

Setting up Python and Pygame

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What are Python and Pygame?

Python is a programming language.

Pygame is a code library that, once installed, can be imported into your Python projects to enable the creation of games.

Get the Right Versions of Python and Pygame

In principle, any version of Python can be made to work with Pygame. But in practice, it can be tricky.

To make things easier, I recommend you install on Windows using the files linked below. Use the default options for both installations.

- [python-3.2.5.msi](#) (alternate link [here](#))
- [pygame-1.9.2a0.win32-py3.2.msi](#) (alternate link [here](#))

Get a Better Development Environment

The Python installation comes with a very simple IDE (not much more than a text editor) called IDLE. It's not very good.

There are lots of other simple IDEs out there. After trying most of them, I recommend [Pyzo](#) for beginning students.

- [Download Pyzo](#) (windows)

When you run Pyzo, it will complain that it doesn't like your version of Python. Just ignore that, and do the following:

- Go to "Edit Shell Configurations" on the "Shell" menu
- Where it says "exe", choose the Python version you just installed (v. 3.2.5)
- Click "Done"

You should see a new window open. This is the "Python Shell". Now you're ready to go.

Verify your Installation

The zip file below contains two python programs. If you installed everything correctly, they should open automatically in Pyzo.

- [helloworlds.zip](#)

After opening these programs, hit Ctrl-E or Ctrl-Shift-E to run them and see what happens.

You should see a Hello World message appear in the shell for `hw.py` and in a pop-up window for `pygame_hw.py`.

There should be no red error message text in the shell.

What if Python and Pygame are already installed?

Some of you may have a school board computer with software already installed. This might work out just fine. Or it might be an issue.

To find out if your installation is OK, get the [helloworlds.zip](#) files and see what happens when you run them.

- If `pygame_hw.py` doesn't work, you probably don't have Pygame installed.
- If `hw.py` doesn't work, you probably have Python 2 instead of Python 3.
 - o To investigate further, remove the brackets from the print statement to see if it runs.
 - o If it does, you have Python 2.

If either of the two tests above gives you a bad result, you can install a portable version of Python and Pygame onto a USB stick. Read the next section.

What if I don't have Install Permissions?

If you don't have the right versions already installed (see section above) or if you can't install at all, you can install a portable version of Python (which includes a simple IDE called IDLE-Portable) to a private folder or a USB memory stick.

First, download the following file:

- [PortablePython 3.2.5.1.exe](#) (alternate link [here](#))

Then install it using the default options, but changing the location so that it installs to a folder in a location where you have permissions.

Now download the following file:

- [pygame-1.9.2a0.win32-py3.2.msi](#) (alternate link [here](#))

Install this file using all the default options. But you will get a window at some point showing an X beside pygame. Click the X and choose the install to hard drive option, then enter the full path to the folder containing PortablePython (you can cut and paste the path from Windows Explorer).

You will now see three folders: App, Lib, and Include

- Copy all files and folders in the **Include** folder into **App/include**
- Copy all files and folders in **Lib/site-packages** into **App/lib/site-packages**

Now run IDLE-Portable and type **import pygame** at the prompt. If you get the prompt back with no errors, you win!

Once everything is installed, you can move the entire folder to a USB memory stick if you need to.

Getting Help

Please send me a message if you're having trouble. To find my coordinates, go to <http://profsamscott.com/about.html>.