

Java Installation Instructions for Windows

CS 2334 – Fall 2008

If you have an old version of Java installed on your computer, remove it before beginning this installation. To remove software go to *Start | Settings | Control Panel | Add or Remove Programs*. The location may be slightly different on systems other than Windows XP.

It is best to perform this installation exactly in the order specified, particularly if you're not very comfortable installing software.

These instructions assume that you are Firefox 2 as your web browser. Small changes may be required if you are using another web browser.

1. Installing the Java Development Kit

Download the software:

1. Go to <http://java.sun.com/javase/downloads/index.jsp> using your web browser.
2. Scroll down to the section *JDK 6 Update 7* and click on *Download*. **Do not download the JRE**. JRE stands for Java Runtime Environment, and is used by people who use Java programs, but don't create them. The JRE is not sufficient for this class.
3. Select your operating system, agree to the licensing terms and click *Continue*.
4. Scroll down to the section *Required Files* and click *jdk-6u7-windows-i586-p.exe* to download the *Windows Offline Installation*.
5. Select "Save to disk" and click "OK" to save the file to your desktop.
6. Go to your desktop and double click on the file you just saved.

To complete the installation:

1. An InstallShield Wizard will be displayed on your screen. When the progress bar completes, a License Agreement will be displayed.
2. Read the licensing agreement, and click *Accept*.
3. Accept the suggested components and suggested destination folder by clicking on *Next>*. This will start the installation.
4. Wait for the installation to complete...
5. Next, a new window will guide you through the install process for the Runtime Environment. Accept the suggested components and installation folder by clicking on *Next>*.
6. When the installation is complete, you will see the text "Wizard Completed" in the window. Click on *Finish* to exit the wizard.

7. You may need to restart your computer, depending on what version of Windows you are running. If the program suggests it, go ahead and do it now.

2. Set the Environment Variables

This is the hardest part of this task. It is extremely important that you carefully and precisely follow the instructions given below.

When we install software, like the Java SDK, we have to tell the operating system (usually Windows) where the software is stored. Environment variables are the way that this communication takes place. These are the kinds of things that programmers have to know about that regular computer users sometimes haven't seen before. Try to follow the instructions for your version of Windows and ask for help if you need it.

There is one environment variable that needs to be set. The PATH environment variable is used for the java compiler (javac) and the runtime environment (java). This needs to be set in order for programs to compile and execute correctly.

Note, that in the newer versions of Java (at least since version 1.4) it is not necessary to set a CLASSPATH environment variable unless you are using a custom Java API installed outside of the directory Java's Standard API Libraries are installed in. In this class, we will not be using custom APIs, so you do not need the CLASSPATH set.

✓ *If you have a CLASSPATH environment variable from a previous semester you will need to remove or delete it.*

2.2. Windows XP

On Windows XP, first click the Start button then right click My Computer and select Properties. Select the Advanced Tab and click Environment Variables.

Look for "Path" in the System Variables section. Select the row containing the Path variable and click *Edit*. Add the following to the end (right side) of the text field labeled "Variable value" using copy and paste:

;

Click "OK" to save changes in the "Edit System Variable" dialog.

Click "OK" to save change changes in the "Environment Variables" dialog.

Click "OK" to save change changes in the "System Properties" dialog.

Give yourself a big pat on the back.

If you're interested, the path variable is a series of directories separated by semi-colons (;). Microsoft Windows looks for programs in the PATH directories in order, from left to right. The new path takes effect in each new Command Prompt window you open after setting the PATH variable.

3. Install an Editor or IDE

Install your favorite Java Integrated Development Environment (IDE) – the Eclipse IDE is highly recommended; we cannot stress this enough. Eclipse is a solid IDE, greatly speeds up development, and is perhaps the most used one for Java development. It is also the one that the graders and the instructor will be using.

1. Go to <http://www.eclipse.org/downloads/> using your web browser.
2. Find the label *Eclipse IDE for Java Developers*.
3. Choose your platform by clicking the link to the right of the text labeled “*Eclipse IDE for Java Developers*” that corresponds to your operating system (i.e., Windows or Mac) to begin the download.
4. Select a mirror to download from. Do this by clicking on any of the names below the heading: “Please choose a mirror close to you.” You can choose any mirror, but all other things being equal, should probably choose one fairly close geographically.
5. Select “Save to disk” and click “OK” to save the file to your desktop.
6. Locate the file named “eclipse-java-ganymede-win32.zip” on your desktop. Double click on the file to show the contents of the archive. Drag and drop the folder named “eclipse” on your desktop.

Note: If you are a mac user, then the file will be named “eclipse-java-ganymede-macosx-carbon.tar.gz”. Installation instructions can be found here:

<http://www.cs.dartmouth.edu/~cs5/install/eclipse-osx.html>.

Basically, just follow the instructions as listed; the directory structure of the mac download is the same. You may wish to move the entire eclipse folder to your Applications folder, and/or add it to the dock.

7. Wait for the folder to be copied and then close the window showing the contents of the archive.
8. Locate the folder named “eclipse” on your desktop. Double click on the folder to show its contents. Double click on the file named “eclipse.exe”, or just “eclipse” to start the Eclipse IDE.