

Java Application: PlainText

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Description

PlainText is a Java 1.4 graphical (GUI) application to convert Unicode characters to plain text characters, for example, to convert left and right quotation marks into plain quotes for web pages. Since everyone has a different idea about what “plain text” means, the conversion is controlled by a configuration file that can be easily edited.

The program presents you with a single large text area and a few buttons or options above. You may edit the text area in a normal manner, including Control-C and Control-V keys for selective copy and paste. The “Copy” and “Paste” buttons above the text area affect the entire text: the “Copy” button copies all text to the system clipboard ignoring any current selection, and the “Paste” button replaces the entire text area with the contents of the clipboard. No conversion takes place until you click the “Convert” button. The typical sequence of actions is to copy text from a Unicode-aware application such as Microsoft Word, switch to this Java application, click the “Paste” and “Convert” buttons, then copy the converted text to another application that expects a more limited character set.

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Installation

You must have the Java run-time environment (JRE) installed on your computer. PlainText was developed with Java 1.4 and should run on later versions. It may also run on earlier versions, but this has not been tested. For Macintosh computers, the version of Java is determined by your

version of MacOS. For Windows, Linux, and Solaris, you can download the JRE from Sun Microsystems:

Sun Java

JRE for end users: <http://www.java.com/getjava/>
SDK for programmers: <http://developers.sun.com/downloads/>
IDE for programmers: <http://www.netbeans.org/>

Once Java is installed, you need to put the program files for PlainText into a folder (directory) on your hard drive. The name of the folder and the location are your choice, except it is easier if the name does not include spaces. Assume that files will go into a C:\JAVA folder. Then create the folder and unpack the Java *.class files into this folder (if you received the program as a ZIP file). The files look something like this:

GnuPublicLicense3.txt (35 KB, legal notice)
PlainText2.class (16 KB, executable program)
PlainText2.doc (32 KB, this documentation in Microsoft Word format)
PlainText2.gif (16 KB, sample program image)
PlainText2.ico (6 KB, icon for Windows)
PlainText2.jar (10 KB, archive file with same class files inside)
PlainText2.java (49 KB, source code)
PlainText2.manifest (1 KB, main class manifest for archive file)
PlainText2.pdf (71 KB, this documentation in Adobe Acrobat format)
PlainText2.txt (4 KB, configuration file in plain text format)
PlainText2User.class (1 KB, helper class for main program)
RunJavaPrograms.pdf (88 KB, more notes about running Java)

To run the program on Windows, start a DOS command prompt, which is Start button, Programs, Accessories, Command Prompt on Windows 2000/XP. Change to the folder with the program files and run the program with a “java” command:

```
c:  
cd \java  
java PlainText2
```

The program name “PlainText2” must appear exactly as shown; uppercase and lowercase letters are different in Java names. Some systems (Macintosh) will run a main “class” file by clicking on the class file name while viewing a directory in the file browser (Mac Finder). Many systems will run a “jar” file by clicking (or double clicking) on the jar file name (Windows Explorer). The command line is the only guaranteed way of running a Java program. Should you find this program to be popular, you can create a Start menu item or desktop shortcut on Windows 2000/XP with a target of “java.exe PlainText2” starting in the “c:\java” folder.

One complication may arise when trying to run this program. Java looks for an environment variable called CLASSPATH. If it finds this variable, then that is a list of folders where it looks for *.class files. It won't look anywhere else, not even in the current directory, unless the path contains "." as one of the choices. The symptom is an error message that says:

```
Exception in thread "main" java.lang.NoClassDefFoundError: PlainText2
```

To find out if your system has a CLASSPATH variable defined, type the following command in a DOS window:

```
set CLASSPATH
```

To temporarily change the CLASSPATH variable to the current directory, use the following command line:

```
java -cp . PlainText2
```

To permanently change the CLASSPATH, you must find where it is being set. This may be in an old AUTOEXEC.* file in the root directory of your system disk (usually the C:\ folder), or it may be in Control Panel, System, Advanced, Environment Variables on Windows 2000/XP.

Removal or Uninstall

To remove this program from your computer, delete the installation files listed above. If the folder that contained the files is now empty, you may also delete the folder ... if you created the folder, of course, not the system. If you created desktop shortcuts or Start menu items, then delete those too. There are no hidden configuration or preference files, and no information is stored in the Windows system registry. You don't need an "uninstall" program.

Graphical Versus Console Application

The Java command line may contain options for the position and size of the application window, and for the size of the display font. See the "-?" option for a help summary:

```
java PlainText2 -?
```

An option such as -u14 or -u16 is recommended because the default Java font is too small.

Restrictions and Limitations

A configuration file called "PlainText2.txt" is expected to be in the current working directory and contains the character conversion table. You should edit this file so that it has only the changes

that you want. Please read comments in the file for further instructions. Characters are processed in their 16-bit or UTF-16 form. To translate Unicode characters above U+FFFF, you must convert high and low surrogate pairs. See also the “Character Map” application.

file: PlainText2.doc 2010-02-13