Installation Document

The Gender Classifier Web Application

Compiled by :

1. Saurabh Jadhav
2. Vaibhav Dond
3. Omkar Gawali
4. Mangesh Bhise

Contents

1. Introduction
    1.1. Purpose
    1.2. How to Use this Document
2. Software Installation
    2.1. Python Installation on Windows
    2.2. Install Sublime Text
    2.3. Install Numpy
    2.4. Install pip
    2.5. Install SciPy
    2.6. Install Sklearn
3. Test Installation

1. Introduction

1.1. Purpose

This document describes all the installation process required for the gender classifier web application starting from scratch. This document covers all aspect of its installation including all various softwares needed, and how to deploy the web services in your machine.

1.2. How to Use This Document

When installing the Software from scratch, all software are compulsory . Readers are encouraged to follow the steps specified below step by step.

2. Software Installation

2.1. Installing Python on Windows :

Installing and using Python on Windows 10 is very simple. The installation procedure involves just three steps:

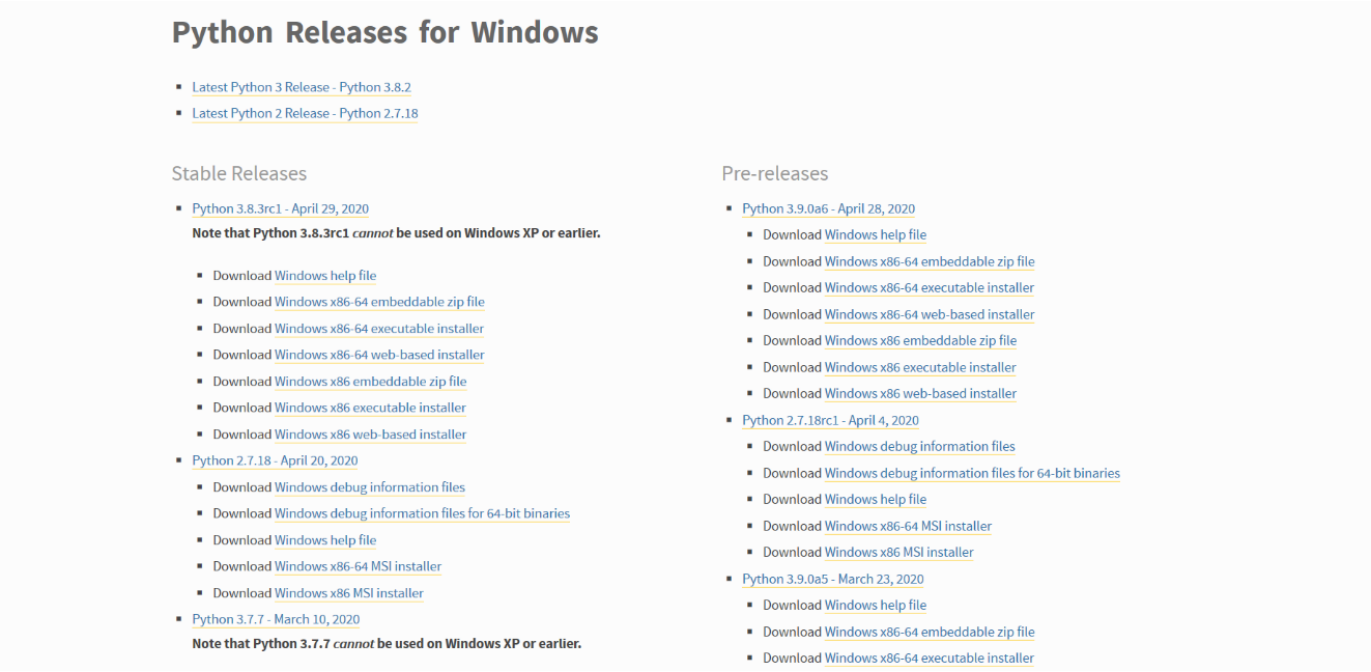
1. Download the binaries
2. Run the Executable installer
3. Add Python to PATH environmental variables
4. Verify the Python Installation

To install Python, you need to download the official Python executable installer. Next, you need to run this installer and complete the installation steps. Finally, you can configure the PATH variable to use python from the command line.

You can choose the version of Python you wish to install. It is recommended to install the latest version of Python, which is 3.7.3 at the time of writing this article.

