Java Application: ShowFileSize

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Description

ShowFileSize is a Java 1.4 console application to print the size of each file named on the command line in bytes, kilobytes, megabytes, gigabytes, or terabytes. By default, sizes are in kilobytes with one digit after the decimal point, rounded to the nearest digit. More decimal digits will give more precision, but beyond two digits, it is better to reduce the scale factor, for example, from gigabytes to megabytes. You may specify an allocation unit or cluster size, and file sizes will be rounded up to the next full unit if necessary. Options go before file names on the command line:

-a:4kb

Sets the allocation unit or cluster size to 4 kilobytes. Choose your own size. Omit the "k" for bytes only, and replace "k" with "m" for megabytes, "g" for gigabytes, or "t" for terabytes. The default allocation unit is one byte, which means no cluster size.

-f:mb2

Formats file sizes in megabytes with 2 decimal digits. Metric prefixes above apply for kilobytes, megabytes, gigabytes, etc. There may be 0 to 5 decimal or fractional digits, except when the scale factor is bytes only (no digits allowed). Omit the "f:" if desired. The default is -f:kb1 for sizes in kilobytes with one decimal digit.

To display the size of all ZIP files in the current directory, rounded up to the nearest kilobyte:

```
java ShowFileSize4 -a:1k -k0 *.zip
```

See the "-?" option for a help summary:

```
java ShowFileSize4 -?
```

There is no graphical interface (GUI) for this program; it must be run from a command prompt, command shell, or terminal window.

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Installation

You must have the Java run-time environment (JRE) installed on your computer. ShowFileSize 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/download/
> SDK for programmers: http://www.oracle.com/java/ or the OpenJDK builds
> IDE for programmers: http://www.eclipse.org/ or http://www.netbeans.org/

Once Java is installed, you need to put the program files for ShowFileSize 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)
> RunJavaPrograms.pdf (60 KB, more notes about running Java)
> ShowFileSize4.class (5 KB, executable program)
> ShowFileSize4.doc (30 KB, this documentation in Microsoft Word format)
> ShowFileSize4.jar (4 KB, archive file with same class file inside)
> ShowFileSize4.java (14 KB, source code)
> ShowFileSize4.manifest (1 KB, main class manifest for archive file)
> ShowFileSize4.pdf (67 KB, this documentation in Adobe Acrobat format)

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  ShowFileSize4
```

The program name "ShowFileSize4" must appear exactly as shown; uppercase and lowercase letters are different in Java names. 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: ShowFileSize4
```

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  .  ShowFileSize4
```

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.

file: ShowFileSize4.doc 2021-10-26