Setting Up Java and Eclipse for Windows

If you have any issues after completing this setup, please visit our page Support: Troubleshooting Common Issues which provides solutions to many of the errors that our learners encounter.

In this course we (and you) will be using the Eclipse integrated development environment (IDE) to develop and run our Java code. Eclipse is a powerful, industry-grade IDE. While it might be a little confusing at first because of its power, once you get the hang of it, it will provide for a very pleasant programming experience and you'll wonder how you ever programmed without it!

Part 1: Install the Java JDK, if you don't have it already installed

Eclipse comes with its own compiler, which means many people are able to write programs using Eclipse without installing the Java Development Kit (JDK for short). But having a working JDK is a very useful thing, and is an easy way to prevent potential issues later on. Because of this, we recommend installing the JDK to your system. In this class we have tested our files with Java versions 7 and 8, so if you have anything older than that, you'll want to upgrade.

1. Go to http://www.oracle.com/technetwork/java/javase/downloads/index.html

2. Click on one of the buttons to download the latest version of the Java SE JDK. These buttons are highlighted in the screenshot below (click either one).

3. Accept the license agreement in the first list of files titled "Java SE Development Kit …" and then download the file that is right for your operating system.

4. Install the JDK as appropriate for your operating system. If you need instructions, you can find them here:

Windows: http://docs.oracle.com/javase/7/docs/webnotes/install/windows/jdk-installation-windows.html

Linux: https://docs.oracle.com/javase/8/docs/technotes/guides/install/linux_jdk.html

That's it. You've got the Java SDK on your machine (SDK stands for software development kit -- a more general term).

Part 2: Download, "install" and setup Eclipse

Next, you will install and setup eclipse. You might find the following guide helpful: https://wiki.eclipse.org/Eclipse/Installation - Download_Eclipse And/or you can follow our instructions here:

1. Go to https://www.eclipse.org/downloads/

2. Select your operating system from the dropdown menu in the upper right. Then, in the row titled Eclipse IDE for Java Developers, click on 32 or 64-bit as appropriate to go to the download page.

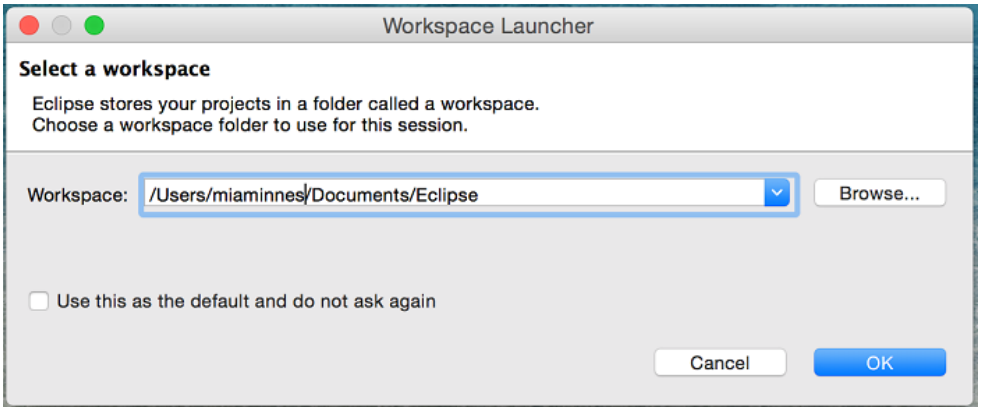
3. Click the Download button to start your download. Save the compressed (.zip) file wherever you want on your computer.

4. Uncompress the downloaded file to any location on your computer. Note: Eclipse will run from here. There is nothing else you need to do to "install" it. However, Windows users should note the following warning from https://wiki.eclipse.org/Eclipse/Installation#Download_Eclipse

"Note that there is a known problem with the built-in decompression utility on all current versions of Windows. We recommend that you use a more robust decompression utility such as the open source 7zip when decompressing an Eclipse download. Some people report success when initially decompressing Eclipse into a root directory (e.g. c:\) and then moving it to a more appropriate home (e.g. c:\Program Files\Eclipse)"

5. Once Eclipse is unzipped, run it by either double-clicking on eclipse.exe (Windows and Mac) or typing eclipse at the command line (Linux--make sure it is on your path).

6. Eclipse will ask you to select your workspace. This is where eclipse will store all of your code and project files. We recommend you choose a directory that gets backed up regularly (e.g. on Google Drive, for example). Optionally, make this the default workspace (so Eclipse will not ask you every time).

