

Week 1 Laboratory Exercises – Java and Eclipse Setup and Test (Version 2.2)  
BE-104, Dr.'s Tritt & Milkowski, Spring '05

The purpose of this assignment (worth 0 points) is to install the Java development environment that we will be using this term in BE-104 and later in BE-205.

Insert the provided “BE-104 Java CD” into your laptop computer’s CD drive. View what is contained on the CD using Windows Explorer.

Create a “temporary” folder on your D: drive to hold the necessary installation files. Specifically create a new folder on the D: drive such as “*Java Install Files*”. Copy all the files from the CD to this folder. You are now done with the CD. Please pass it to another student or return it to the instructor.

### **Installation**

You need to unzip and install each of the necessary Java components. These components should be installed as summarized below and **in the given order**.

1. Install the JDK (Java) for Windows. Locate the following named icon or file:

*jdk-1\_5\_0\_01-windows-i586-p.exe*

Simply double click on the icon or filename. Doing this will begin the installation. If needed direct the installation to the following location (depending on how much space you have available on you C: drive):

*c:\Program Files\Java or d:\Program Files\Java*

Otherwise, do the ‘default’ choices during the installation.

2. Install Eclipse (the integrated development environment). Locate the icon for the following file:

*eclipse-SDK-3.0.1-win32.zip*

Double click on the icon to begin ‘unpacking’ or ‘unzipping’ this software. You will need to “EXTRACT”. After selecting that option be sure to next specify the ‘Extract to:’ location very carefully. This is done by providing the following location in the provided text box.

*c:\Program Files\Eclipse or d:\Program Files\Eclipse*

At this point you may want to create a desktop short to run Eclipse. Do this by right clicking on the desktop and specifying create shortcut... and specifying the path to the file *eclipse.exe* in the folder specified above.

3. Install the Java and JDK documentation (descriptions & documentation on java language components). Locate the following named icon or file:

*jdk-1\_5\_0-doc.zip*

Double click on the icon or filename to begin ‘unpacking’ or ‘unzipping’ these files. You will need to “EXTRACT”. After selecting that option be sure to next specify the ‘Extract to:’ location very carefully. This is done by providing the following location in the provided text box.

*c:\Program Files\Java or d:\Program Files\Java*

To read this documentation, open the file named: “*C:(or D:)\Program Files\Java\docs\index.html*” (you may want to create a desktop shortcut to this file).

## Testing

You should next test your installation to be sure everything is working. To do this, you must create a Java project in Eclipse, enter a Java program and run it by doing the following:

Start Eclipse. To do this, you may need to create a shortcut to the eclipse.exe file in the Eclipse folder you created in step 2 above if you haven’t already done so.

Next, create a Java project. Do this by performing the following steps (as necessary) in Eclipse. Create a Java Perspective by selecting *Window / Open Perspective / Java*. Next, create an Eclipse Workspace by selecting *File / Switch Workspace...* and entering a convenient folder specification (I recommend *d:\classes\be104\ eclipse*). Finally, create a new Project using *File / New / Project* and specifying a Java Project and a name (I recommend Lab0). You will create a new project for each program you write.

The next step is to create a Java Class that contains a main function. Do this by selecting *File / New / Class* and specifying a class name (I suggest *HelloWorld*, the name must not contain any spaces) and assuring that the class is created as *public* and with a “*public static void main(String[] args)*” function and *Inherited abstract methods*. This will result in the automatic generation of some code to get you started.

Enter the code on page 33 of your textbook. Enter the code exactly as it is shown. Don’t forget to enter the “*import*” line before the “*class ...*” line. Change the text after “*setTitle*” to “*Hello World.*”

Set up a “Run Configuration” for your project and run your program. Do this by selecting *Run / Run...* and specifying your project and class files (*Lab0* and *HelloWorld*, respectively if you used the names suggested above). If project and class choices aren’t available, try clicking on the “New” button. After setting up the configuration click on the “Run” button on the dialog. A dialog box should appear on your screen.

Delete the temporary folder holding the installation files from the CD.

## **INSTRUCTOR NOTES**

### **1) Path Setting SHOULD NOT BE NECESSARY**

Once you have finished installing Java. Next your 'path' will need to be updated to reflect its installation. Add the "C:\Program Files\Java\jdk1.5.0\bin" to your path. Select the following choices in the order of the vertical lines. For example first select the "Start Button in the lower left corner, then the Settings choices and so on.

Start button | Settings | Control Panel | System | Advanced Tab | Environmental Variables | Path | Edit.

There will be a 'path' already highlighted in blue ending with a semicolon. Do not erase what is there simply ADD "C:\Program Files\Java\jdk1.5.0\bin" to the end.

2) IF there is limited room on the C: drive, the JDK documentation can be installed on the D: drive for example. Location not critical.