Java Game: MazeFog

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Description

MazeFog is a graphical Java 1.1 AWT (GUI) applet to play a maze game. The computer creates a random maze. The exit is marked by blue and white boxes. Your position is marked by a blue circle. Use the arrow keys or the mouse to move towards the exit. You may have to reposition your mouse if you bump into walls! You may run this program as a stand-alone application, or as an applet on the following web page:

> Maze Fog Game - by: Keith Fenske
> http://www.psc-consulting.ca/fenske/mazfog2a.htm

There are no monsters or obstacles in the maze. Your view is limited by a "fog" that shows only nearby positions and positions that you have already visited. If you can't solve the maze, then click the "Show Me" button to see the path to the exit.

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Installation

You must have the Java run-time environment (JRE) installed on your computer. MazeFog was developed with Java 1.4 and compiled for Java 1.1, so it should run on all later versions. 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 MazeFog 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:

ffcccc.gif (1 KB, web page background, name must be lowercase)
GnuPublicLicense3.txt (35 KB, legal notice)
make-mazfog2.bat (1 KB, compiles as Java 1.1 using Java 1.4 SDK)
MazeFog2.class (16 KB, executable program)
MazeFog2.doc (31 KB, this documentation in Microsoft Word format)
MazeFog2.gif (12 KB, sample program image)
MazeFog2.java (75 KB, source code)
MazeFog2.manifest (1 KB, main class manifest for archive file)
MazeFog2.pdf (68 KB, this documentation in Adobe Acrobat format)
MazeFog2Board.class (1 KB, helper class for main program)
MazeFog2Window.class (1 KB)
mazfog2a.htm (3 KB, applet web page, external links don't work)
mazfog2b.jar (22 KB, applet archive file, name must be lowercase)
mazfog2c.txt (77 KB, same source code as text for web page)
MAZFOG2E.AU (13 KB, cowbell sound, name must be uppercase)
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 2000/XP. Change to the folder with the program files and run the program with a "java" command:

```
c:
cd \java
java MazeFog2
```

The program name "MazeFog2" 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 MazeFog2" 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: MazeFog2

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 . MazeFog2

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.

Restrictions and Limitations

Web page applets are obsolete and may run as stand-alone applications with the help of a wrapper (included), although this becomes less likely after Java 9 (2017). Rewriting for Java Swing or newer JavaFX is not an easy job.

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file: MazeFog2.doc 2019-03-30