

User Interface - Bug #3401

clarifications for windows related methods in Widget and GuiDriver classes

12/01/2017 02:42 PM - Ovidiu Maxiniuc

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:	Ovidiu Maxiniuc	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:		case_num:	
billable:	No	version:	
vendor_id:	GCD		
Description			

History

#1 - 12/01/2017 03:07 PM - Ovidiu Maxiniuc

Recently I used the window() method to pass the window id of a EditorGuiImpl in the GuiDriver for accessing some method that required a window to be selected. This resulted in following exception to be thrown:

```
java.lang.IllegalStateException: Can not change window to <N> within the same thread, if a window is already selected!  
    at com.goldencode.p2j.ui.client.gui.driver.AbstractGuiDriver.selectWindow(AbstractGuiDriver.java:2050)  
    at com.goldencode.p2j.ui.client.gui.driver.GuiDriver.withSelectedWindow(GuiDriver.java:773)  
    [...]
```

I was misled by the fact that the GuiDriver methods (selectWindow(), releaseWindow()) parameter is named and documented as "Window ID". The problem is that the GuiDriver requires a TopLevelWindow to be selected which can be a Window object or other implementation like DialogBoxWindow. Since the DialogBoxWindow has a parent Window, the window call for all its children will return that Window instead. Passing it to selectWindow() will cause the wrong object to be selected in driver, with a lot of problems.

The proper way to do it is to use the parentOrSelf(TopLevelWindow.class) to get the id to be selected in GuiDriver. Note that in AbstractWidget there also a method topLevelWindow() which returns the same result if available, but it cannot always be used because if the widget is not assigned to a parent, it will fail by throwing an exception.

Replacing the window with parentOrSelf(TopLevelWindow.class) fixed the issue. The problem is now to find other misuses of same method that have potential to break the UI by selecting the wrong top-level window resulting in draw-related operations to silently fail (maybe with a message in log) or to completely kill the client.

#2 - 12/01/2017 04:42 PM - Ovidiu Maxiniuc

Patch committed to 3394a as revision 11221.

#3 - 12/28/2017 11:11 AM - Greg Shah

- *% Done changed from 0 to 100*

- *Assignee set to Ovidiu Maxiniuc*

- *Status changed from New to Closed*

The changes are included in task branch 3394a which has been merged to trunk as revision 11214.