5, '-r2', FILL_BACKGROUND=0, /norm)  
e.window.EVENT_HANDLER=Obj_New('AvoidMovingObj')  
END  
#####
```

There are two clear drawbacks in this way of working:

- 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
- 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 not

elegant.

I hope I'm not the only one in need for this and if you have suggestion on how to improve this...  
very welcome!

Cheers,  
Helder

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