Hostos Community College

Hostos BMI TEAM – Python Boot camp

Winter 2020

Assignment #0

Due: January 6, 2019

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The first assignment is to install Python, Git and a text editor on your machine. You can go ahead and skip to the section that pertains to your operating system.

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Windows OS

Over the duration of this boot camp, we will be using Python 3.7.x. The instructor will also be using Windows as their main operating system, However, all code produced over the duration of this workshop is cross-platform and will work on any operating system granted that dependencies are installed.

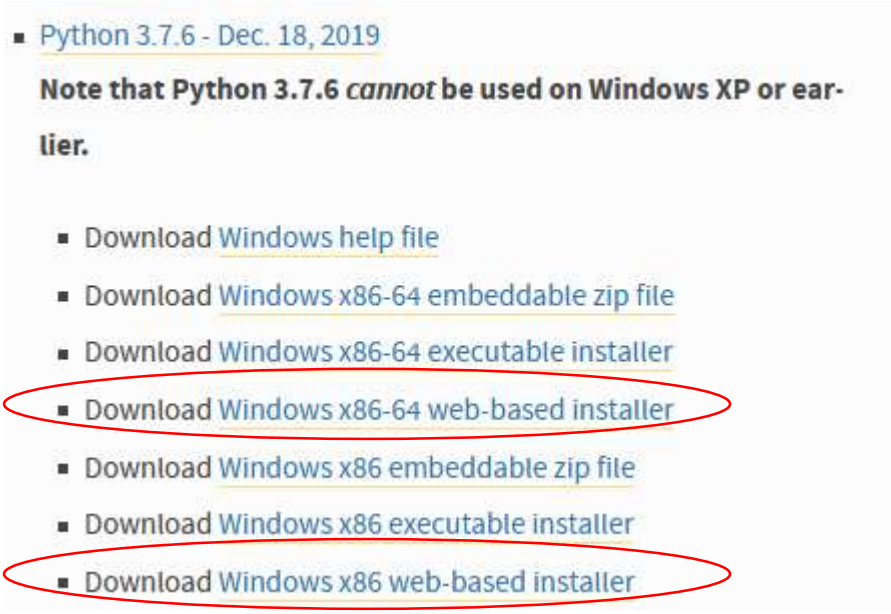
Requirements: Python requires that you have a windows operating system newer than windows XP. Windows 7, 8 and 10 (any edition of those) will work.

Python

Installing Python is quite easy to do.

Steps:

1. Visit the following link: https://www.python.org/downloads/windows/
2. Look for Python 3.7.6 (not 3.8.1) – we will discuss the reasons why!
3. If you are on a 64-bit machine – Download the **Windows x86-64 executable installer**
    a. NOTE: If you are on a 32-bit machine – **Download the Windows x86 executable installer**



    b. If you do not know if your machine is 64-bit or 32-bit, please follow the directions for your specific operating system here: https://www.computerhope.com/issues/ch001121.htm
4. Run the executable installer previously downloaded. When the prompt shows up – **DO NOT** click "Install Now".

5. Before installing, you **must** ensure that the option to "Add Python 3.7 to PATH" is checked off. Your installer should look like this:

6. If you have this option checked off, you may now click Install Now. You will be prompted to give the installer administrative rights. Click "Yes" to finish the installation.
7. When the installer is finished, there will be an option to disable MAX_PATH_LENGTH. Disable it, we will discuss the reasons why later!

Confirming the installation

Great! Now that the installer is done, we can confirm the successful installation by opening the **"Command Prompt".** You can do this by pressing going to the search bar on the taskbar and searching for **cmd.**

After the command prompt is open, we can simply type:

```
python --version
```

to confirm that we have successfully installed python. The output should look like:

```
C:\Users\Kelvin>python --version
Python 3.7.6
```

If you receive no output, don't fret! You can also start up python as such by typing: **python**

Your output should look similar to the following:

```
C:\Users\Kelvin>python
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

Over the duration of this course, we will be using the command prompt to run our Python code. As such, we will be going over some of the basic commands across all the operating systems as we go along. However, if you've programmed with Python before and prefer to use an IDE, both will produce the same results.

Git

Over the duration of the course, we will be using Git for assignments. We will have a full length discussion on what Git (and any version control software) is and the vital role it plays in any type of software development.

Just to have consensus within the students, we will also be using GitHub to host our projects and assignments throughput the duration. So if you don't have a GitHub account, please follow this link: https://github.com/ and make a GitHub account.

Steps

1. To get Git for windows click the download button from this link: https://gitforwindows.org/
2. The whole installation process can be quite confusing but luckily you can keep all the default parameters.
3. After the installer is finished, we will continue the discussion in class!

Installing a Text Editor

Finally, the last piece of software that you'll need for this boot camp is a text editor! You can use any text editor but here are some suggestions that have syntax highlighting and autocomplete features. We won't be using their full functionalities throughout the boot camp but you can always learn more about them later.

List of text editors (no particular order)

- Sublime Text 3 - https://www.sublimetext.com/3
- Atom - https://atom.io/
- Visual Studio Code (VSCode) - https://code.visualstudio.com/
- Notepad Plus Plus - https://notepad-plus-plus.org/

Over the course of the boot camp, I'll (most likely) be using Atom text editor.

MacOS

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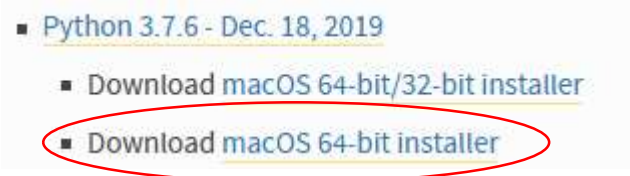
Python

Steps

1. You can open a terminal by using the search and typing in: Terminal. Check that python3 is not installed by typing: **`python3 --version`**
    a. The output should prompt either your current version of python (if it is python 3.7 and above, you may skip the rest of the following steps) or it should say:
    -bash: python3: command not found
    b. If you have an error pertaining to xcode command line tools – please type the following command to install command line tools: **`xcode-select --install`**
2. If you don't have python 3 installed, go to the following link: https://www.python.org/downloads/mac-osx/ and look for python 3.7.6



    a. Click on the macOS 64-bit installer
3. After downloading the installer, go ahead and run it. You can keep the defaults and read through the license agreement if you wish.
4. After the installer is finished, you can ensure that python is installed by typing the following commands into terminal.
    a. **`python3 --version`**

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Git should already be installed on macOS by default. You can confirm this by typing this command into the terminal:

`git --version`

If you receive an output, you're good to go! You may skip the rest of the steps blow!

Steps to Installing Git

1. Go to the following link: https://git-scm.com/downloads
2. Click on the mac OS X
3. Follow the on screen instructions then close your terminal. Open your terminal again and type: **`git --version`** to confirm your download.

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Linux

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Python

If you're using a Debian-flavored distribution like Ubuntu or Mint, we can use the deadsnakes-ppa to install the newest version of Python 3.7. Type the following commands:

```
$ sudo add-apt-repository ppa:deadsnakes/ppa
$ sudo apt-get update
$ sudo apt-get install python3.7
```

Git

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Git is also relatively easy to install on Linux, you can simply type the following commands

```
$ sudo add-get update
$ sudo apt-get install git
```

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