How to configure your laptop for CSSE 120 (2012-2013)

By David Mutchler, *November 25, 2012*

If you have the 2012-2013 IAIT install, you need to do ONLY step 4 (if anything).

Throughout:

- Accept the license agreement but otherwise accept all defaults, unless the instructions below explicitly say otherwise.
- Continue the installation even if the installation indicates potential security problems, for example:
    - If *User Account Control* asks whether you want to allow the installation program to make changes to this computer, respond *Yes*.
    - If the installation indicates that you need *Administrator privileges*, respond *Yes.*
    - Select *Run* even if you get a Security Warning that the *publisher could not be verified*.

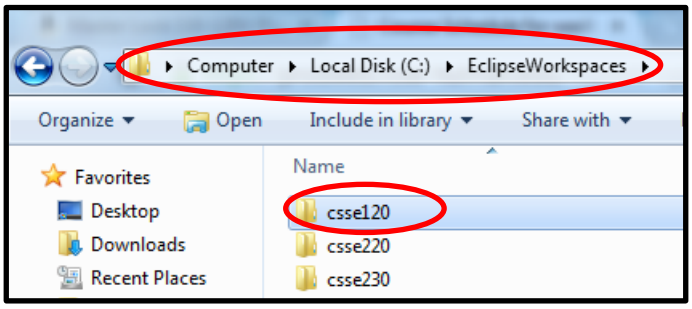
You must have internet access for some of the following.

All the installation files mentioned herein are available locally in:

- http://www.rose-hulman.edu/class/csse/binaries/CSSE120-software/64-bit/
- http://www.rose-hulman.edu/class/csse/binaries/CSSE120-software/32-bit/

These instructions assume a 64-bit installation of Windows 7. If you have a 32-bit installation, replace the 64-bit versions of installation files by their 32 bit versions throughout.

1. **Do you have the folder:**
   `C:\EclipseWorspaces\csse120`

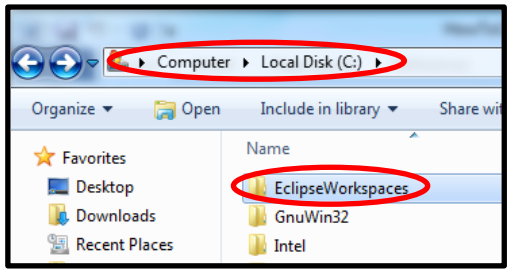


If so, skip to Step 2 on the next page.

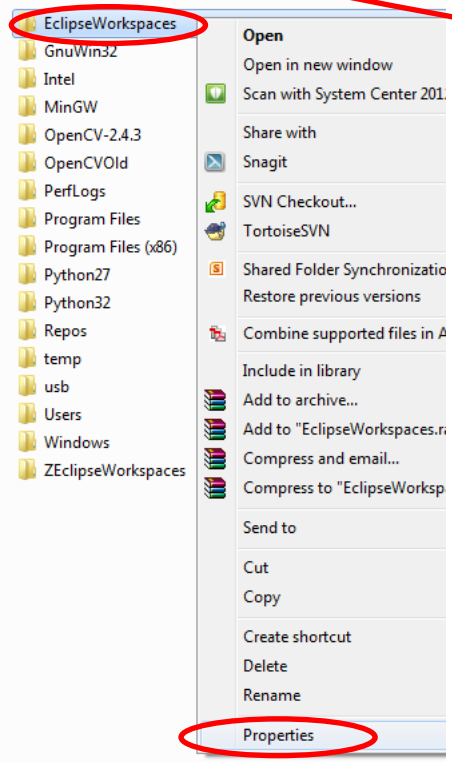
Otherwise:

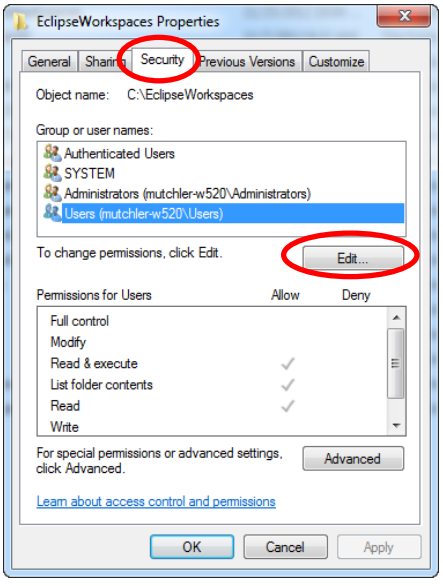
a. Create a folder: **`C:\EclipseWorkspaces`**

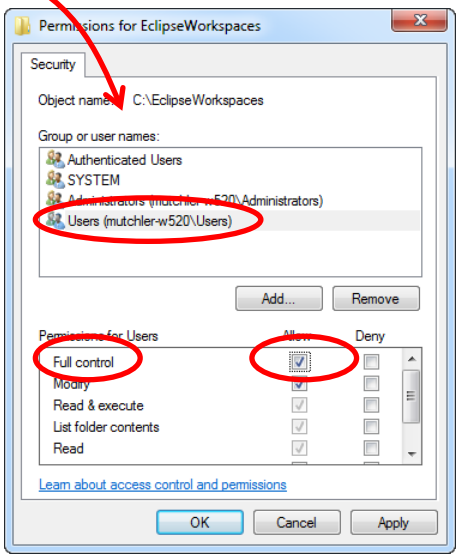
b. Set its rights so that a normal user can read and write in the folder, as follows:



- ***Right-click*** the folder you wish to add read or write access to (here, **`C:\EclipseWorkspaces`**) and select "***Properties***"
- In the *Properties* dialog box that opens, select the "***Security***" tab and click on the "***Edit***" button.
- Then, select "***Users***" in the "Group or user names" section and check the box in the "***Allow***" column next to "Full control".

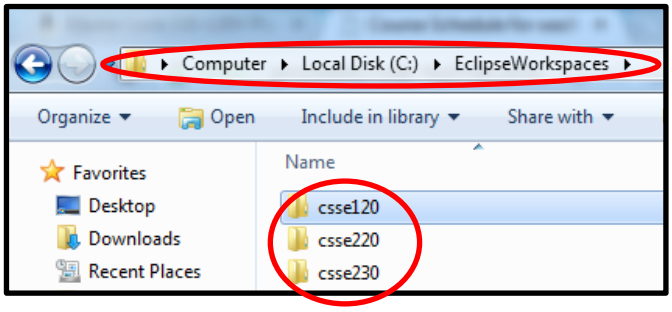






- Finally, click OK twice to exit the dialog boxes.

c. Create subfolders called **`csse120`** *(no spaces!)*, **`csse220`** and **`csse230`**. (The latter two are in case you continue to those courses.) These folders will inherit rights from the parent folder.