Step 1 – Download the Python Installer binaries

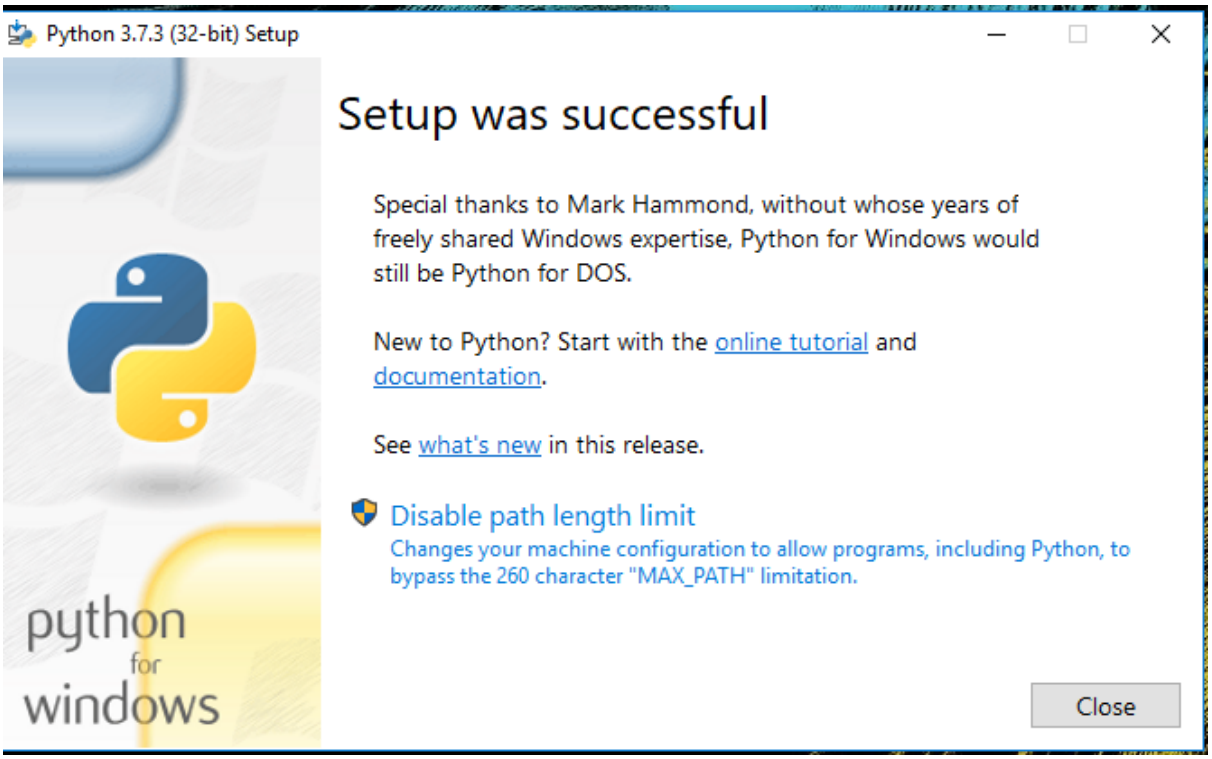
1. Open the **official Python website** in your web browser. Navigate to the Downloads tab for Windows.
2. Choose the latest Python 3 release. In our example, we choose the latest Python 3.7.3 version.
3. Click on the link to download **Windows x86 executable installer** if you are using a 32-bit installer. In case your Windows installation is a 64-bit system, then download **Windows x86-64 executable installer**.



Step 2 – Run the Executable Installer

1. Once the installer is downloaded, run the Python installer.
2. Check the **Install launcher for all users** check box. Further, you may check the **Add Python 3.7 to path** check box to include the interpreter in the execution path.

3. Select Customize Installation.
4. Once the installation is over, you will see a **Python Setup Successful** window.



Step 3 – Add Python to environmental variables

The last step in the installation process is to add Python Path to the System Environment variables. This step is done to access Python through the command line. In case you have added Python to environment variables while setting the Advanced options during the installation procedure, you can avoid this step. Else, this step is done manually as follows.

