

Yet, One More Reason to Use AutoHotkey Free Software!

Writing AutoHotkey Code Fast with SmartGUI

Creator

"A Powertool for Fast Design and Code Writing for Pop-up Windows" by Jack Dunning While it's great to build pop-up windows with the AutoHotkey GUI command, writing all that code can be tedious. Use SmartGUI Creator 4.0 to quickly generate lines for your scripts.

This column talks about an easy-to-use AutoHotkey code generator which helps to build app windows. If you're familiar with the Gui, Add command, then this column will be no problem. If not then you will find the GUI (Graphical User Interface) is introduced in <u>A</u> <u>Beginner's Guide to AutoHotkey</u>, discussed in the <u>Digging Deeper into AutoHotkey</u> e-book, and covered in some depth in <u>AutoHotkey Applications</u>.

If you own a Windows computer and you're not familiar with AutoHotkey, you should be! See this <u>Introduction to AutoHotkey</u>!

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In almost all of the previous columns I have done things the hard way—line of code by line of code. This was to promote a deeper understanding of how AutoHotkey works. However, there are some powerful free tools which can save you a lot of time while helping you to build your apps. One of the most impressive is SmartGUI Creator 4.0 by Rajat. The final version (4.0) was released in 2006. The general opinion is that it doesn't need any more revisions since it is now time tested and just plain works.

When building AutoHotkey apps one of the most tedious (and often confusing) tasks is writing the <u>Gui, Add command</u> statements which place the controls in the pop-up window. The placement options are not particularly intuitive and often require a great deal of testing before the window will look right. There is a means to the madness and the GUI control formatting options are addressed in both the <u>Digging Deeper into AutoHotkey</u> e-book and <u>AutoHotkey</u> <u>Applications</u>, but if all you need is code which will place the contros where you want them and size them as you planned, then SmartGUI Creator is one of the best for doing just that. You

can quickly create a GUI window with this WYSIWYG app and generate the AutoHotkey code.

Note: SmartGUI Creator generates code which uses the absolute coordinate system for placing the controls. Therefore, the other GUI formatting options using relative placement are bypassed and unavailable. In most cases, you may not need or want to use the other options, but there are times when you may want those capabilities. In those latter situations, you could initially use SmartGUI Creator to initially create the GUI code, but once you edit the *Gui, Add* statements with other formatting options, you will no longer be able to use SmartGUI Creator for modifications.

There are a number of locations where SmartGUI Creator can be downloaded, but I wasn't sure which was the best. So once I had it downloaded I decided to provide it on the *ComputorEdge* AutoHotkey download site. The ZIP file (*SmartGUI.zip*) contains three files: *SmartGUI.exe* (the main program—no installation required), *Manual.htm* (a short tutorial), and *calc.ahk* (a sample AHK file). After downloading the ZIP, these files should be extracted to your folder of choice.

Loading SmartGUI Creator is as simple as double-clicking on the EXE filename (*SmartGUI.exe*). After loading SmartGUI the first time, the file *SmartGUI.ini* is created and appears in the same folder.

Using SmartGUI Creator

There is a short tutorial that comes with SmartGUI Creator (*Manual.htm*), but the program is remarkably intuitive. Initially, I made a point of not reading the manual and was quickly up and running. There are still a few things I need to figure out, but I intend to continue talking about SmartGUI Creator in this column until I've exhausted the topic.

When SmartGUI Creator is loaded, three windows open (see Figure 1). The main parent window includes the menu bar (File, Options, and Help) across the top, plus there is an icon for each one of the controls just below the menu bar. The Workspace (layout) window is a child of the main screen and moves independently anywhere on the screen—although it minimizes with the main window. (This is similar to some paint programs which have separate floating palette and tool windows.) The third window which also floats provides information such as coordinates and control names.

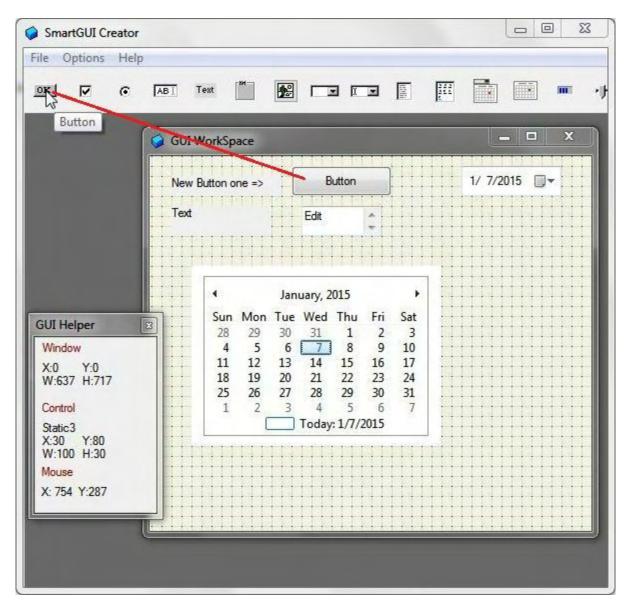


Figure 1. SmartGUI Creator uses three windows: the main parent window with a menu bar and the GUI control selection buttons across the top, the layout window where new controls are placed, and the GUI Helper window which provides information such as coordinates, control names and mouse locations.