2. **Do you have the *Java Software Development Kit (SDK)*?**

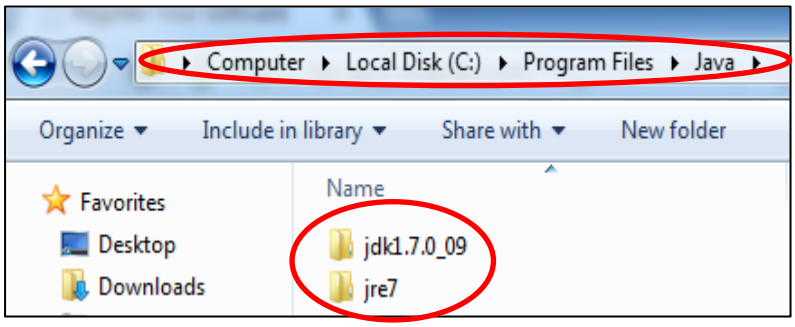
To find out, see if you have the folders:

`C:\Program Files\Java\jdk1.7.0_09`

(it's OK if yours is **`jdk1.7.0_xx`** with any ***xx***)

`C:\Program Files\Java\jre7`

If so, skip to Step 3 on the next page.



Otherwise:

a. Install **Java SE 7** by downloading and then running:

http://www.rose-hulman.edu/class/csse/binaries/CSSE120-software/64-bit/jdk-7u9-windows-x64.exe

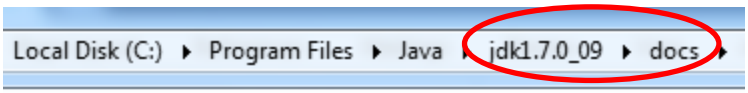
It is not necessary to register Java when it asks you too at the end.

b. Install the **documentation** for the above by downloading and then unzipping:

http://www.rose-hulman.edu/class/csse/binaries/CSSE120-software/64-bit/jdk-7u6-apidocs.zip

After you have unzipped it, move the unzipped ***`docs`*** folder to directly below the ***jdk1.7.0_xx (where xx is your version number)*** folder (*not* the *jre7* folder) created by the previous step:

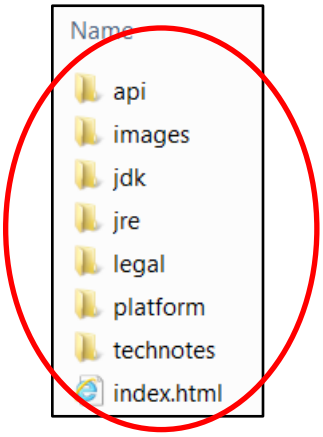
`C:\Program Files\Java\jdk1.7.0_xx`



As a double-check, confirm that you end with a folder:

`C:\Program Files\Java\jdk1.7.0_xx\docs`

that has seven folders and one file beneath it, as shown.

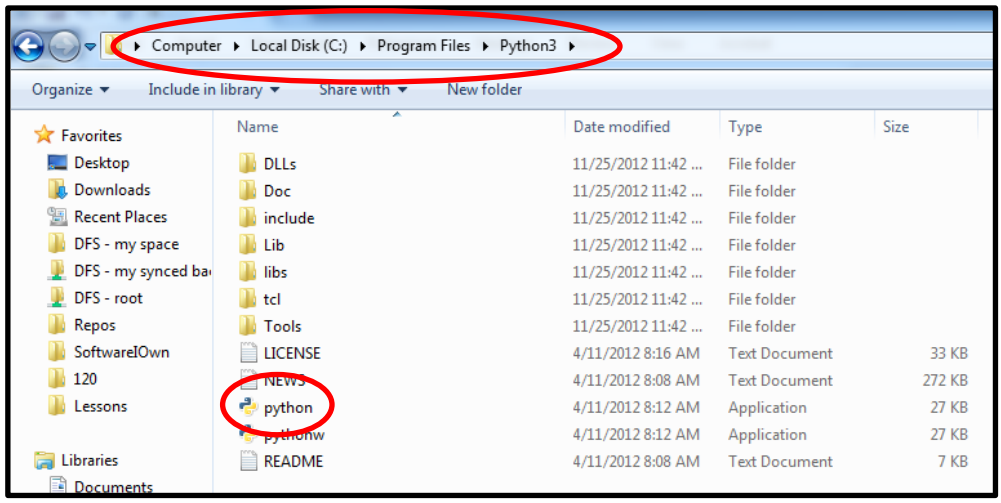


3. **Do you have Python 3.2?**

   To find out, see if you have the file:

   `C:\Program Files\Python3\python.exe`

   If so, skip to Step 4 on the next page.



Note: Python 3.3 is the most current version, but some of the libraries have not caught up with version 3.3, so we are using the next most current version – Python 3.2.3. If you have Python 3.2.x for any x you are probably OK. If your Python is older than that, it might be wise to uninstall your old version and re-install per this step.

Otherwise:

a. Install **Python 3.2** by running:

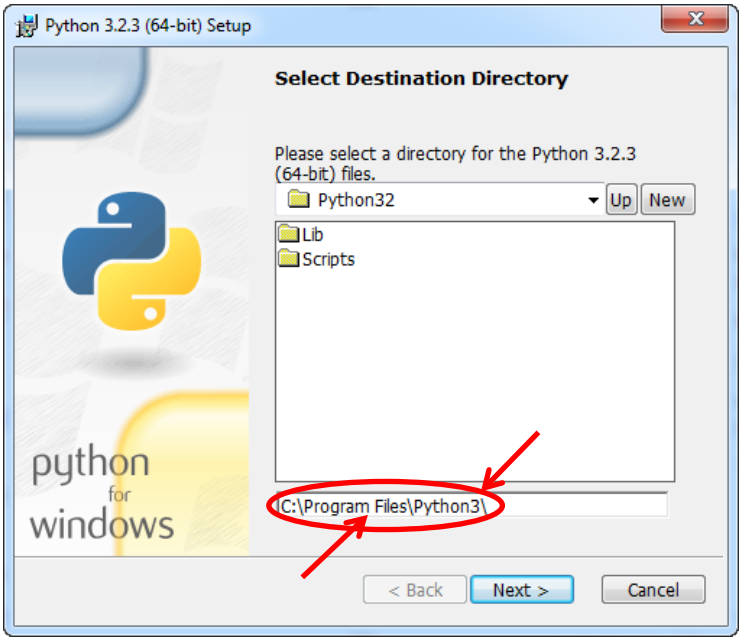
   http://www.rose-hulman.edu/class/csse/binaries/CSSE120-software/64-bit/python-3.2.3.amd64.msi

Important: Change the installation folder from the default *C:\Python32* to

C:\Program Files\Python3

*(Note: just **Python3**, NOT Python32.)*

Other than that (and accepting the license agreement), accept all defaults (including installing for *all* users).



