# Notepad++

The COMPSCI 101 Text Editor for Windows

The text editor that we will be using in the Computer Science labs for creating our Java programs is called Notepad++ and is freely available for the Windows operating system. If you plan to do work outside of the labs, perhaps at home, you may like



http://notepad-plus.sourceforge.net

to use the same software that we have available in the labs. This document describes how to install and configure Notepad++ using the same settings available in the labs.

### What is a text editor?

A text editor is a program that enables you to write plain text files (a *text file* is a file that consists of lines of text comprised mainly of the characters that you can type on a keyboard). A common extension for text files is *.txt*, although the Java source files that we are creating in this course are also examples of text files and use the extension *.java*. There are many text editors that are freely available for you to use. For example, Windows provides a very simple text editor called Notepad (that you can find under the *Accessories* menu). However, this is not a very good editor for writing source code because it doesn't support useful features such as syntax-colouring, auto-indentation and brace highlighting. Notepad++ is a freely available text editor for Windows, and is the editor we will be using in the labs to write our Java source code.

## Install Java (JDK)

Before installing and configuring Notepad++ make sure that you have installed the Java Development Kit (JDK). You can download and install the most recent version from:

http://java.sun.com/javase/downloads/index.jsp

Make sure you are able to compile and run programs using the Command Prompt **before** you install and configure Notepad++.



### Installing Notepad++

Go to the Resources page of the CompSci 101 website:

http://www.cs.auckland.ac.nz/courses/compsci101s1c/resources/

and download the zip file, Notepad++.zip, to your desktop.



Unzip the file and you should see the following folder on your desktop:



Right-click the installer.exe file and and select "run as administrator". Notepad++ will now be installed on your computer.



To check that you have installed Notepad++ correctly, run the application (a Notepa... link should appear on your desktop) and you should see an editor window like the following appear:

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	new 1													_
1	1													
										1				
0 char	s 0b	ytes 1	Ln : 1	Col : 1	Sel : 0 (0 by	tes) in 0 rar	nges		Dos	s\Windows	ANSI		INS	

## Configuring Notepad++

In the labs, certain commands and short-cut keys have been defined to make it easier for you to compile and run your Java applications. This section will describe how to configure Notepad++ so that the same commands and short-cut keys are available to you.

#### **Display Font**

If you would like to set the display font to be identical to the settings used in the labs, go to:

Settings > Style Configurator...

Set Font to Courier, and Font size to 12 for Language: Global Styles and Style: Global override

Style Configurator		×
Select theme : Default (styles.xml)		
Language : Style :	Global Styles : Global override	
Global Styles       Global override         ActionScript       Default Style         ADA       Indent guideline style         asp       Brace highlight style         Bash       Bad brace colour         Current line backgrus       Selected text colou         C++       Caret colour         Caml       Fold margin         CMakeFile       White space symbo         CSS       Smart HighLighting         DIFF       Mark Style 2         GUI4CLI       Mark Style 3	Colour Style       Font Style         Foreground colour       Font name : Courier         Background colour       Bold         Italic       Font size : 12         Underline       Underline         Enable global foreground colour       Enable global font         Enable global background colour       Enable global font size         Enable global background colour       Enable global font size         Enable global bold font style       Enable global italic font style         Enable global underline font style       Enable global underline font style	
	Save & Close Cancel Intransparency	

#### NppExec Plugin

Open the *Plugins* menu. You will need an option called **NppExec** in this menu and it may not be present by default (as in the example screenshot below):



If the NppExec plugin is *not* present, you can enable it by going to *Plugin Manager* and selecting *Show Plugin Manager*:

Plugins Window	?	
Compare	⊁	🔽 💽 🔳 🕨 🔤
MIME Tools	⊁	
NppExport	⊁	
Plugin Manager	►	Show Plugin Manager
Spell-Checker	►	About

From here, find the NppExec plugin, and select it – then click Install:

able Updates Installed							
lugin	Category	Available Version	Stability				
MultiClipboard	Others	2.0	Good				
NativeLang	Others	1.2	Good				
NppAutoIndent	Others	1.2	Good				
NppCrypt	Others	1.0.0.4	Good				
NppExec	Others	0.3.3.1	Good				
NppNetNote	Others	0.1	Good				
Oberon-2 Lexer	Others	0.3	Good				
Perforce actions	Others	2.0.0.1	Good				
Plugin Marker Margin	Others	1.0	Good				
Plugin update	Others	0.3	Good				
With this NppExec plugin you can execute your commands or saved scripts without leaving Notepad++. It makes you triple your productivity! Author: Dovgan Vitaliy Source: http://downloads.sourceforge.net/project/npp-plugins/ Latest update: fx1: now GRLF (Enter key emulation) is sent to the pipe separately							
				Install			

You will be prompted to restart Notepad++. Click Yes and wait for Notepad++ to restart.