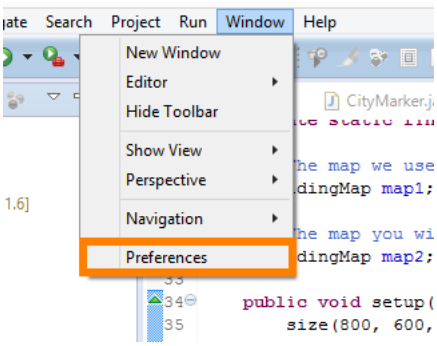


7. Then you will see a welcome screen that has links to a bunch of information including tutorials and overviews. We encourage you to try out some of these, but if you just want to dive in and get started, click the Workbench icon in the top right corner.

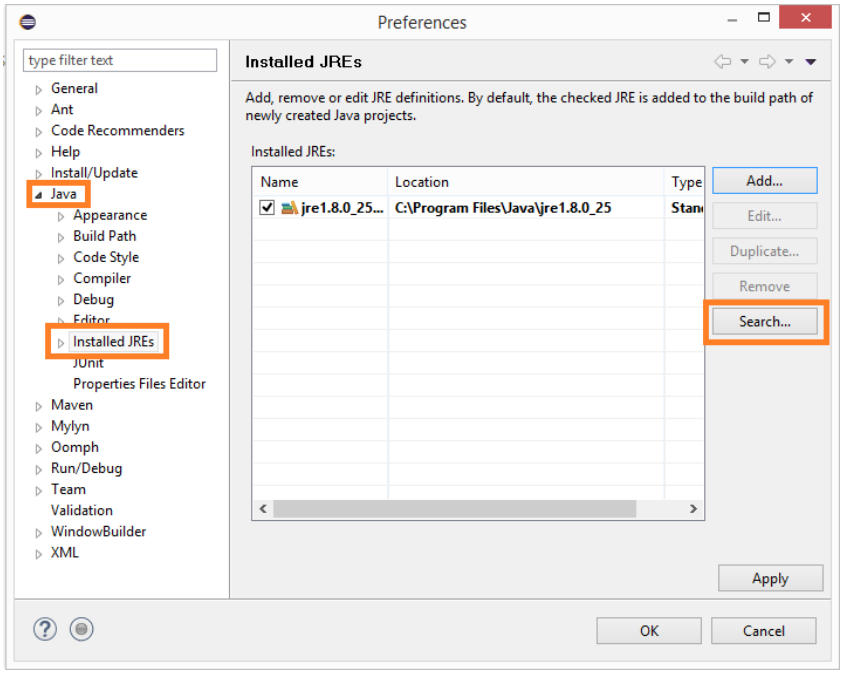
Setting Up the Correct JDK

IMPORTANT: Sometimes Eclipse will not use the version of Java that we have installed. This can create problems later on. Follow these steps to make sure Eclipse is using the version of Java that we installed in Part 1.

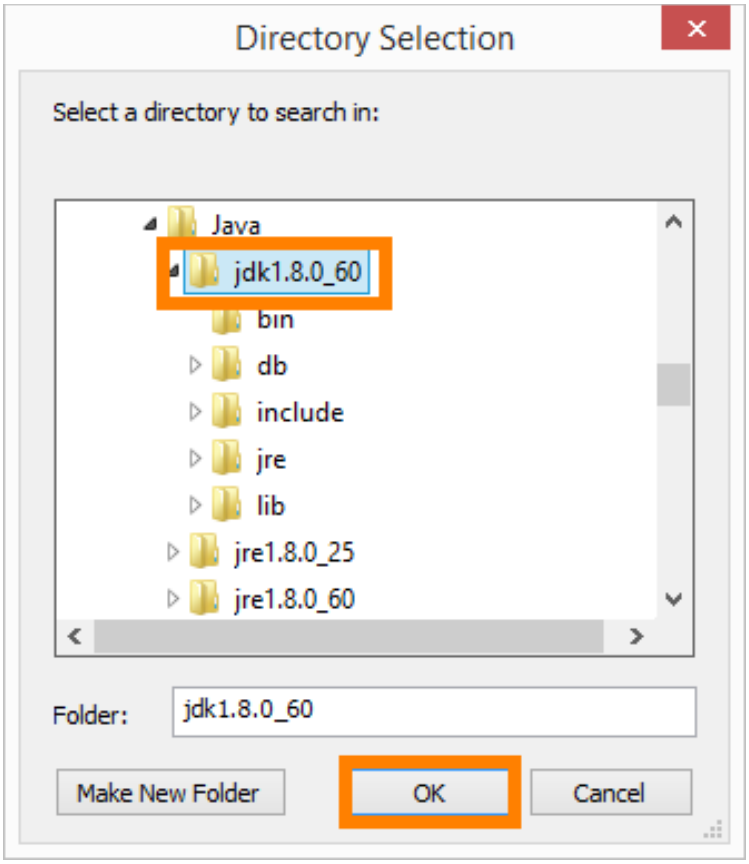
1. Go to Window->Preferences.