4. **Do you have the plug-ins we need for Python: *pyserial*, *pywin32*, *create* and *zellegraphics*?**

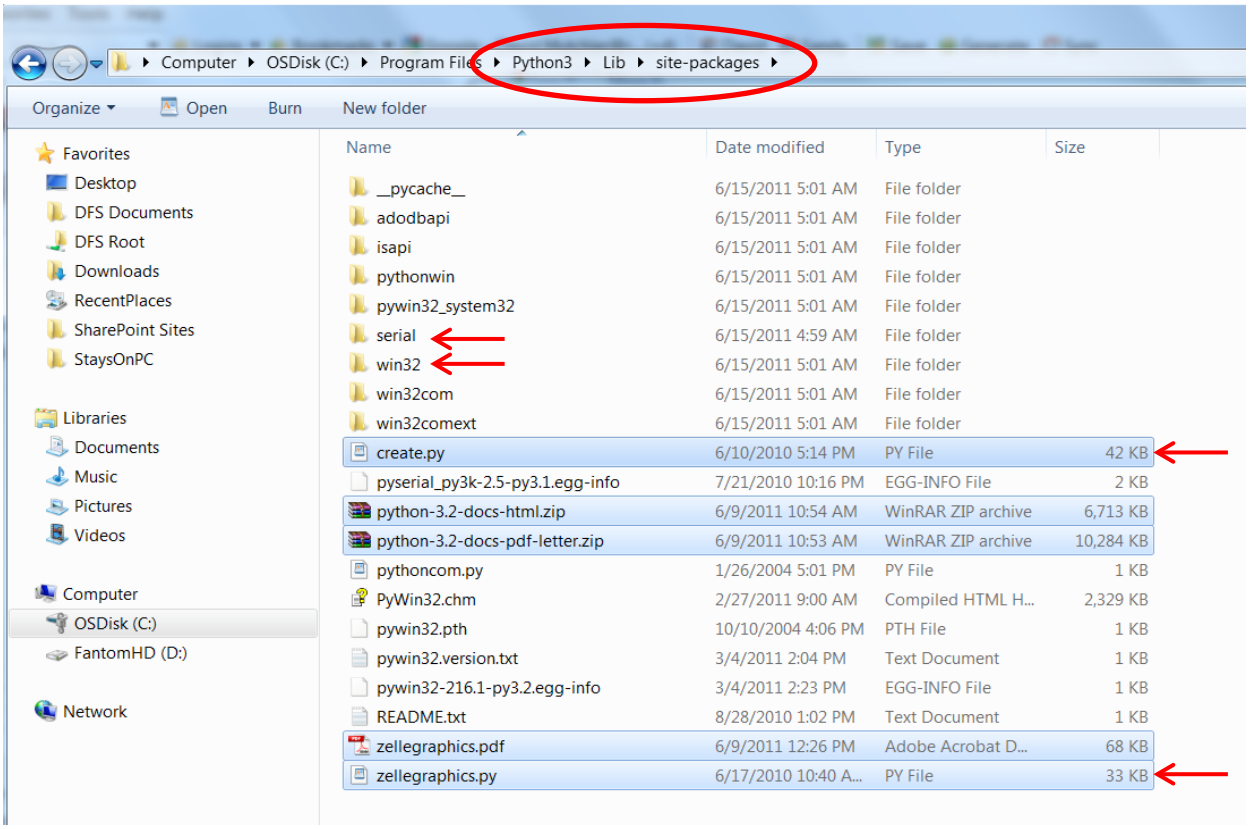
   To find out, examine the folder:

   `C:\Program Files\Python3\Lib\site-packages`

   Does it have files/folders for:

   serial ***win32*** ***create.py*** ***zellegraphics.py***

   (If it has these, it almost certainly has all the others that it needs.)



If it has all 4 of the above, skip to Step 5 on the next page.

Otherwise: Download and the unzip the file:

http://www.rose-hulman.edu/class/csse/binaries/CSSE120-software/64-bit/PutInSitePackages.zip

Then move the CONTENTS of the unzipped folder into the folder:

`C:\Program Files\Python3\Lib\site-packages`

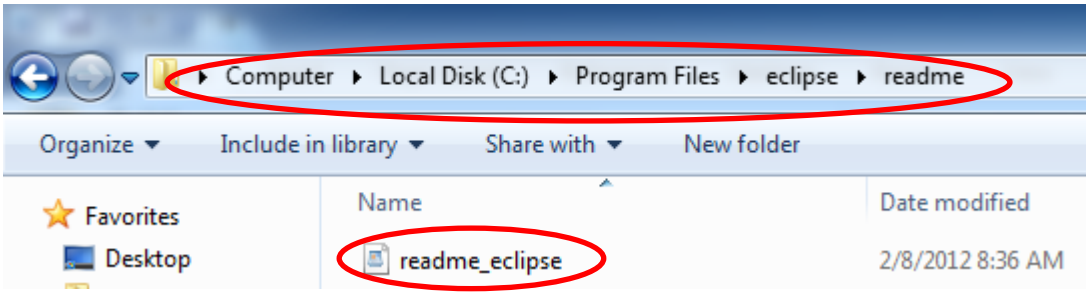
(Overwrite any files that are already there.) ***Be sure that you end up with something that looks like the picture above*** – do NOT end up with a *PutInSitePackages* folder.

5. **Do you have the *Indigo* version of Eclipse?**

   To find out, see if you have the file:

   `C:\Program Files\eclipse\readme\readme_eclipse.html`

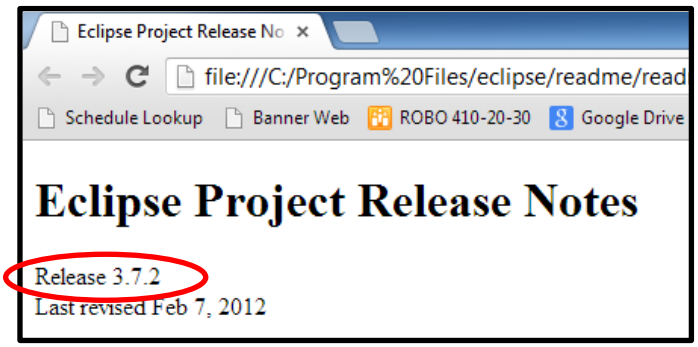
   and if so, open it in a browser (by double-clicking on it, for example).