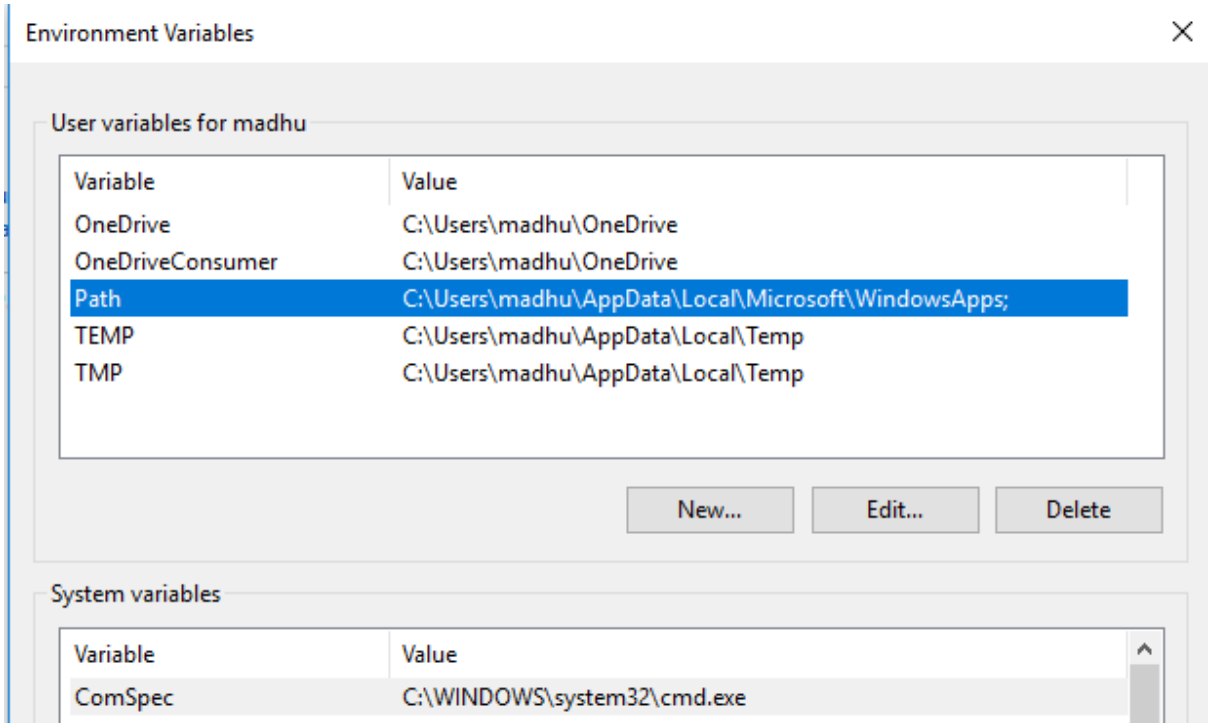
In the Start menu, search for “advanced system settings”. Select “View advanced system settings”. In the “System Properties” window, click on the “Advanced” tab and then click on the “Environment Variables” button.

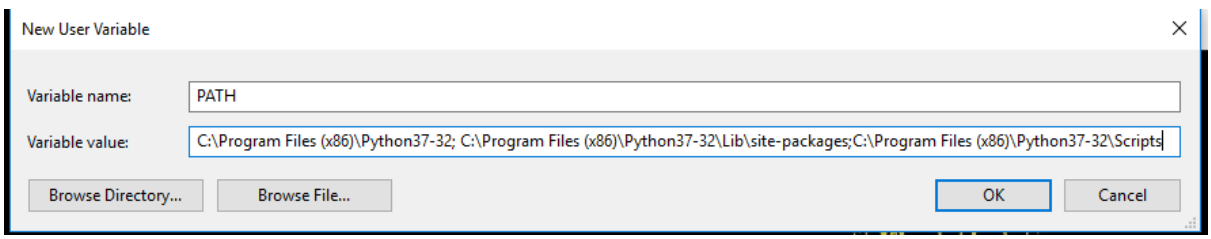
Locate the Python installation directory on your system. If you followed the steps exactly as above, python will be installed in below locations:

- C:\Program Files (x86)\Python37-32: for 32-bit installation
- C:\Program Files\Python37-32: for 64-bit installation

The folder name may be different from “Python37-32” if you installed a different version. Look for a folder whose name starts with Python.

Append the following entries to PATH variable as shown below:

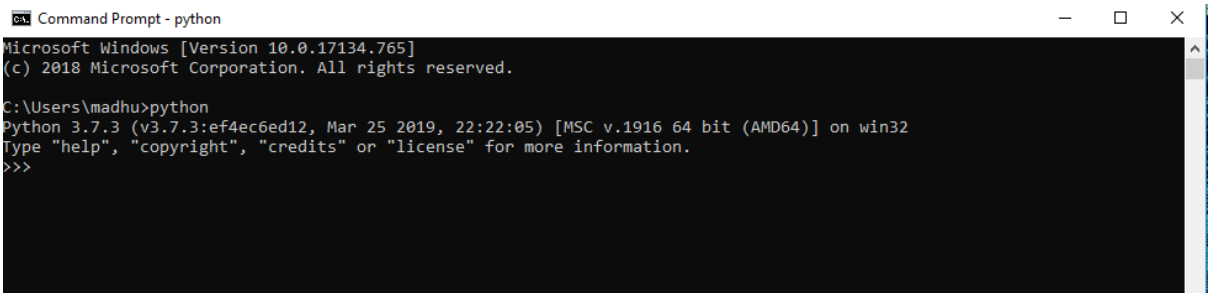




Step 4 – Add Python to environmental variables

You have now successfully installed Python 3.7.3 on Windows 10. You can verify if the Python installation is successful either through the command line or through the IDLE app that gets installed along with the installation.

