Teaching.Codes Installation Guide

This document describes the steps for installing the Teaching.Codes plugin for PyCharm as the requirement for programming courses. The system requires python3, PyCharm, and the Teaching.Codes plugin.

1. Install Python

Windows 10

Go to Microsoft Store, type python 3.8 in the search bar. Install python 3.8.

IF your Windows username has spaces in it for example “Utku Bozdogan”, this may give you problems in the next steps. If you encounter problems later, uninstall python from the store. Click the link below to download the executable installer of official python version 3.8.6.

https://www.python.org/ftp/python/3.8.6/python-3.8.6-amd64.exe

Once downloaded start the installation, and click Customize installation, then click Next once and under Advanced Options, check the box which says install for all users. Also, note the installation location, you will need to tell PyCharm to go there to select the interpreter. Then, click Install.

Linux (Ubuntu/Debian) & MacOS Catalina and later

1) Download Python from the official website

MacOS: https://www.python.org/ftp/python/3.8.6/python-3.8.6-macosx10.9.pkg

Linux: gzipped → https://www.python.org/ftp/python/3.8.6/Python-3.8.6.tgz

tar.xz → https://www.python.org/ftp/python/3.8.6/Python-3.8.6.tar.xz

2) Install Python from the downloaded file. (This is trivial on MacOS. On Linux, extract the file, open the README file and see the section on Build Instructions. Apply the commands written there, but if you wish not to have this version as your primary, instead of the last command **sudo make install** instead execute **sudo make altinstall**

3) Check if the installation is successful by opening a terminal and typing **python3.8 -V** and pressing Return (Enter).

4) On the same terminal window, type **which -a python python3** and press Return (Enter) to find out where this Python version is installed. You will see all the Python versions installed on your system, the one you are looking for should have 3.8 written in it. Note this location for later.

2. Install PyCharm

Go to https://www.jetbrains.com/pycharm/download/other.html

Choose your operating system (Windows, Mac or Linux) and download from the "Community" or "Professional" option. Both work the same for the purposes of this course. Make sure you download version 2020.3.5 and please upgrade/downgrade or install this version too if you have a different version already installed.

After the download finishes, install PyCharm. Your computer may not trust applications downloaded from the web, if so change this from your system preferences or trust this source in the appearing dialog.

The installation will begin, accept the license agreement and choose your settings like the dark theme, create a launcher script if you wish (you don't need to), and you will not need any plugins it shows you.

After the installation, run PyCharm. License Activation window will appear if you chose "Professional". You can get a free student license with your university email (with the boun extension) from JetBrains. Enter your license information and activate your license.

Welcome to PyCharm window should appear.

3. Create a new project

Click on the "New Project" button. From the window that comes up, choose Pure Python from the left side if you are using the Professional edition, this is already chosen in Community edition.

In the options on the right side, you can write a project name of your choosing at the end of the Location setting -the one at the top of the window- by deleting the "pythonProject" and writing something like "myFirstProject" or "hello".

Then, under Python Interpreter, make sure the New environment using Virtualenv is checked, and make sure the Base interpreter is pointing to the location of the python you just installed. **Windows** will usually find this by itself. **In Linux and Mac**, this may point to the default python which comes pre-installed in your computer; so click the three dots and navigate to the location you noted earlier belonging to python3.8.

The location could be something similar to below:

```
/Library/Frameworks/Python.framework/Versions/3.8/bin/python3
```

Check the Create a main.py welcome script for this time and click Create. It will take a little while and your project will be created. If you see no errors, everything is in order.

At the top right of your screen, you will see the section in the image above. Click the Run button (big green triangle) and at the bottom of the screen a Run window will appear, and it will have the writing:

Hi, PyCharm

4. Install the Teaching Codes Plugin

Download the Teaching Codes plugin from one of the links below based on your operating system.