   If you do not have this file, then you do not have Eclipse: follow the directions below.

   If you do have the file: The page that opens should indicate the version of Eclipse that you have.

   If the page says Release 3.7.2, that means that you have the most up-to-date version of the Indigo release of Eclipse – that's the one that you want. *In that case, skip to Step 6 on the next page.*



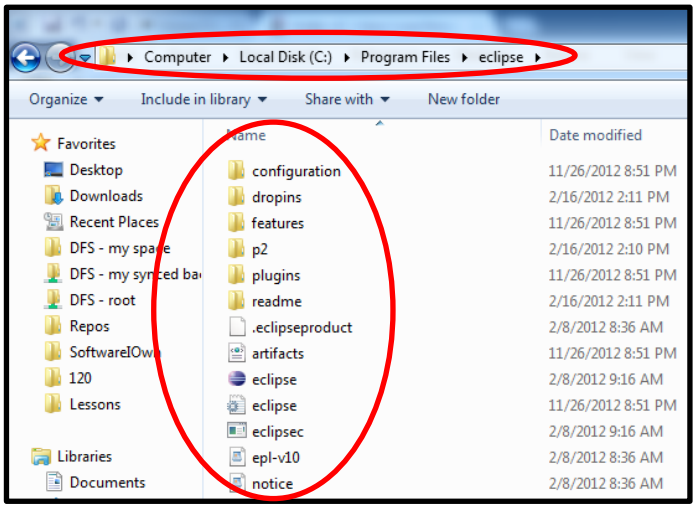
   If it says anything else, you either have an older version of Eclipse (3.6 or lower) or the new Juno version (4.0). We will not use Juno at this point because not all of the plugins that we use have caught up to Juno yet.

   a. If you have a wrong version of Eclipse, delete the entire **`C:\Program Files\eclipse`** folder (or rename it if you want to keep it).

   b. Download and the unzip the file:
      http://www.rose-hulman.edu/class/csse/binaries/CSSE120-software/64-bit/eclipse-java-indigo-SR2-win32-x86_64.zip
      placing its unzipped ***`eclipse`*** folder wherever you want.

   c. Move the unzipped ***`eclipse`*** folder to: **`C:\Program Files\`**

      Double-check that you ended up with a folder structure like that pictured.



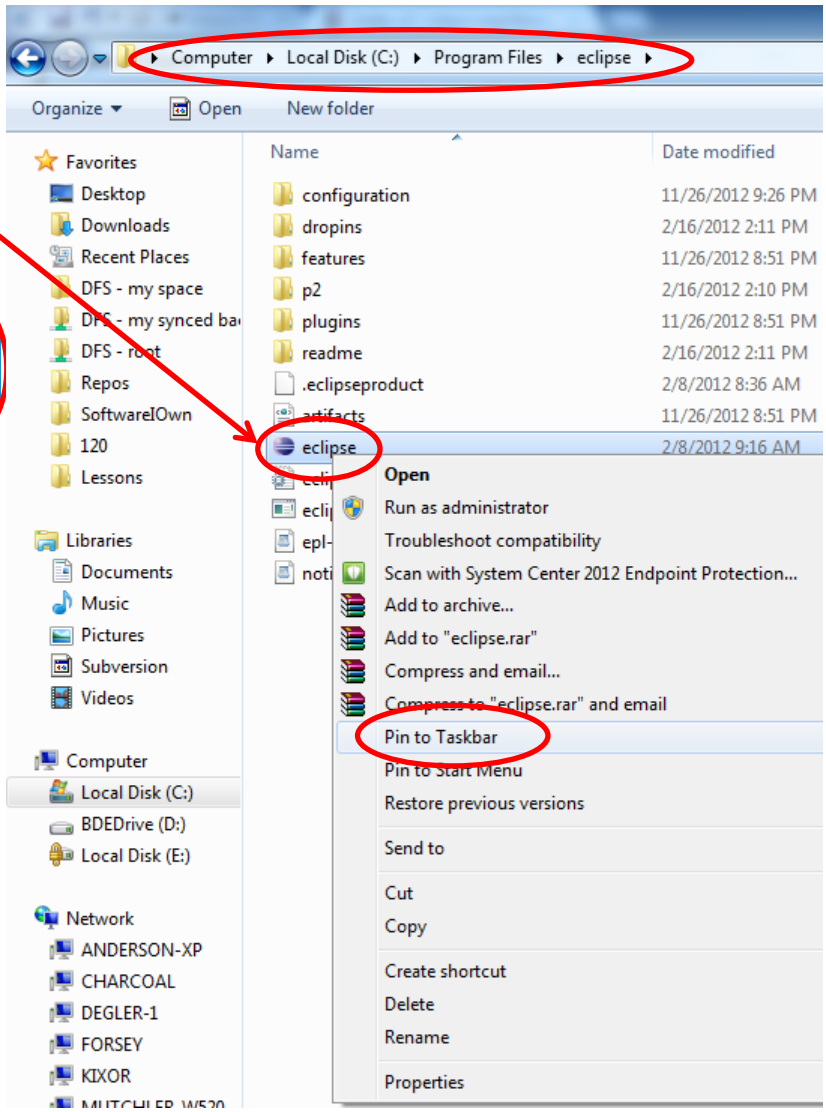
   d. Right-click on the **`C:\Program Files\eclipse`** folder, select the ***Security*** tab, and give an ordinary user read and write permissions to the folder – proceed as indicated in Step 1 above (where you gave rights for a different folder).

6. Open Eclipse, as follows:

   Right-click on the file: **`C:\Program Files\eclipse\eclipse.exe`**

   (it's the one with a round purple icon)

   and select ***Pin to Taskbar***.



   and select ***Pin to Taskbar***.

