

Python Training Workstation Setup Guide

DataBank IMX

January 12, 2024



Setting Up Your Workstation for Python Development

Performing Python development requires a few components to be installed on your workstation. You can, of course, install whatever IDE you prefer, but I will be teaching the class using Visual Studio Code (the most popular IDE for Python development) and other convenience tools that you may find useful. If you want to set up your development environment similar to mine, the instructions below will walk you through the setup process. If you're following these steps, it is best to do them in the order presented.

Table of Contents

Prerequisites	3
Install Python	4
Customize Visual Studio Code.....	5
Create a Test Project in Python	6
Clone the Python Training Repository.....	8
Import Snippets (optional).....	12

Prerequisites

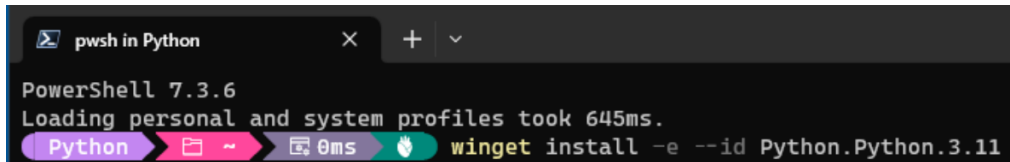
Prior to any of the steps listed below, please complete all tasks in the guide titled:

[Setting Up Your Workstation for Development Training.pdf](#)

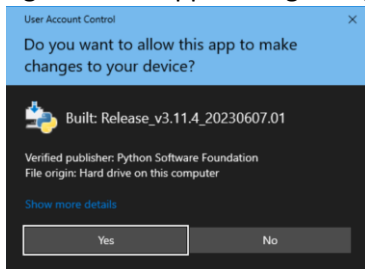
Install Python

Before we can write and execute Python, we need to install the Python interpreter itself. The current version of Python is v3.11. This is compatible with the code examples we'll use in the course.

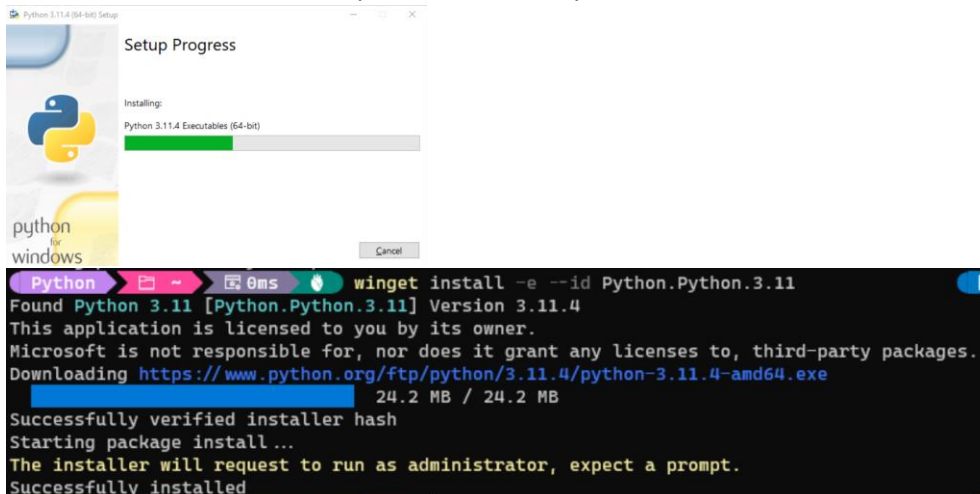
1. In the terminal, enter the following command
`winget install Python.Python.3.11`



2. Agree to the app making changes



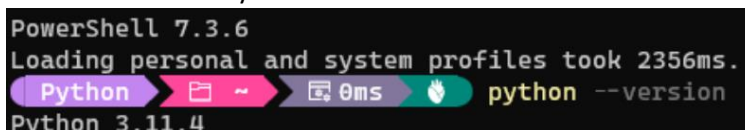
3. The installer will run and complete automatically



4. To verify that you have Python installed, enter the following in the terminal:

`python --version`

Note: You may need to reboot before this command will work



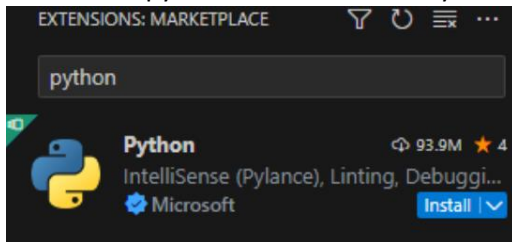
Customize Visual Studio Code

We need to set up VS Code and install a few add-ons before we're ready to start coding.

