

Being Productive

Venkat Subramaniam

venkats@agiledeveloper.com

Abstract

As software developers we spend most of our day on the computer. We must constantly find ways to be productive so we can be effective and, at the same time, enjoy reduced stress. In this article we will look at some ways we can gain productivity while using our computers.

Distance that Mouse?

As I travel around the world—training and mentoring—I come across hundreds of programmers each year. I have the privilege to observe and learn from several of them. I take notes when I find someone doing something that is new and productive. I also learn—sometimes—what not to do.

At times I find programmers depend on the mouse way too much. What is worst than heavily relying on the mouse is struggling with the trackpad on the laptops. Realistically speaking, it's pretty hard to disown the mouse; however, we should try to come close. Put your mouse further away than your arms distance (for at least an hour each day) so it takes a bit more effort to reach for it. Each time you reach for it, ask if you can do that task without the mouse, may be using a keyboard shortcut.

Get a Mouse

If you rely heavily on the trackpad on your laptop, take a minute to observe if you are more productive using a real mouse instead. There is no real reason to struggle to click on a menu item using the trackpad (unless you are cramped in an airplane seat—even then, I am tempted at times to use the real mouse). You may get better at it with practice; however, it is hard to be as productive with a trackpad as with a real mouse. So, don't be lazy—it takes less than ten seconds to hook up a mouse to your laptop (or if you have a wireless mouse—like the Bluetooth Mighty Mouse I use on my Mac—then you don't even have to hook up anything).

Learn Shortcuts

You may be familiar with a number of things I mention in this article. However, even if you come across one or two tips that you are new to you and if that improves your productivity, I think the time I took to write this and the time you took to read it has served well.

As you work on your computer, and as you use the most common applications (like your IDE, mail app, browser, etc.) ask yourself if there are keyboard shortcuts you can use to be more productive. When both your hands are on the keyboard, if you want to perform an operation like search, look at what's involved in using a mouse. You need to seek the mouse, your eyes switch focus to the menus, you navigate down the menu to select the appropriate menu item, and then you probably set focus on the appropriate text box before you can start entering the search text. You may then navigate to the search button

and click on it. Now, how about hitting Ctrl+F on Windows (⌘ F on Mac) and entering your search text? What if you need to continue the search? Does your application allow you to press Alt + F3 or Ctrl + F again? On Macs, ⌘ G does the trick. Also, on Mac, if you have a text selected, pressing ⌘ E will use that text as search text.

On the Mac, when you select a menu (and you can do that by pressing ⌘ F2), you can start typing the name of the menu item and that menu item is selected. Hit enter and off you go. This works for any menu item, even the dynamic menu items (like recently used files). I like this better because I don't have to remember any shortcut keys.

I often find myself having to rename files in Windows Explorer. You can gently and slowly click twice on the file name and then change it. Or if you want to get your work done at the speed of your thought, in Windows Explorer, you can press F2 and start typing the new name of the file.

Instead of renaming a file, if you like to launch that in an application (or as an application), you simply hit Enter on Windows to launch it. On the Mac, unfortunately, hitting enter in Finder lets you edit the file name instead of launching it. There is, however, a work around—you can press ⌘ DOWNARROW.

When working with applications you may realize that some operations are available only through popup menus. That would mean that you have to seek that mouse again, move to the location of interest (your mouse may not be where the cursor is), and right click on it. Nope, that's way too much effort. On Windows, select the word or file of interest (using the keyboard of course by using combination of ctrl, shift, and arrow keys you can navigate to text of interest or search for it), and press Shift+F10 and you will see the menu popup. You can then use the keyboard arrow keys to navigate quickly down the menu. What about on the Mac? You can hit fn + Ctrl + i to bring up the popup menu¹.