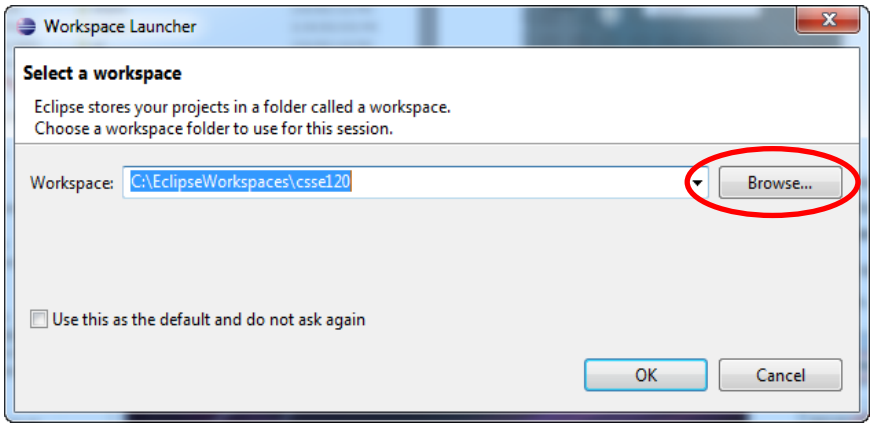
   This will put an icon for Eclipse on your

   Taskbar.

   Double-click on the icon to open Eclipse.

   When you open Eclipse for the first time, set the workspace by:

   a. You should see the ***Select a workspace*** dialog shown to the right. Do ***NOT*** press *OK* yet. Instead, select ***Browse***.[1]



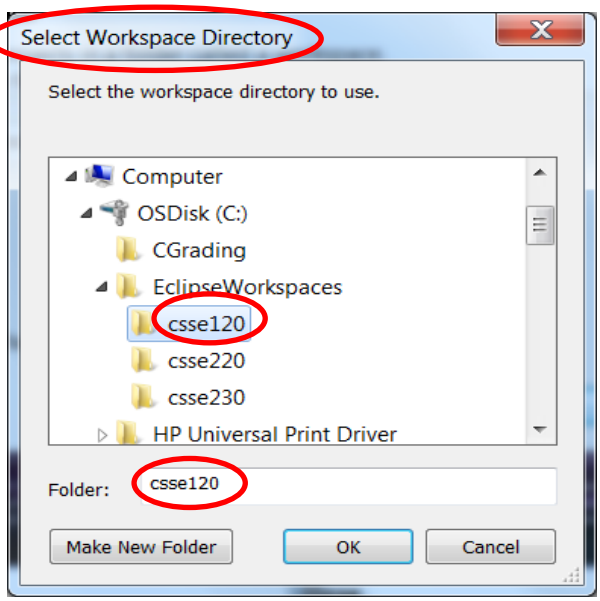
(Continues on the next page.)

[1] If you do not see the ***Select a workspace*** dialog the first time that you open Eclipse, or if you accidentally press *OK* before browsing to the correct workspace folder, you may have accidentally created a workspace folder in an unintended place, or even a new *user* folder beneath *C:\Users*. Get help as needed to correct that error.

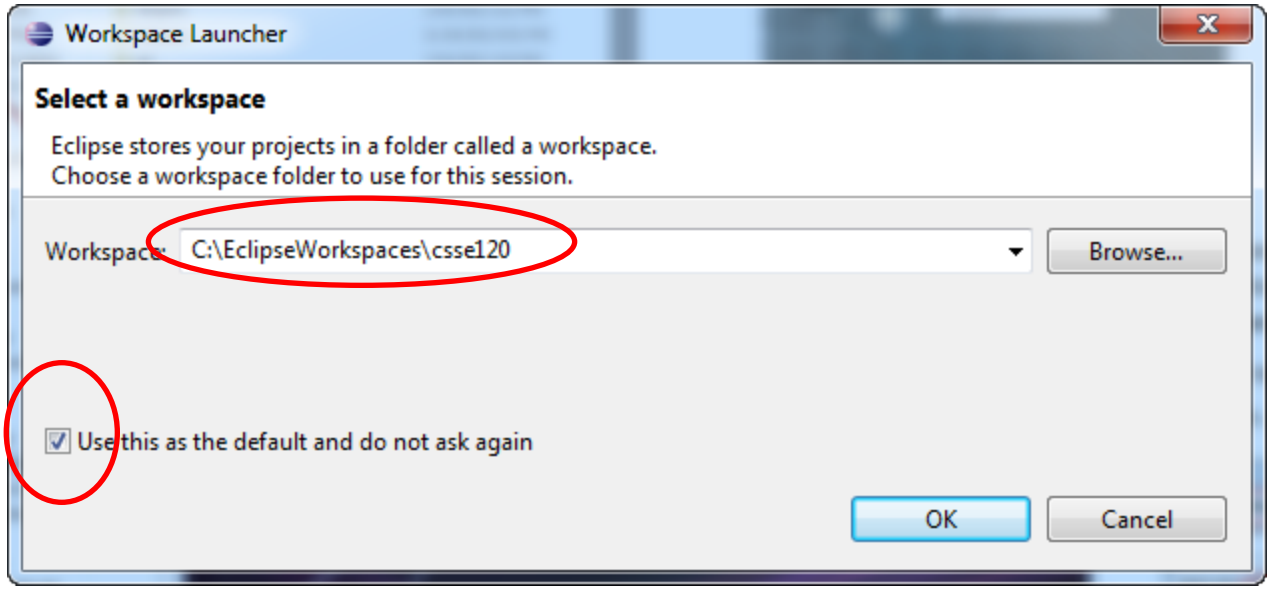
b. In the ***Select Workspace Directory*** that opens, select the

   `C:\EclipseWorkspaces\csse120`

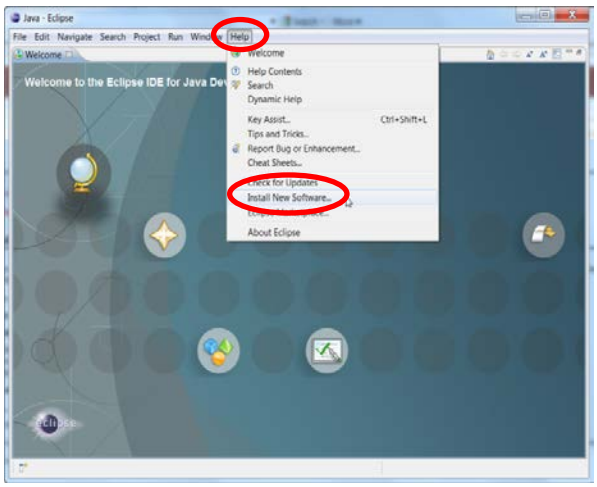
   folder. Press *OK* to bring you back to the ***Select a workspace*** dialog.