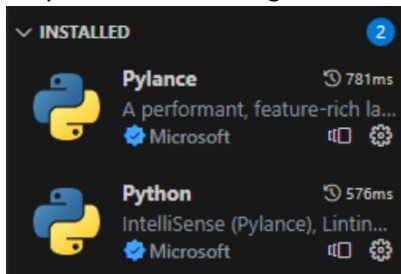
1. Click on the “extensions” icon on the sidebar



2. Search for “python” and install the Python extension

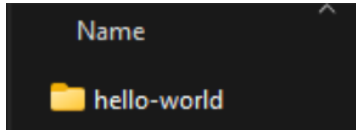


3. This also installs the Pylance component. You can install other add-ons if desired, but those are the only ones we need to get started with Python coding.

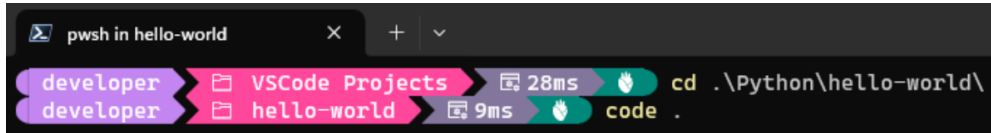


Create a Test Project in Python

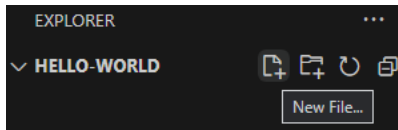
1. Create a folder Named “Python,” and in it, create a folder called “hello-world



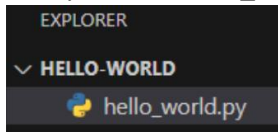
2. Navigate to the folder and open it in VS Code



3. Click on the “new file” icon in the explorer

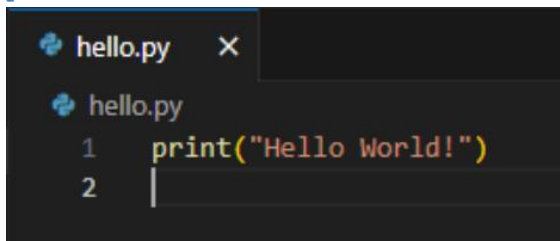


4. Title your file “hello_world.py”

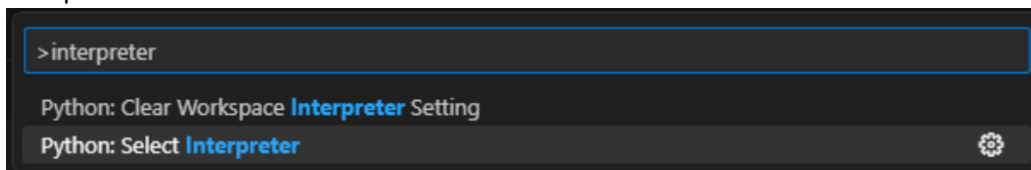


5. Enter the following code

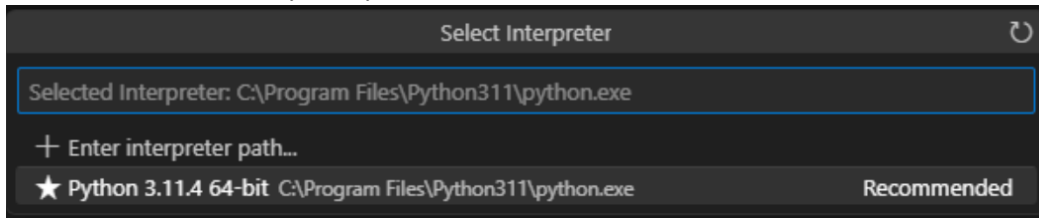
```
print("Hello World!")
```



6. Press [CTRL]+[SHIFT]+[P] to bring up the menu. Search for “interpreter” and choose “Python: Select Interpreter”



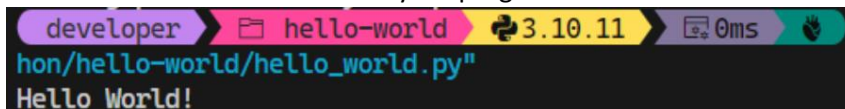
7. Choose the version of Python you installed earlier



8. Click the “Run” icon on the toolbar



9. The terminal will launch and run your program. You will see “Hello World!” in the terminal



Clone the Python Training Repository

Finally, you'll need to clone a copy of the repository to work with.