Using Applications

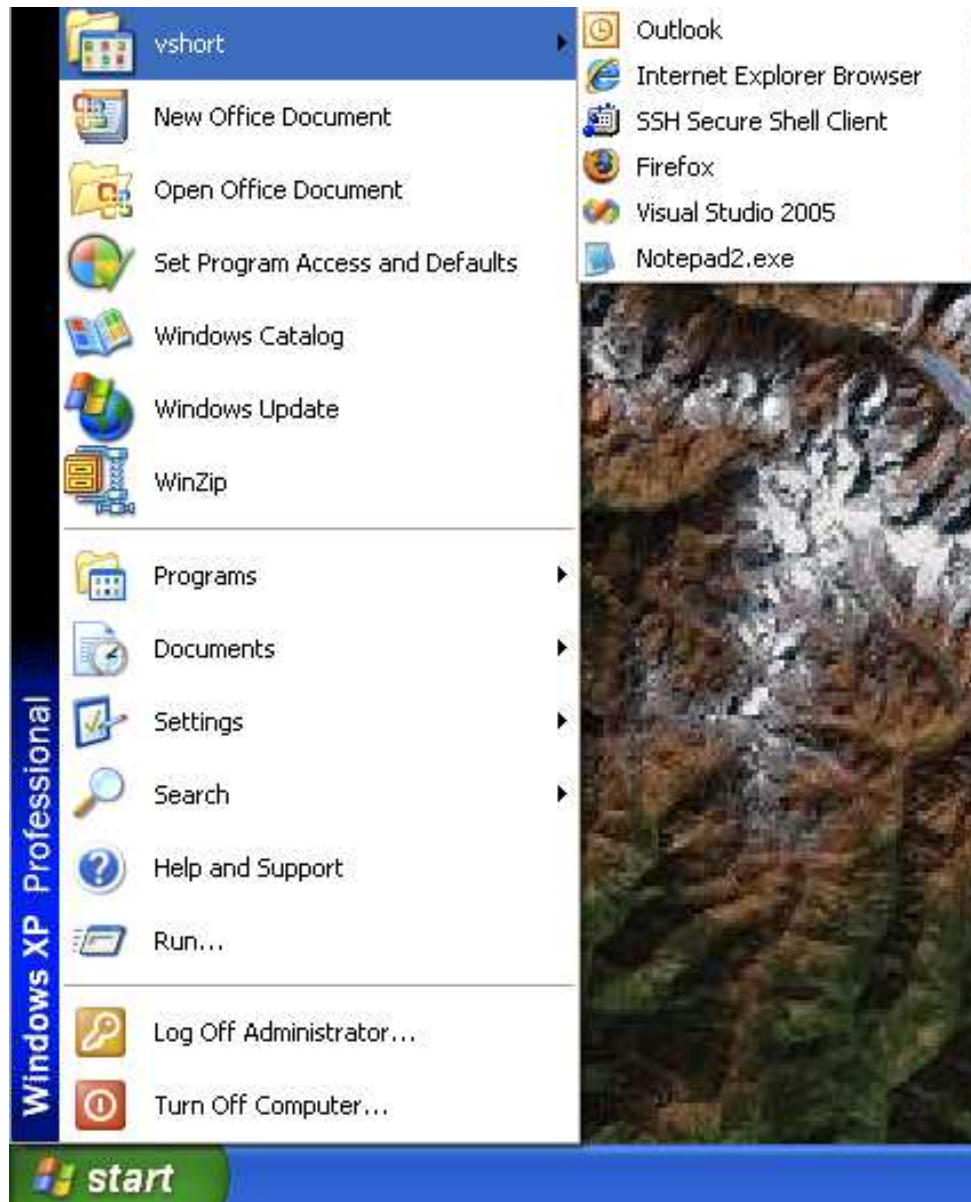
You may have seen people reach for the mouse, select the File menu, and select the Save menu item to save the file they're working with. No reason to do that. On Windows, most applications will respond to Ctrl + S to save. (On Mac, it is ⌘ S). Most IDEs will automatically save (and compile if needed) your code when you run the tests. So, don't waste time saving files. Similarly, use Ctrl + P (⌘ P) for printing. Learn shortcuts that allow you to format the code for appearance. If you're in a text editor, you can move right from word to word using Ctrl + RIGHTARROW (⇧ RIGHTARROW). In addition, you can select the words by doing the above operation while holding the SHIFT key.

Frequent Use

Launching an application is a very common task. For instance, you may be launching your browser or the favorite IDE several times a day. For the most common applications you use, how do you launch it? If you are using mouse to find it on your desktop, or