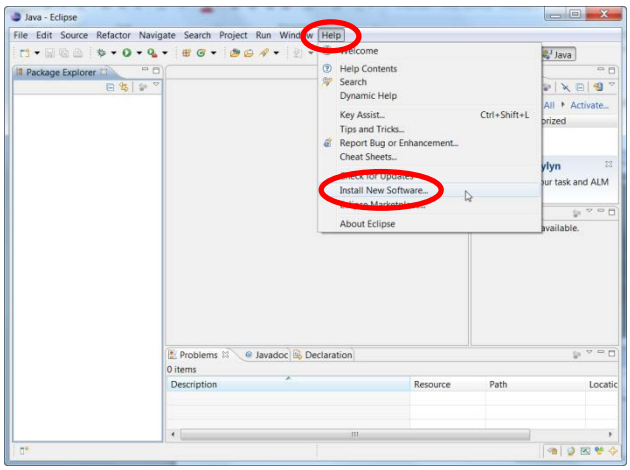


c. ***Check the box*** labeled "***Use this as the default and do not ask again***." Then press *OK* to continue into Eclipse.



7. **Do you have the Subclipse (SVN) plug-In for Eclipse? To find out, proceed as follows:**



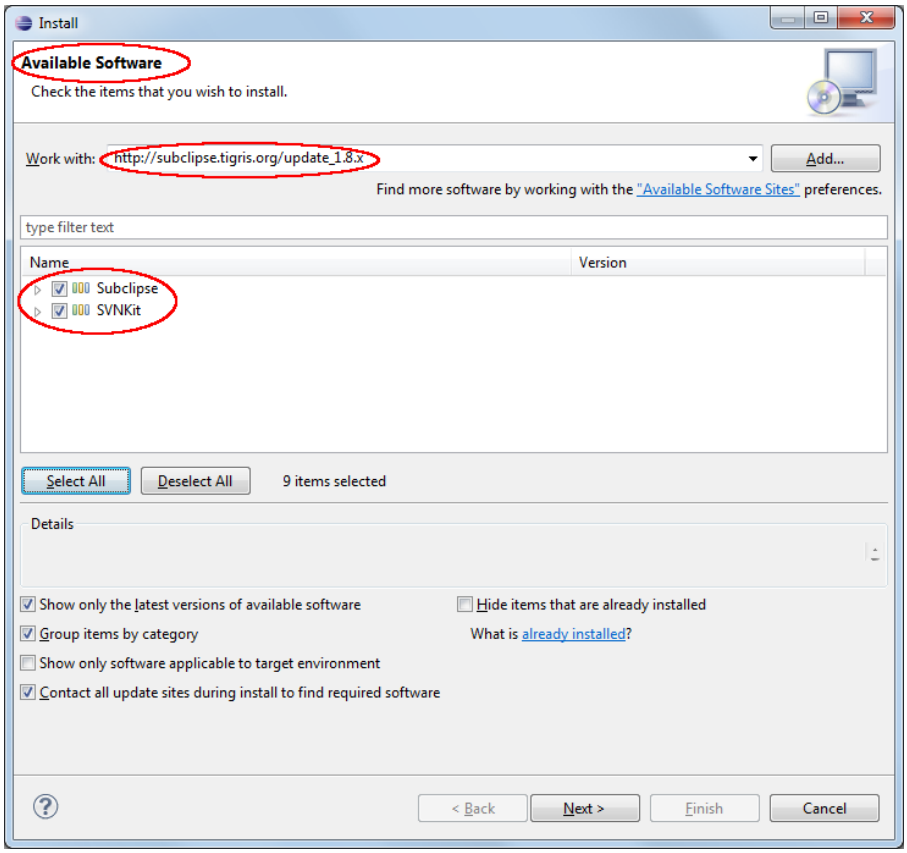


After opening Eclipse the first time, you will see the *Welcome* screen (left screenshot above). Subsequent sessions normally open to the *Workbench* (right screenshot above). In either case, select: ***Help ~ Install New Software***

a. In the ***Available Software*** dialog that opens, type

   `http://subclipse.tigris.org/update_1.8.x`

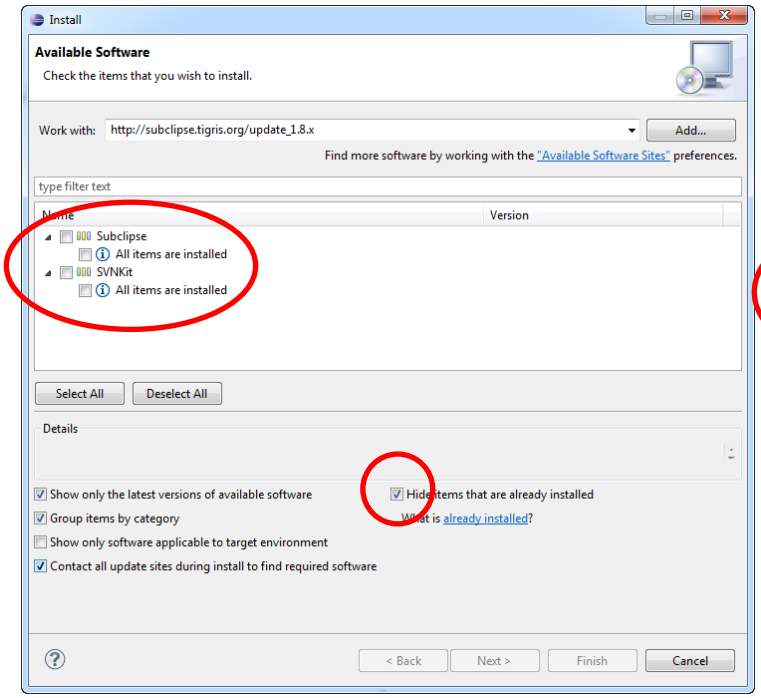
   in the ***Work with:*** field and press ***Enter***.