I have two different locations where this repository is stored.

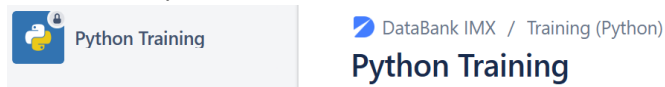
- Bitbucket: <https://bitbucket.org/databankimx/python-training>
- GitHub: <https://github.com/ZeroKlu/python-crash-course>

1. For access to either repository, email smclean@databankimx.com to request access.

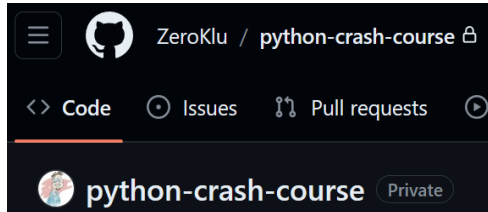
Be sure to indicate whether you need access to Bitbucket or GitHub and provide the username you use on the selected source control system.

2. In a browser, navigate to the repository you selected and make sure you have access.

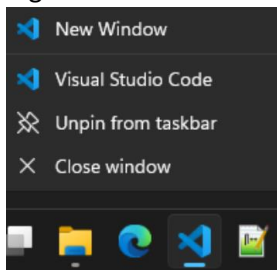
- a. In Bitbucket, you should see this:



- b. In GitHub, you should see this:



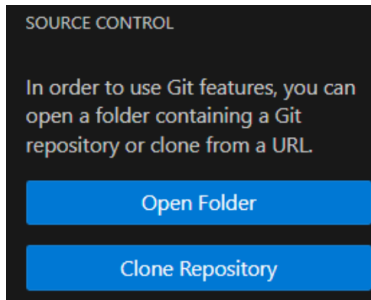
3. Right-click the VS Code icon and select “New Window” to open an empty VS Code instance



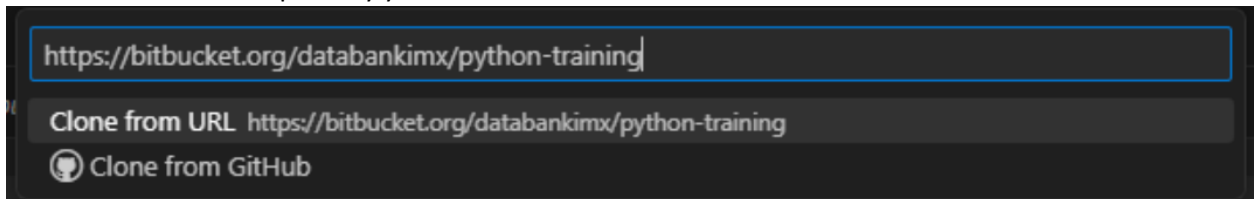
4. Click the Source Control icon on the sidebar



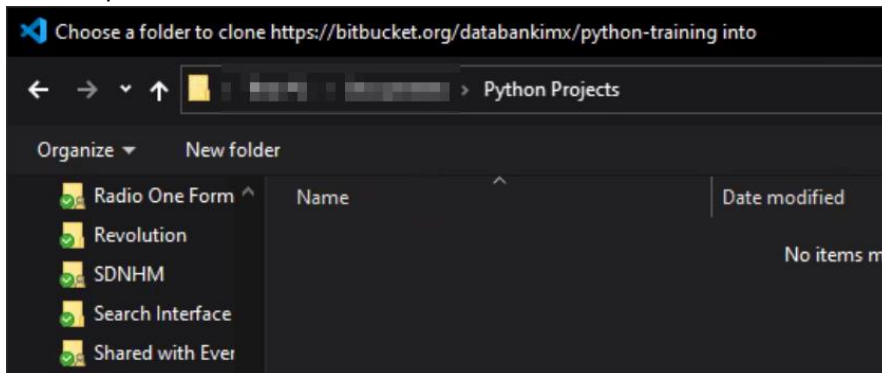
- Click the button labeled “Clone Repository”