Windows 10

https://programming.cmpe.boun.edu.tr/downloads/StudentPlugin/TCPluginJetBrains_Windows.zip

Linux

https://programming.cmpe.boun.edu.tr/downloads/StudentPlugin/TCPluginJetBrains_Linux.zip

MacOS

For a successful installation, if you are using Safari browser, you need to go to Preferences and under the General tab, uncheck the option open “safe” files after downloading. Otherwise the downloaded .zip file is automatically extracted and won’t work.

https://programming.cmpe.boun.edu.tr/downloads/StudentPlugin/TCPluginJetBrains_MacOS.zip

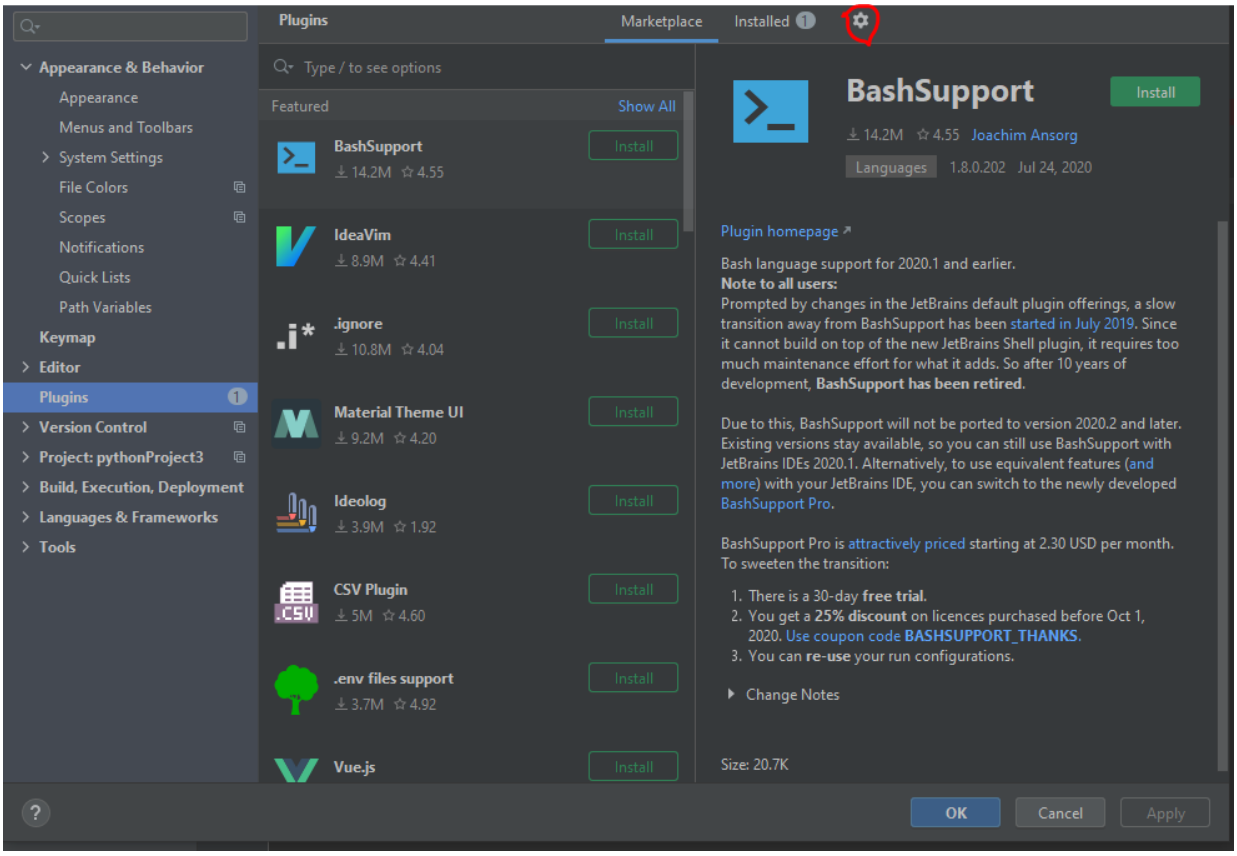
While you have a project open in PyCharm, go to File>Settings (just Preferences in Mac) and find Plugins on the left.