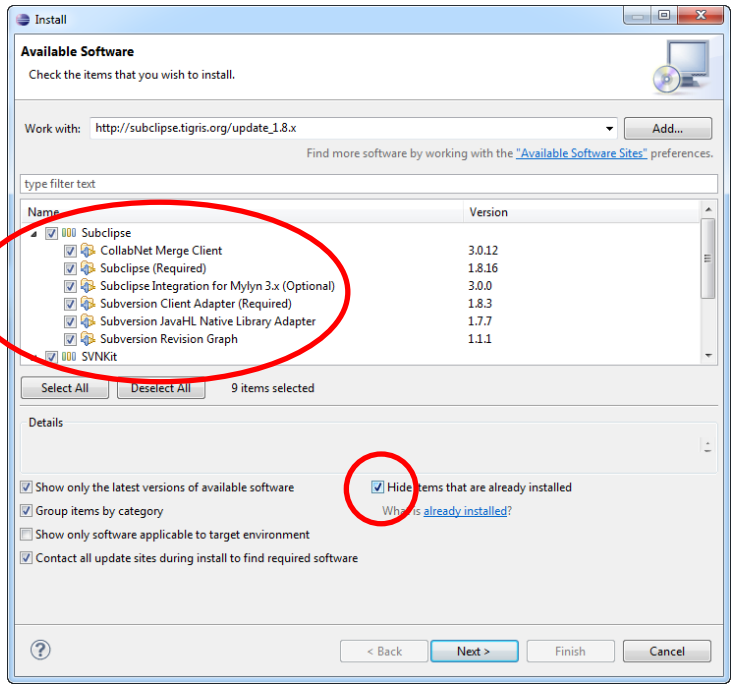


b. After several seconds, two checkboxes will appear. ***Check both checkboxes*** (but do **NOT** yet press *Next*).

Continues on the next page.

c. Now ***check the box*** labeled ***Hide items that are already installed*** (but do NOT yet press *Next*). You will EITHER see a box like the left one below OR one like the right one below.

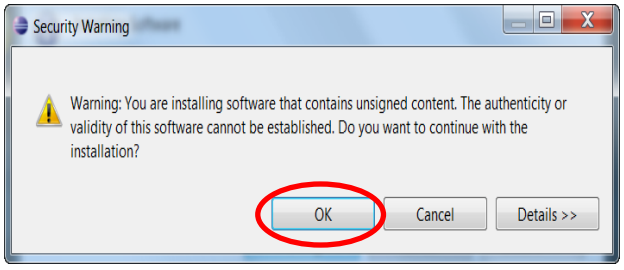




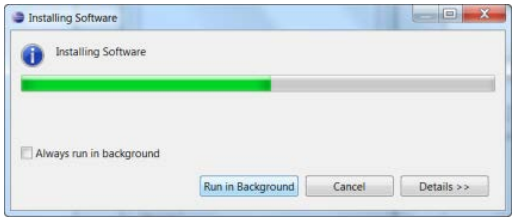
The box on the left indicates that Subclipse is already installed. ***If you see a box like the LEFT one (with the Subclipse items UN-checked and the phrase "All items are installed", skip to Step 8 on the next page.***

Otherwise (that is, if the box looks like the one on the RIGHT where the Subclipse items remained checked)

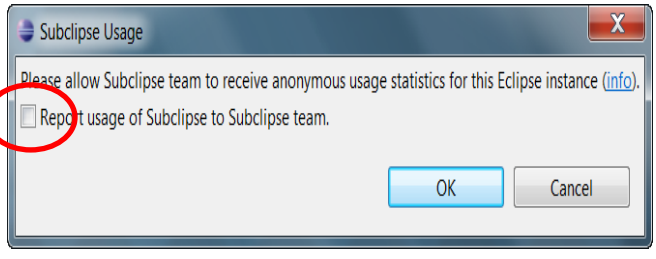
d. Press *Next* and *Next* to continue installing Subclipse. Accept licenses and trust certificates as needed and continue despite any *Security Warning* that you might see. The *Installing Software* dialog may take several minutes and be slow to start.



When asked to restart Eclipse, do so.



When Eclipse restarts, you may see a ***Subclipse Usage*** dialog. If you see this at any point, ***UN-check the box*** and continue.

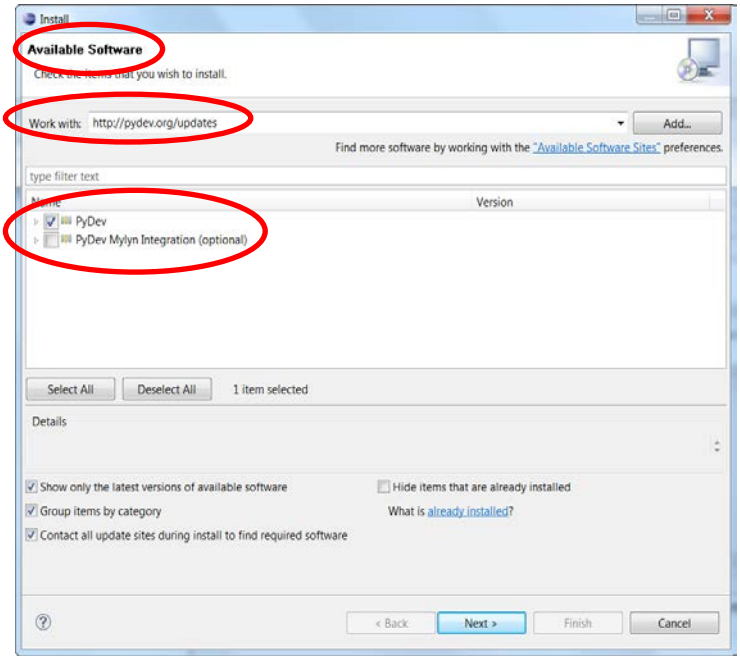


8. **Do you have the PyDev plug-In for Eclipse? To find out, proceed as follows:**

Install **Pydev** from within Eclipse by proceeding similarly to the installation of Subclipse (see the screenshots for that installation in the previous step as needed):

a. From the *Welcome* screen or the *Workbench* in Eclipse, select:

Help ~ Install New Software



b. In the ***Available Software*** dialog that opens, type

`http://pydev.org/updates`

in the ***Work with:*** field and press ***Enter***.

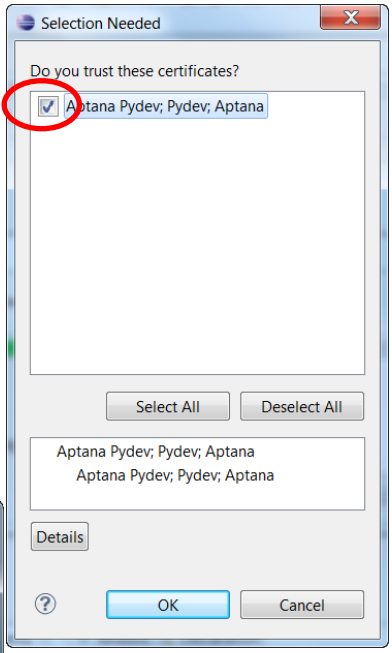
After several seconds, two items will appear. Check the ***PyDev*** box.