Adding a control to the layout windows is easy. Click on the desired control icon, then move the mouse over the layout window. The control will appear as a tooltip attached to the cursor. As you move the cursor the control follows. Left-click once to place the control and the cursor jumps to the lower right-hand corner of the control for sizing. When the control is the right size, left-click again to release the grip. The control is placed.

Once the control is in place there are several options available in the right-click context menu (see Figure 2). Most of the items, such as Move Control, are self-explanatory. (Move Control restarts the placement/sizing feature explained above.) The option Change Label has more scripting implications than just adding different text to a control. It also conforms to AutoHotkey's use of the term Label for the name of a subroutine. (More on that in later columns.)

SmartGUI Creator File Options Help <u>oк</u>	BI Text M E E	·•
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Figure 2. Right-click on a control in the layout window to open a context menu. This is how the controls can be relocated or the text label may be changed.

At this point the goal is to place all the necessary controls where you want them. It's easy to make adjustments until the GUI layout looks the way you want. To see how the window will work in action, click on File => Test Script (see Figure 3).

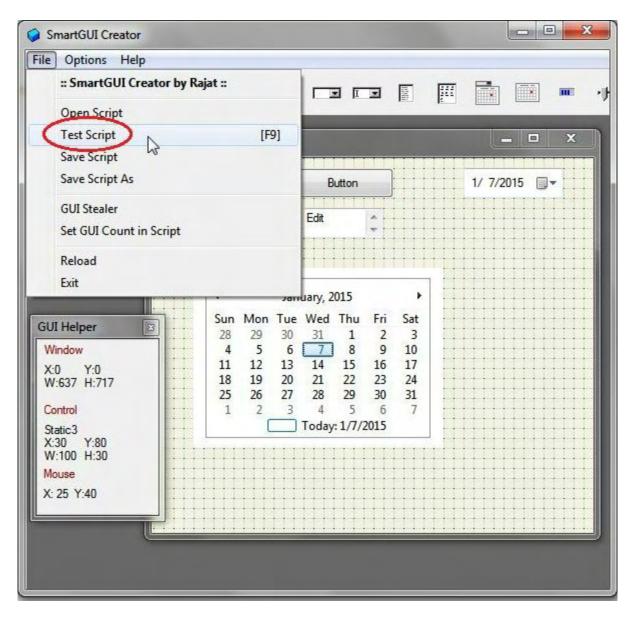


Figure 3. Use the Test Script option to open a window generated by the SmartGUI Creator code.

Notice the other options which give us opportunities for further exploration next time. The test GUI opens (see Figure 4). Once the code is generated and added to a script (or becomes the beginning of a new script), this is what the window will look like.

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Figure 4. A test GUI window of the code to be generated by the layout window.

Once the layout is ready, select *Save Script As* from the same File menu to create the AutoHotkey code. There are three options: *Save New GUI to Clipboard, Save New GUI to File*, and *Save Modified GUI Info to File* (see Figure 5). After selection and *Yes*, the Save dialogue window will open to allow the selection of a filename.

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0	Save New GUI to Clipboard
0	Save New GUI to File
•	Save Modified GUI Info to File
	Yes No Cancel

Figure 5. The GUI code can be saved to the Clipboard, a new file, or a modified file.

If all you want to do is paste the code in an existing script, then the save to Clipboard option may be best. Otherwise, save the code to a file. Once the AHK script file is created, it can be opened by right-clicking on the filename in Windows Explorer (File Explorer in Windows 8.1)

and selecting Edit Script. The code will be displayed in the default editor ready for adjustments (see Figure 6). (The main AutoHotkey programs needs to be <u>installed</u>.)

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<pre>Gui, Add, Text, x22 y20 w110 h20 , New Button one => Gui, Add, Edit, x152 y50 w80 h30 , Edit Gui, Add, Button, x142 y10 w100 h30 , Button Gui, Add, DateTime, x312 y10 w100 h30 , Gui, Add, MonthCal, x42 y110 w250 h180 , ; Generated using SmartGUI Creator 4.0 Gui, Show, x925 y333 h379 w446,</pre>	

Figure 6. When Save Script As is used the code is generated and saved in an AHK file.

In this quick introduction it's easy to see how useful SmartGUI Creator can be. Rather than tediously working with the GUI positioning option codes or constantly adjusting and testing your script, in a matter of minutes many GUI controls can be added to a window. I intend to continue exploring the capabilities and limitations of SmartGUI Creator next week.

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