

Java Application: SameFileSize

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Description

SameFileSize is a Java 1.4 console application to find files that have the same size as another file, which is often the first step in finding duplicate files.

Operating systems such as Microsoft Windows may modify photo files as you copy them from a digital camera, by putting the current date and time inside each file (called “Exif” data for JPEG images). If you copy the same photo twice from the same camera, you can have two files with slightly different contents and the same file size. This prevents duplicate file finders from recognizing that both files are of the same photo. Gallery software designed for photos knows to ignore the Exif data; general software does not.

To run this program, put a list of file or folder names on the command line. For example, if your photos are in a folder called “MyPhotos”, then use the following command line:

```
java SameFileSize1 MyPhotos
```

See the “-?” option for a help summary:

```
java SameFileSize1 -?
```

There is no graphical interface (GUI) for this program; it must be run from a command prompt, command shell, or terminal window. Run time will depend upon how many files and folders are searched. Most operating systems protect some folders, and this program treats those folders as empty.

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Installation

You must have the Java run-time environment (JRE) installed on your computer. SameFileSize 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 SameFileSize 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)

SameFileSize1.class (5 KB, executable program)

SameFileSize1.doc (30 KB, this documentation in Microsoft Word format)

SameFileSize1.jar (4 KB, archive file with same class file inside)

SameFileSize1.java (12 KB, source code)

SameFileSize1.manifest (1 KB, main class manifest for archive file)

SameFileSize1.pdf (66 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 SameFileSize1
```

The program name “SameFileSize1” 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: SameFileSize1
```

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 . SameFileSize1
```

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: SameFileSize1.doc 2021-11-19