You should now see NppExec appearing on the Plugins menu:

Configure the NppExec Plugin:

Go to Plugins > NppExec and apply the followings

- 1. Disable "Console Command History"
- 2. Enable "Save all files on execute"
- 3. Enable "Follow \$(CURRENT\_DIRECTORY)"

as shown in the screenshot below:



#### Short-cut keys

Define functions and corresponding short-cut keys for compiling and running Java programs:

- 1. Go to Plugins > NppExec > Execute...
- 2. Choose "Cancel" if a Save File... dialog box appears
- 3. Enter the following command:

cd "\$(CURRENT\_DIRECTORY)" javac \$(FILE\_NAME)

as shown below:

E	Execute	×
	Command(s):	
	cd "\$(CURRENT_DIRECTORY)" javac \$(FILE_NAME)	<u> </u>
		V
	<temporary script=""></temporary>	
	ОК	Save Cancel

Then choose Save... and save this using the name "Compile":

Execute	x
Command(s):	
cd "\$(CURRENT_DIRECTORY)" javac \$(FILE_NAME)	<u></u>
Script name:	
Save Delete Cancel	Save Cancel

4. Save two more commands:

One called "Run":

cd \$(CURREN1	_DIRECTORY)
java \$(NAME_	PART)

E	xecute	×
1	Command(s):	
	cd "\$(CURRENT_DIRECTORY)" java \$(NAME_PART)	<b>A</b>
		J
	Run T	
	OK Save Cance	

and another called "Compile and Run"

cd \$(CURRENT\_DIRECTORY) javac \$(FILE\_NAME) java \$(NAME\_PART)

E	Execute	x
	Command(s):	
	cd "\$(CURRENT_DIRECTORY)" javac \$(FILE_NAME) java \$(NAME_PART)	1
	<u>۲</u>	7
	Compile and Run OK Save Cancel	

5. Define the scripts for the short-cut keys:

Go to NppExec Advance Options

Run TextFX	Plugins Window	?	X	
<u>8</u>   ≪ ⊂ <del>,</del>	Compare Light Explorer MIME Tools	+ + +	Image:	
	NppExec	•	Execute	F6
	NppExport	►	Direct Execute Previous	Ctrl+F6
	NppNetNote	►	<ul> <li>Show Console Dialog</li> </ul>	
	Plugin Manager	•	Toggle Console Dialog	Ctrl+~
	Spell-Checker	<u> </u>	Console Commands History	
			Console Output {OEM/OEM}	
			No internal messages	
			<ul> <li>Save all files on execute</li> </ul>	
			<ul> <li>Follow \$(CURRENT_DIRECTORY)</li> </ul>	
			Disable command aliases	
			Console Output Filters	Shift+F6
			Advanced Options	
Dos	Windows ANSI	_	Change Console Font	
1003			Help/Manual	
			Help/About	

and enable "Place to the Macros submenu".



Then select "Compile" from under the "Associated script:" menu, and click the "Add/Modify" button:

NppExec Advanced Options							
Menu items *	Advanced options Execute this script when Notepad++	•					
Move up Move down	- [Options] HotKey ToolbarBtn - [Console]	F6  Console					
Assign shortcut keys using Settings: Shortcut Mapper -> Plugin commands	Visible (on start) ShowHelp (on start) SaveCmdHistory CommentDelimiter	No  Ves V/					
Item name: Compile Associated script: Compile	TextColorNormal (RR GG BB) TextColorError (RR GG BB) TextColorMessage (RR GG BB)	00 00 00 A0 10 10 20 80 20					
Add/Modify Delete	BackgroundColor (RR GG BB)	0					

You should see the script added in the "Menu items" box as shown above.

Repeat this process for the other two scripts, be careful to type the names "Run" and "Compile and Run" in the "Item name:" box before hitting the Add/Modify button.