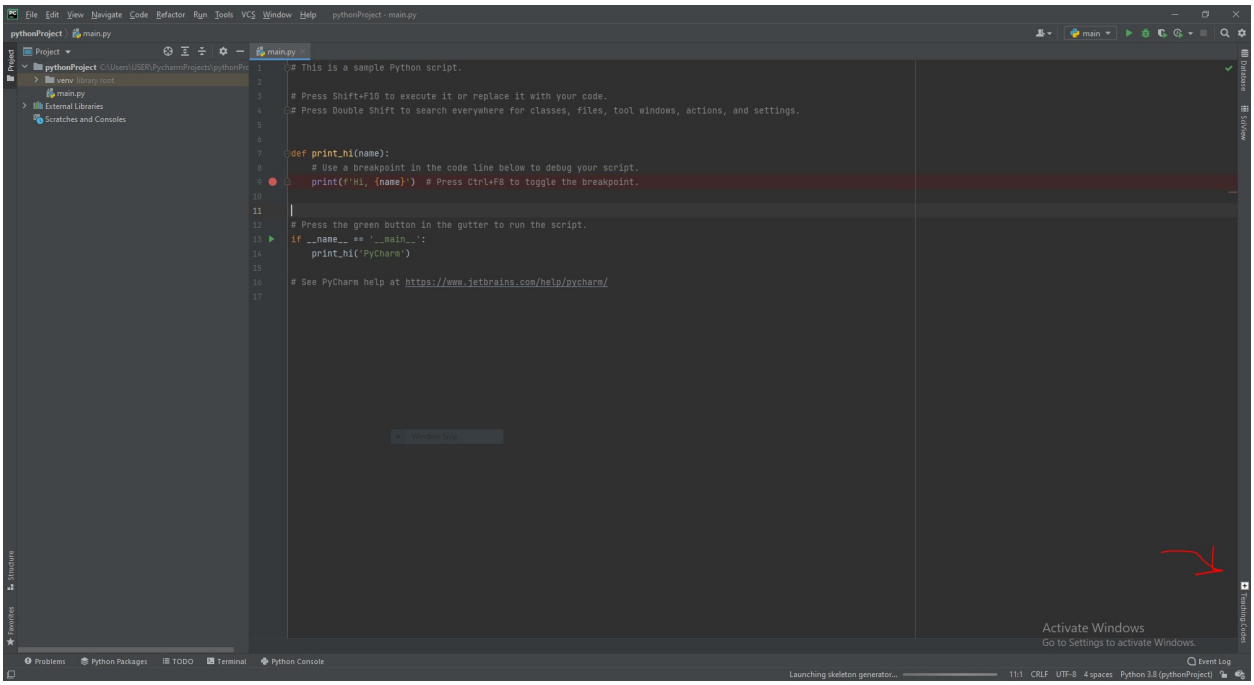
Click the gear icon on the top (shown in red circle in the image on page 4) and click Install Plugin from Disk…

Navigate to the location of the zip file and choose it. After a short while “Teaching Codes JB” plugin will appear as downloaded at the top of the plugins list.

Then you should see Teaching Codes at the right side bottom part of the screen, (shown in red circle in the image on page 5 with a red arrow). Click on it and you should see the login screen. You can login with the Teaching Codes information that has been sent to you from **communique@teaching.codes**

It is possible that you did not receive such an email, in which case you should contact the teaching assistants.




File Edit View Navigate Code Refactor Run Tools VCS Window Help pythonProject - main.py
pythonProject main.py
main
Project
pythonProject C:\Users\USER\PycharmProjects\pythonPro
venv library root
main.py
External Libraries
Scratches and Consoles
main.py
# This is a sample Python script.
# Press Shift+F10 to execute it or replace it with your code.
# Press Double Shift to search everywhere for classes, files, tool windows, actions, and settings.
def print_hi(name):
# Use a breakpoint in the code line below to debug your script.
print(f'Hi, {name}') # Press Ctrl+F8 to toggle the breakpoint.
# Press the green button in the gutter to run the script.
if __name__ == '__main__':
print_hi('PyCharm')
# See PyCharm help at https://www.jetbrains.com/help/pycharm/
Activate Windows
Go to Settings to activate Windows.
Problems
Python Packages
TODO
Terminal
Python Console
Event Log
Launching skeleton generator...
11:1 CRLF UTF-8 4 spaces Python 3.8 (pythonProject)