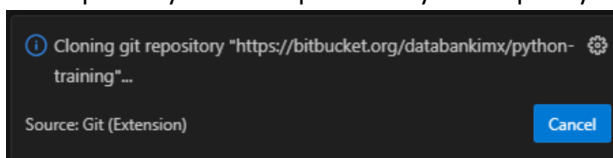
- Enter the URL to the repository you selected



- Select a path

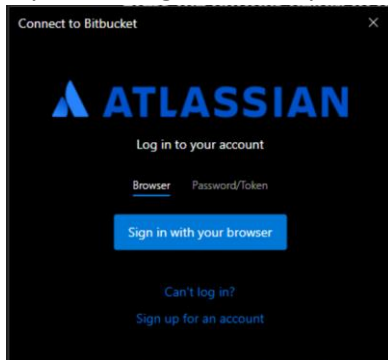


- The repository will be copied locally to the path you selected

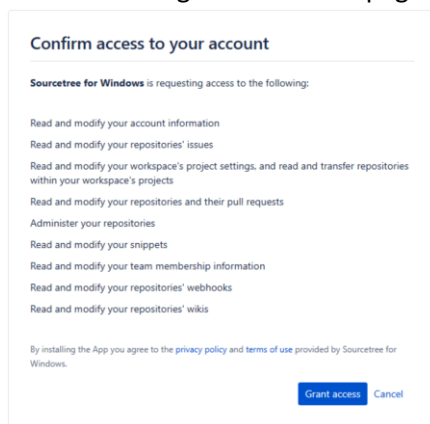


- If you are using GitHub, skip to step 13

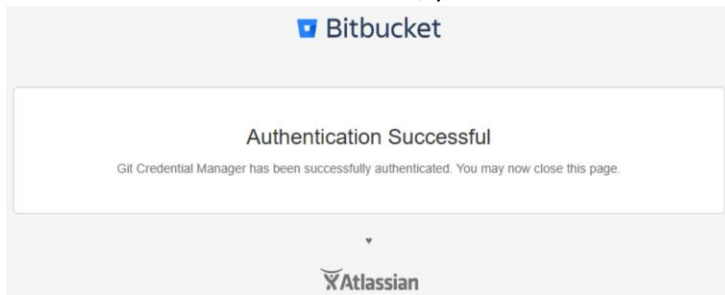
10. If you're using Bitbucket, you'll be prompted to log in again



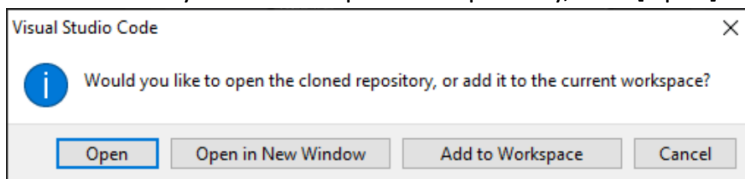
11. Grant access again in the web page that opens



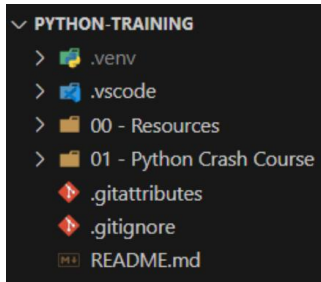
12. You'll see a success alert. After this, you can close the browser



13. When asked if you want to open the repository, click [Open]

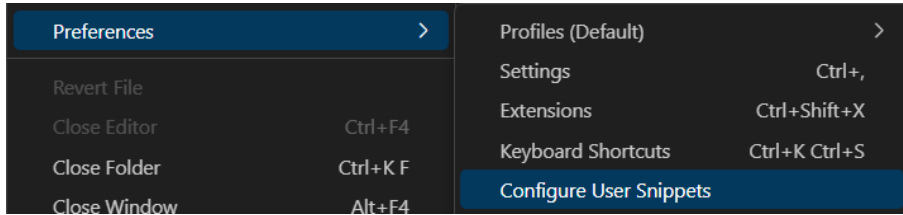


14. The repository will open, and you should see a number of folders containing sample code from the textbook (with samples and commentary from me).