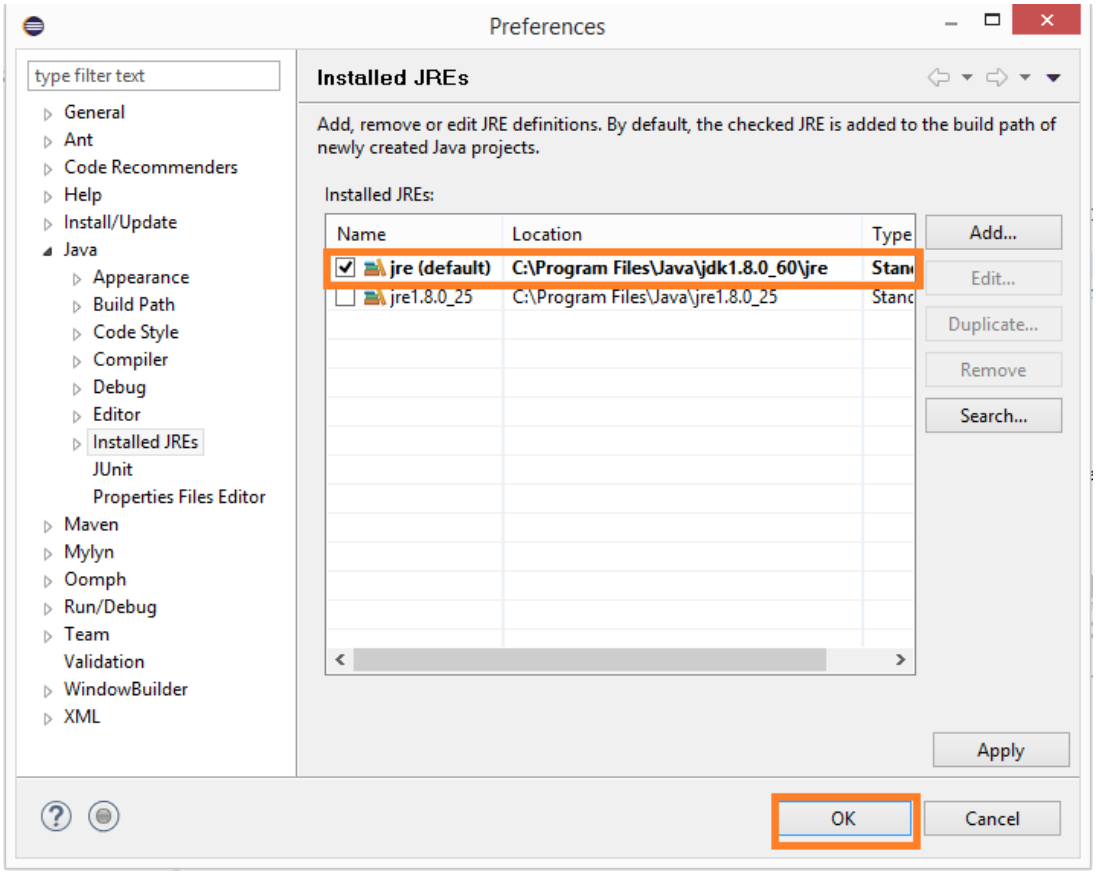
2. In the window that opens select Java->Installed JREs in the menu on the left. In the main portion of the window will be listed each version of Java that Eclipse knows about. If you see the newer version of Java that you installed, then make sure the box next to it is checked and click “OK”. If you do not see the newer version of Java you installed, then click “Search…”



3. Navigate to where you installed the JDK in Part 1. Make sure you select the JDK directory and not the newly installed JRE directory! Then click OK.



4. After a moment, eclipse should list a second JRE in the Java->Installed JREs window. Select the JRE in the newly installed JDK folder, and click OK:



You are now ready to setup and start working with UnfoldingMaps!