

Installing Teaching.Codes on Windows

This document describes the steps for installing the Teaching.Codes plug-in for Eclipse on Windows OS as the requirement for CMPE150, CMPE160, etc.

The installation has been significantly simplified by providing a ZIP file that includes Eclipse Oxygen 2 extended with CDT and Teaching.Codes plug-ins, and the workspace. In the case of Windows, Cygwin and GCC are also included in the ZIP file. However, the ZIP file does not include Java 8u181 JDK; you have to download and install it separately.

The configuration of Eclipse has also been modified for your convenience. Therefore, please follow the installation instructions in this document; do not try to install directly from Eclipse.org site.

Stage #1: Install Java 8u181 JDK (not JRE)

Note that you should install Java 8u181 Development Kit (JDK), not Java Runtime Environment (JRE). If you do not install correct distribution, things will not work as they should.

Java 8u181 JDK is available

[Here](#) (for 32bit Operating System) and

[Here](#) (for 64bit Operating System).

(If you don't know your Operating System is 32bit or 64bit, you can learn like [that](#).)

Please download and install it.

To verify Java is properly installed, you can open a terminal¹ and run the command below:

```
java -version
```

The output should explicitly state the version as "8.*.*" where you could have any number instead of "*".

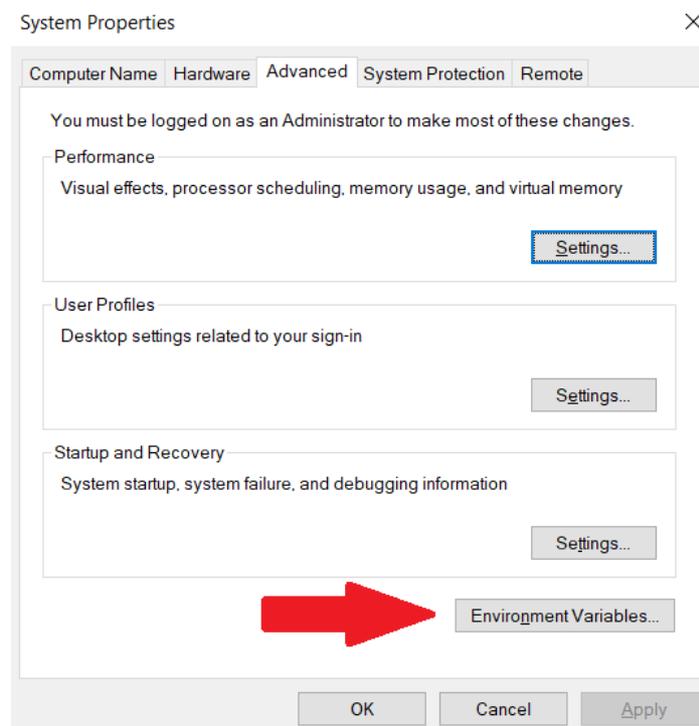
¹ To open a terminal, hit the Windows (⊞) key on the keyboard and type **cmd** and hit Enter key. This will open the Command Prompt, which is the shell in Windows.

Stage #2: Installing the C Compiler

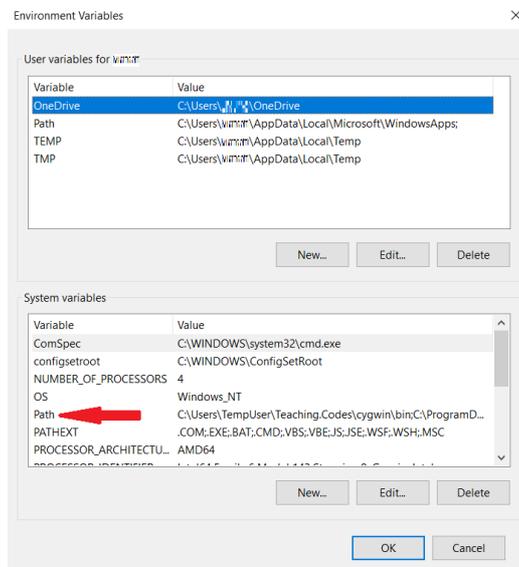
Students of Java courses may wonder why they need to install C compiler. Actually, they are not required to install the C compiler for the moment, but they will definitely need it later. Configuring Eclipse to detect the C compiler that is installed later may turn out to be more complex. Therefore, we highly recommend that you install it at this stage.

The ZIP file you will download in the next stage contains GCC within Cygwin package. However, you should add Cygwin to the path. To do this, perform the following:

- Open a file browser and right click on My Computer (or This Computer or whatever name it has in your system). Select “Properties”.
- In the window that pops up, click the “Environment Variables” button.
 - If you cannot find “Environment Variables” this way (different Windows versions have different ways of doing this), search for [how to modify environment variables in Windows X](#) by substituting your Windows version instead of ‘X’ using your favorite search engine. You should see a window like the following:



- The next window contains the list of user variables in the top list and system variables in the bottom list. Select the “Path” variable **in the bottom list** and click Edit button.



- The Path variable already contains some values. Make sure that you do not delete those values, but at the top, add the value “C:\Teaching.Codes\cygwin\bin” (without the quotes). When you make the addition and close the pop-up window, make sure that the Path variable appears as in the figure above. The text you have added must appear to be separated from the previous value with a semi-colon (;’).

Stage #3: Download and Install the ZIP File

Now that you are sure you have everything ready to install Eclipse and Teaching.Codes, go to <http://programming.cmpe.boun.edu.tr> and download the ZIP file for Windows.

Note that the ZIP file has to be extracted exactly as mentioned. Otherwise, things will not work since components will not be able to find each other. Use your favorite unzip program to extract the contents under C:\ directory. The ZIP file will extract three directories (.p2, .eclipse, and Teaching.Codes). The first two directories are hidden; therefore, you need to make hidden files visible in your file browser. To achieve this, select the “View” tab in the ribbon at the top and make sure “Hidden items” is visible (or search “how to make hidden files visible in Windows X” in the Internet). Make sure you turn hidden files to invisible afterwards to avoid troublesome mistakes in the future.

Stage #4: Run Eclipse and Set Your Workspace

Your workspace should be under your C:\ directory. Consequently, the first time you run Eclipse, you will have the workspace at an invalid path. You should fix this for the first time you run Eclipse.

Your Eclipse executable resides in the folder:
C:\Teaching.Codes\eclipse\eclipse

Run Eclipse and update the workspace path to **C:\Teaching.Codes\workspace**