(Leave the other box, for *PyDev Mylyn integration*, unchecked.)

c. As for Subclipse, now ***check the box*** labeled ***Hide items that are already installed*** (but do NOT yet press *Next*).

If PyDev now expands and indicates that it is already installed, skip to Step 9 on the next page.

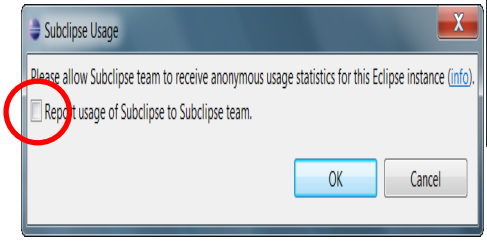
d. Press *Next* and *Next* to continue installing Pydev. Accept licenses and trust certificates as needed and continue despite any Security Warning that you might see. The *Installing Software* dialog may take several minutes and be slow to start.



Caution: When you see the ***Selection Needed*** dialog to the right, you must ***manually check the box*** before pressing *OK*.[2]

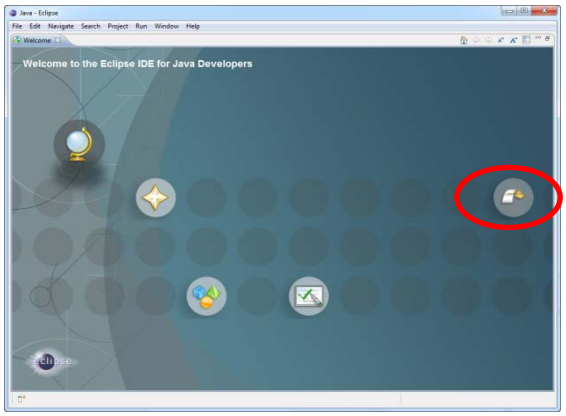
When asked to restart Eclipse, do so.

When Eclipse restarts, you may see a ***Subclipse Usage*** dialog. If you see this at any point, ***UN-check the box*** and continue.



[2] If you press *OK* without checking the box indicating that you trust the Pydev certificates, the installation may continue as if all is well. But it isn't, and you'll have to uninstall and then re-install Pydev.

9. **Do you have the *PyDev120* preferences? To find out:**



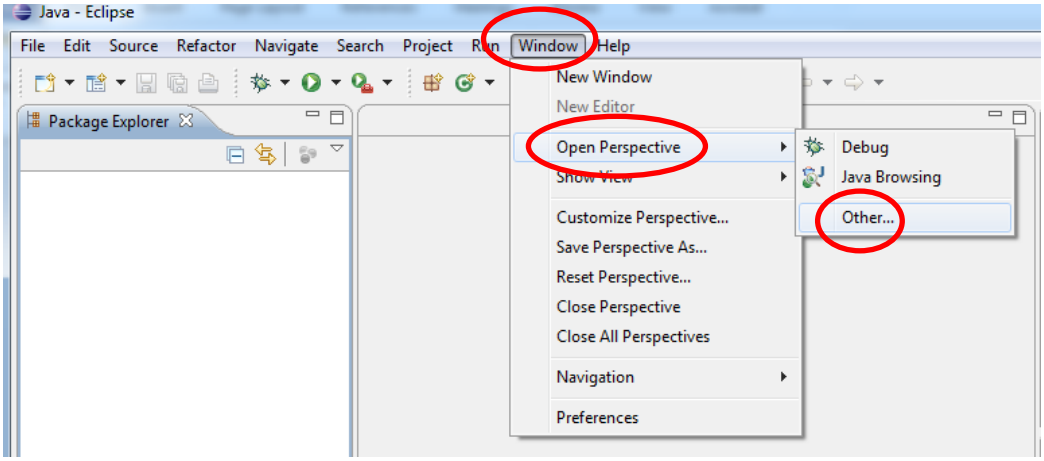
Enter the Eclipse workspace (if you have not already done so) by selecting the ribbon-like icon (see the picture).

Inside the workspace, try:

Window

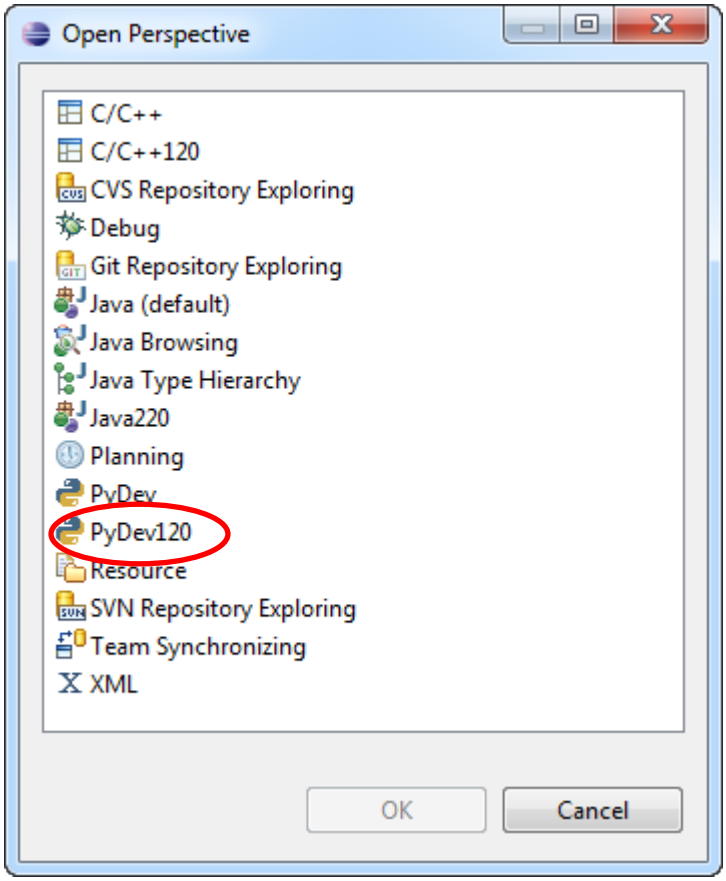
~ Open Perspective

~ Other



If *PyDev120* is an option (not just PyDev, but PyDev120), then you DO have the *PyDev120* perspective; select that item and you are done!

Otherwise: follow the instructions on the separate handout "***To obtain the PyDev120 Perspective***."



There is a little more to install, but this is close enough and is all that is needed for the first week.