Contents

Installation Checklist

All laptops must have the following installed:

- ☐ **Mac and Windows:**
  - ☐ Firefox or Chrome (please make sure you install the most up-to-date version)
  - ☐ Scratch 3.0
    - ☐ Offline editor: https://scratch.mit.edu/download
  - ☐ Arduino IDE (for robots)
    - ☐ Offline editor: https://www.arduino.cc/en/Main/Software
      (Skip "Contribute & Download" section and click "Just Download")
  - ☐ Atom
    - ☐ Text editor: https://atom.io/
- ☐ **Windows only:**
  - ☐ Visual C++ 2015 Build Tools
    - ☐ Tools:
      https://www.microsoft.com/en-us/download/details.aspx?id=48159
    - ☐ Instructions:
      https://blogs.msdn.microsoft.com/vcblog/2016/03/31/announcing-the-official-release-of-the-visual-c-build-tools-2015/
  - ☐ (If the above doesn't work) Visual C++ 2017 Build Tools
    https://wiki.python.org/moin/WindowsCompilers#Microsoft_Visual_C.2B-.2B-_14.0_with_Visual_Studio_2017_.28x86.2C_x64.2C_ARM.2C_ARM64.29

The remainder of this document will help you install the following:

- ☐ Git
- ☐ Python 3
- ☐ The following Python libraries:
  - ☐ Pillow 6.0.0
  - ☐ TextBlob 0.15.2
  - ☐ Word_cloud 1.3.1
  - ☐ Matplotlib 3.0.3

Mac Install Instructions

1. Open Terminal and install Homebrew. Instructions: http://brew.sh/
2. Use Homebrew to install Git:
   ```
   $ brew install git
   ```
3. Install Python 2 and additional packages like PIP (Only enter the text **after** the $ sign!):
   ```
   $ brew install python
   ```
4. Install Python 3:
   ```
   $ brew install python3
   ```
5. Update PIP to make sure you're running the latest version:
   ```
   $ pip3 install --upgrade pip
   ```
6. Use PIP to install Pillow:
   ```
   $ pip3 install Pillow==6.0.0
   ```
7. Use PIP to install TextBlob:
   ```
   $ pip3 install textblob==0.15.2
   ```
8. Use PIP to install word_cloud (if you get stuck, refer to the original install instructions):
   ```
   $ pip3 install wordcloud==1.3.1
   ```
9. Use PIP to install Matplotlib (if you get stuck, refer to the original install instructions):
   ```
   $ pip3 install matplotlib==3.0.3
   ```

Continue reading for Windows install instructions and testing instructions.

Windows Install Instructions

1. For Python 3.6, download the following:
   a. Select Windows x86-64 installer if you have a **64-bit** computer.
   b. Select Windows x86 installer if you have a **32-bit** computer.
2. Install Python 3.6. Make sure to do the following:
   a. Choose the Destination directory to be C:\Python36\. It should automatically give that option. If not change the destination directory to C:\Python36\.
   b. In the Python 3.6 prompt select the the box marked "**Add Python 3.6 to PATH**". This will ensure that command prompt can be used to run Python.
3. Open Command Prompt by typing "cmd" in the Windows search box.
   a. Right-click the Command Prompt application and selecting "**Run as administrator.**"
4. Install Pillow by entering the following command (Only enter the text **after** the > sign!):
   ```
   > pip install Pillow==6.0.0
   ```
5. Install TextBlob by entering the following command in the command prompt:
   ```
   > pip install textblob==0.15.2
   ```
6. Install word_cloud by entering the following command in the command prompt:
   ```
   > pip install wordcloud==1.3.1
   ```
7. Install Matplotlib by entering the following command in the command prompt:
   ```
   > pip install matplotlib==3.0.3
   ```
8. Install Git for Windows.
   a. Destination Location should be in C:\ProgramsFiles\Git.
   b. When the dialog box **"Adjusting your PATH environment"** pops up, select:
      i. "Use Git from the Windows Command Prompt" option.
   c. When the dialog box "**Configuring the line ending conversation**" pops up, select:
      i. "Checkout Windows-style, commit Unix-style line endings."
   d. When the dialog box **"Configuring the terminal emulator to use with Git Bash"** pops up, select:
      i. "Windows default console window."
   e. Select 64-bit Git for Windows Set-up for **64-bit**.
   f. Select 32-bit Git for Windows Set-up for **32-bit**.

Testing Your Install: For Mac and Windows Users

1. Do the following based on the OS you have:
    *   **Windows** - Go to the Windows search box. Type in "cmd" and press enter to open up the command prompt.
    *   **Mac** - Go to spotlight search. Type in "terminal" and press enter to open up the Terminal.
2. Once command line is opened (Terminal for Mac and Command Prompt for Windows), enter the following command (Enter the following command):
    ```
    git
    ```
    The output should be a git menu containing commonly used commands in git.
3. Do the following, based on the OS you have. If Python was installed properly the Python interpreter should open up.
    *   Windows - Enter the following command. Note: Windows users may have to restart computers for command prompt to recognize the command (Enter the following command):
        ```
        python
        ```
    *   Mac - Enter the following command (Enter the following command):
        ```
        python3
        ```
4. Enter the following (Only enter the text **AFTER** the >> sign):
    ```
    >> import PIL
    ```
    If installed correctly the output should be:
    ```
    >>
    ```
5. Enter the following command (Only enter the text **AFTER** the >> sign):
    ```
    >> import textblob
    ```
    If installed correctly the output should be:
    ```
    >>
    ```
6. Enter the following command (Only enter the text **AFTER** the >> sign):
    ```
    >> import wordcloud
    ```
    If installed correctly the output should be:
    ```
    >>
    ```
7. Enter the following command (Only enter the text **AFTER** the >> sign):
    ```
    >> import matplotlib
    ```
    If installed correctly the output should be:
    ```
    >>
    ```
8. If everything is installed correctly, you should have no issues with any of the above steps. Congrats!