The screenshot below shows what this should look like when you have added all three scripts:

NppExec Advanced Options						
Menu items *	Advanced options					
Place to the Macros submenu	Execute this script when Notepad+	+ starts:				
Compile :: Compile		•				
Run :: Run Compile and Run :: Compile and Run	Execute this script when Notepad+	+exits:				
		-				
	[Options]					
	HotKey	F6 T				
	ToolbarBtn	Console				
	Toolbarburi					
Move up Move down	[Console]					
Move up Move down	Visible (on start)	No 💌				
<ul> <li>Assign shortcut keys using Settings: Shortcut Mapper -&gt; Plugin commands</li> </ul>	ShowHelp (on start)	No 💌				
	SaveCmdHistory	Yes 💌				
Menu item	CommentDelimiter					
Item name:		00 00 00				
Compile and Run	TextColorNormal (RR GG BB)					
Associated script:	TextColorError (RR GG BB)	A0 10 10				
Compile and Run	TextColorMessage (RR GG BB)	20 80 20				
Add/Modify Delete	BackgroundColor (RR GG BB)	0				
ОК	Cancel					

Select OK – you will be shown a dialog box indicating the Notepad++ needs to restart.



Select OK, and close Notepad++, then open it again.

6. Finally, set up the short-cut key mappings:

Go to Setting > Shortcut mapper:



and select the "Plugin commands" tab. Scroll down to find the scripts you defined:

	n menu Macros Run commands Plugin commands Sc	
	Name	Shortcut
	Change Console Font	
	Help/Manual	
_	Help/About	
39	1	
_	Compile	
	Run	
	Compile and Run	
	Export to RTF	
_	Export to HTML	
	Copy RTF to clipboard	
	Copy HTML to clipboard	
	Copy all formats to clipboard	
	Show Dialog	
_	ITEXTEX NULL FUNCTION	
	Convert quotes to "	
	Convert quotes to '	
	Swap quotes (" <-> ')	
53 54	Drop quotes " & '	
	Escape " to \"	
	Escape to \ Escape ' to \'	
	Escape to \"	
57	Escape to (	

Double-click the "Compile" script name to bring up the "Shortcut" box. In this box, you can enter the desired short cut for the "Compile" script. Enter CTRL+1 as shown below:

Shortcut	×
Name : Compile	
CTRL + SHIFT + 1	◄
OK Cancel	]

Repeat this for the other two scripts so that you have defined:

Compile:	Ctrl + 1
Run:	Ctrl + 2
Compile and Run:	Ctrl + 3

_	Name	Shortcut	1
36	Change Console Font		
	Help/Manual		-
	Help/About		
39			
40	Compile	Ctrl+1	
41	Run	Ctrl+2	
42	Compile and Run	Ctrl+3	
43	Export to RTF		
44	Export to HTML		
45	Copy RTF to clipboard		
46	Copy HTML to clipboard		
47	Copy all formats to clipboard		
48	Show Dialog		
49	I: TEXTFX NULL FUNCTION		
50	Convert quotes to "		
51	Convert quotes to '		
52	Swap quotes (" <-> ')		
	Drop quotes " & '		
54	-		
55	Escape " to \"		
56	Escape ' to \'		
57	Escape ' to \"		

and then click the "Close" button

#### **Output Font**

To set the font for the output window, go to Plugins > NppExec > Change Console Font, and set to Courier font, and Font size to 12

## Testing the configuration of Notepad++

To test that the Notepad++ has been configured correctly, enter the following source code into the editor:

```
public class Test {
    public static void main(String[] args) {
        System.out.println("Hello world!");
    }
}
```

and save the file in some location on your disk:

<u>File E</u> dit <u>S</u> e	paul\Desktop\Test.java - Notepa arch View Encoding Language S   🛍 🔁 🍙 🛖 🔐 🎸 🖿 💼 성	e <u>t</u> tings Macro				_ 🗆 🗙 X
Test.java	public class Test {					
2 (=) 3 4 - 5 ()	public static void m System.out.print }					
6 -						
Jav 104 chars	114 bytes 6 lines	Ln:6 Col:1	Sel : 0 (0 bytes) in 0 ranges	Dos\Windows	ANSI	INS

You should now be able to use the short-cut keys (or you can select them from the "Macro" menu) to compile and run your program:

anguage Settings	Macro Ru	n TextFX	Plugins	Window	?	
) <b>() ()</b>	Stop Re Playbad Save Cu	cording			ihift+P	
void main(S t.println("H	]	iling and save		Alt+Sł	nift+S	
	Compile			Ctrl+1	l	
	Run	and Run		Ctrl+2 Ctrl+3		

You should see the console pane appear with output from the compiler:



You can then run the program:



and you should see the output appear in the console window:

Console NPP EXEC: "Run" CD: C:\Users\paul\Desktop Current directory: C:\Users\paul\Desktop java Test Process started >>> Hello world! <<< Process finished.