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Subject: Re: Keeping objects fixed in function graphics  
Posted by [Helder Marchetto](#) on Thu, 19 Dec 2013 13:10:03 GMT  
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On Thursday, December 19, 2013 1:40:06 PM UTC+1, Helder wrote:

> 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

```

Ok,

So the solution for problem 1) (see above) is to substitute the lines with:

```
RETURN, ~ISA(oWin.GetSelect(), 'ELLIPSE')
```

with this line:

```
o = oWin.GetSelect()
```

```
IF ISA(oWin.GetSelect(), 'ELLIPSE') && (o.NAME EQ self.Name) THEN RETURN, 0 $  
    ELSE RETURN, 1
```

and to add an Init method:

```
FUNCTION AvoidMovingObj::Init, Name
```

```
self.Name = Name
```

```
RETURN, 1
```

```
END
```

```
PRO AvoidMovingObj__define
```

```
void = {AvoidMovingObj, inherits GraphicsEventAdapter, Name:''}
```

```
END
```

and then to set the event\_handler property like this:

```
e.window.EVENT_HANDLER=Obj_New('AvoidMovingObj', 'Obj1Name')
```

That solves that...

Cheers,

h

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