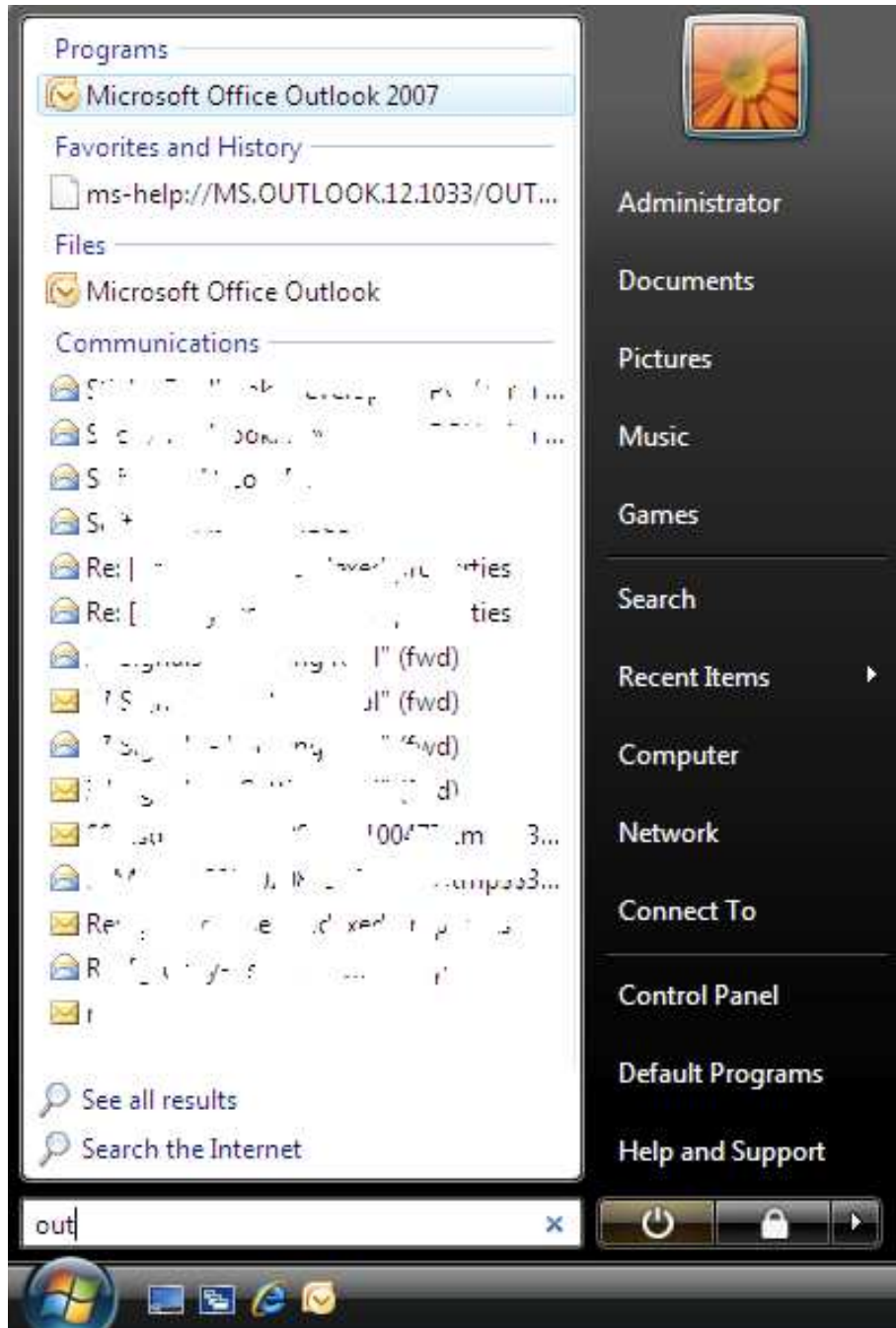
trying to find it in the program menu or in the explorer (or Finder), there are much better alternatives.

I learned this productivity trick from Neal Ford. On Windows XP, the items on the start menu can be access using the keyboard. When you press the Window key, the Start menu is activated. Now, if you press P, the Program menu in Start is active. You can use this trick to launch application very quickly. Here's how you do it. Create a shortcut in the Start menu (for example, I've created a shortcut named vshort). To create this shortcut, right click on the Start menu (oh wait, that would be Windows key, Escape, Shift+F10 for those of you who've followed along until now!), and select Explore. This opens the Start Menu in Explorer. Create a folder in it and name the new folder whatever you like (may be your name or initials). Double click or hit Enter on this newly created folder to open it. Create shortcuts for your most commonly used application here. Easiest way to do this is to hold the Ctrl while dragging the application from either the Program menu, the desktop, or from another instance of explorer. Once you create shortcuts for your desired programs, you are ready to launch them with ease. Below is a sample of the vshort I've created on my machine.