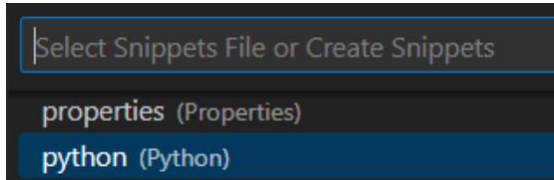


Import Snippets (optional)

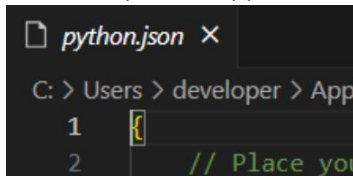
1. In VS Code, under the “File” menu, click on “Preferences” > “Configure User Snippets”



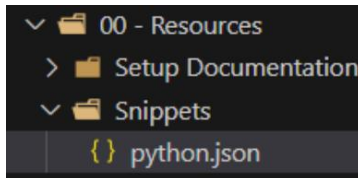
2. From the languages list, select “python”



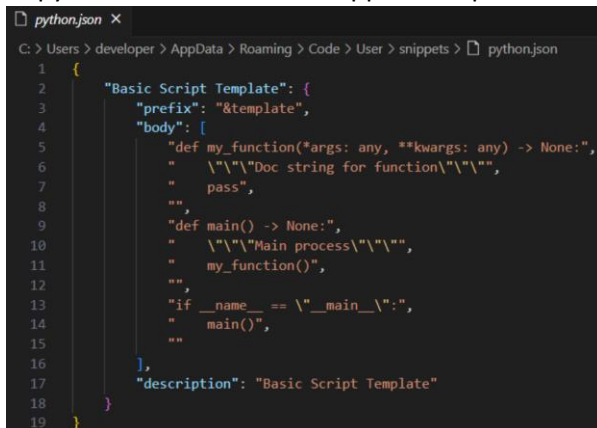
3. This will open a snippets file called python.json



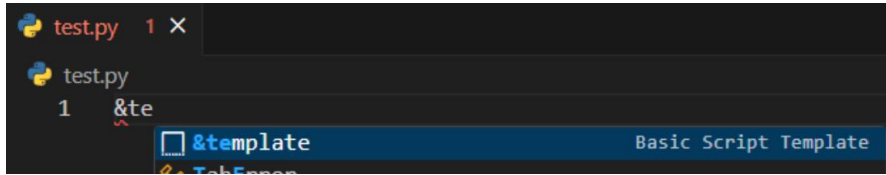
4. In the explorer pane, open the provided file “python.json”



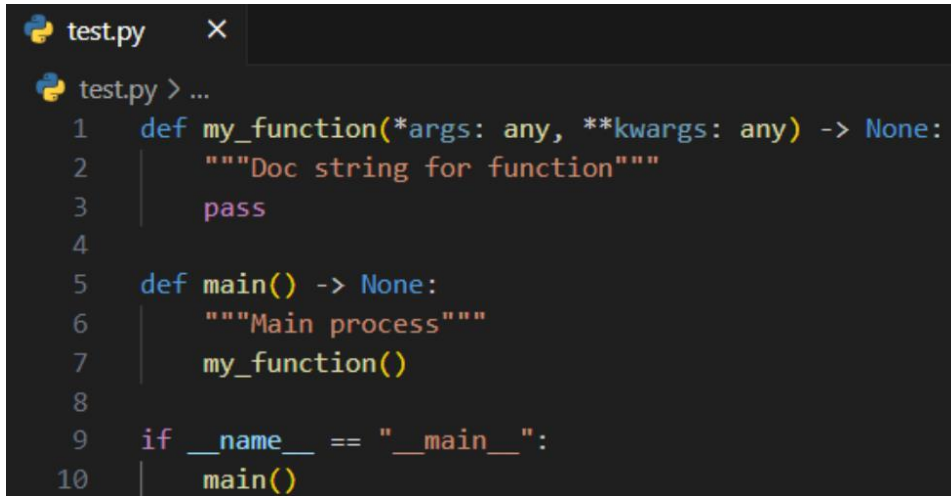
5. Copy the content into the snippet file opened in step 3, then save the file.



6. In any python file, you can now start typing “&template” and the snippet will be available.



7. Once you select the snippet, the following template code will be added to your file



Congratulations! Your system is set up for Python training.
Happy Coding!