

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, a configuration file called “PlainText3.txt” is expected to be in the current working directory and contains the character conversion table. Edit this file so that it has only the changes you want. Please read comments in the file for further instructions. See also any “Character Map” application.

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.

Characters above U+FFFF are converted in extended Unicode form (UTF-32), if the Java run-time co-operates (Java 5.0 or 7 or later, not Java 6), while character counts are reported to the user in their UTF-16 form, which is double for each extended Unicode character.

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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. You can download the JRE from Oracle (formerly Sun Microsystems):

JRE for end users: <http://www.java.com/getjava/>

SDK for programmers: <http://www.oracle.com/technetwork/java/>

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:

- ApacheLicense20.txt (12 KB, legal notice)
- GnuPublicLicense3.txt (35 KB, legal notice)
- PlainText3.class (24 KB, executable program)
- PlainText3.doc (32 KB, this documentation in Microsoft Word format)
- PlainText3.gif (20 KB, sample program image)
- PlainText3.ico (87 KB, icon for Windows)
- PlainText3.jar (15 KB, archive file with same class files inside)
- PlainText3.java (88 KB, source code)
- PlainText3.manifest (1 KB, main class manifest for archive file)
- PlainText3.pdf (70 KB, this documentation in Adobe Acrobat format)
- PlainText3.txt (7 KB, configuration file in plain text format)
- PlainText3Data.class (1 KB, helper class for main program)
- PlainText3User.class (1 KB)
- PlainTextParse1.java (5 KB, extra program to parse Unicode character data)
- RunJavaPrograms.pdf (60 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 XP/Vista/7. Change to the folder with the program files and run the program with a “java” command:

```
c:
cd \java
java PlainText3
```

The program name “PlainText3” 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 XP/Vista/7 with a target of “java.exe PlainText3” 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: PlainText3
```

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 . PlainText3
```

To permanently change the CLASSPATH, you must find where it is being set. This is in Control Panel, System, Advanced, Environment Variables on Windows XP/Vista/7.

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 the size of the display font. See the “-?” option for a help summary:

```
java PlainText3 -?
```

The command line has more options than are visible in the graphical interface. An option such as -u14 or -u16 is recommended because the default Java font is too small.

Restrictions and Limitations

There are many ways of converting text from one format to another. This program converts the full range of Unicode characters into alternate forms more suitable for use in e-mail, on web pages, or in program source code.

file: PlainText3.doc 2021-10-25