If I want to launch Visual Studio 2005, I would press Windows, v, v. To start Firefox, I would press Windows, v, f. The v after Windows stands for the first letter in vshort. On your machine, instead of pressing v, press whatever the first letter of the folder name you created.

On Windows Vista, you don't need the above steps. Press the Windows key and start typing a few characters for the program you like to launch or the file you like to open. For example, on Vista, to open outlook, I type Window, out and hit return as shown below:



On the Mac, use QuickSilver² to easily start applications and open files. Think of QuickSilver as a GUI based command line. To say QuickSilver is a very powerful software is quite an understatement. You can not only launch applications, you can also perform several actions (like asking it to email a file to a friend). For some productivity tips on using QuickSilver and other Mac related tips, take a look at the PragMactic OS-Xer site³. Also, on the Mac, Spotlight can help you locate isolated/arbitrary things pretty quickly.

There are applications that try to provide functionality similar to QuickSilver on the Windows⁴. Give them a try.

Quickly Lock your Computer

You may want to lock your computer quickly if you need to step away from your computer even for a few minutes. Navigating using a mouse is not an option for me when I have to step away on an impulse.

On Windows, you can press Windows + L to quickly lock the computer. On the Mac, there are a few ways to achieve this, including a QuickSilver trick⁵.

Use Multiple Desktops

There are several applications we use at the same time. Constantly switching between them can get tiring. There is only so much real estate on the desktop. Furthermore, you may be editing code in an IDE (or code editor). You may have to run tests on your code. You may want to take a look at the command window of the server process, take a look at results from yet another application running on the side. In the mean time, you want to check that email that just popped up and also respond to your buddy who's buzzing you on the IM with a question about regular expressions. Oh, did I forget that remote machine you are logged into and also a couple of virtual machines you are running. Alt tabbing between all these applications is one sure way to get tired soon.

Find an application that allows you to run multiple virtual desktops on your machine. On the Mac, I have been using "Desktop Manager"⁶ which allows me to switch to a desktop with just one key stroke (I've configured Option + 1, Option + 2, etc. to switch to different desktops). If you use Windows predominantly, I urge you to find a similar application⁷.

Create Macros

If you find you are typing something over and over, find a way to create a macro for it. For example, when I program in C#, I use a number of macros in Visual Studio to type routine things I need to type.

I seem to purchase quite a few things on the web (books that I keep buying every week, the travel sites I go to for purchasing airline tickets, or rent a car), and constantly have to type my credit card number(s) and/or address. I am way too lazy to be typing these each time. So, I have created a system wide macro that will fill in my address or credit card number if I type in some "keywords." On windows, I have used a product called AutoHotkey⁸ in the past. On the Mac, I use TextExpander⁹. Check out these tools or find similar tools to help you with macro expansions.

Automate

Do you have a compulsive disorder that makes you check the stock price every few minutes? Or are you one of those authors who check the ratings of books every few minutes. It is not only a waste of time, but it is also a great distraction. What about daily

backups that you may have to run? Do you have to remember to do this each day? No need to do any of that.

You can write scripts very easily to do these repetitive tasks. For example, on my machine, at 3AM a Crontab wakes up (on Mac you can use Crontabs or Automator. If you are on Windows, you can use Task Scheduler) and performs the necessary backups right before I get to work. Also, I have ruby scripts that get executed that poll sites for information I like to get update on and sends the information I care about in a nice email digest for me to look at when I wake up. Thanks to these scripts, I don't have to waste my time pulling information that I like to see each morning. Find ways to automate repetitive tasks so you can focus on more important and interesting things while the scripts do those mundane tasks for you and report status or results back to you when they're done.

Conclusion

We have seen a few ways to improve productivity. If we debug ourselves while we work on the computer, we can discover a number of ways to be productive. Pay attention to what you are doing repetitively and find ways to automate those or find shortcuts for those. Figure out ways to be more productive and reduce stress.

References

1. <http://memeagora.blogspot.com/2007/04/elusive-right-click.html>
2. <http://quicksilver.blacktree.com>
3. <http://pragmatic-osxer.blogspot.com>
4. <http://lifehacker.com/software/quicksilver/windows-equivalents-to-quicksilver-fall-short-249426.php>
5. <http://pragmatic-osxer.blogspot.com/2007/07/quickly-locking-your-computer-using.html>
6. <http://desktopmanager.berlios.de>
7. http://en.wikipedia.org/wiki/Virtual_desktop
8. <http://www.autohotkey.com>
9. <http://www.macupdate.com/info.php/id/19147>