Search for the command prompt and type “python”. You can see that Python 3.7.3 is successfully installed.



2.2. Installing Sublime Text :

Sublime Text is a light weight text editor but has a bunch of features just close Close to an IDE. Besides, it’s free to download and install on your computer.

The way you install Sublime text depend upon your Operating system.

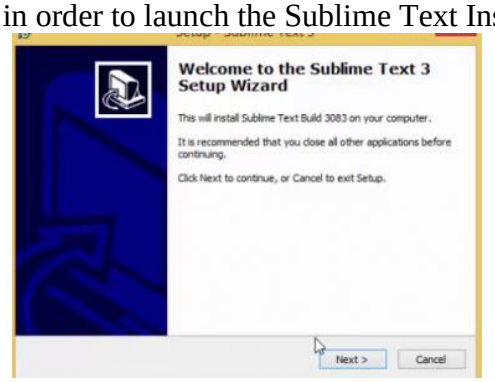
To download and install Sublime Text first you need to download the Sublime Text installer for Windows from the Sublime Text 3 official website.

Download the version of Sublime Text appropriate for the version of Windows you're running. If you are running Windows 64-bit then you will need to download the 64-bit installer, otherwise you will just download the Windows(32-bit) Installer.

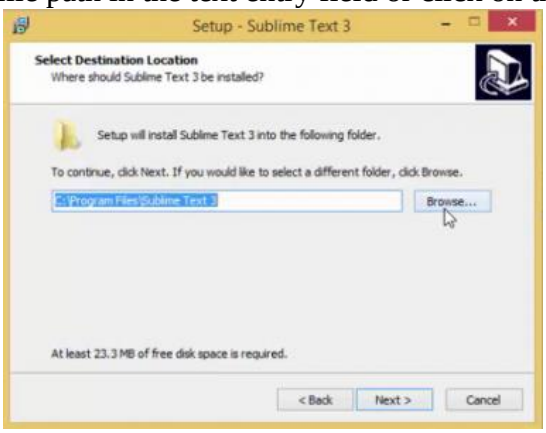
Once you click on the download link, the dialog below will appear. Click on Save File to download and save the installer to your local drive.

Once the download is complete, right click on the file name in the browser Downloads window and then click on Open Containing Folder to open the folder where the installer was saved.

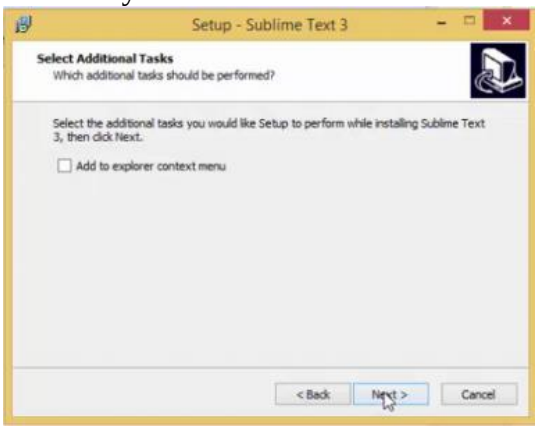
Double click the setup file in order to launch the Sublime Text Installer .



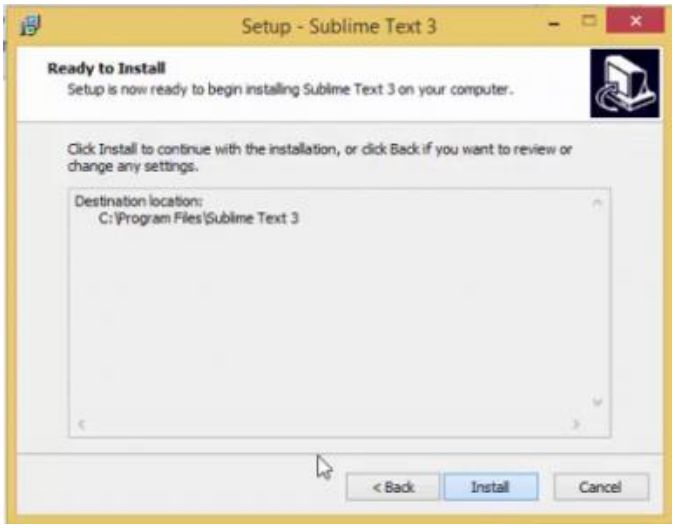
Click on Next to move the the next step of the installation. In the next step you can choose the directory where you want sublime text to be installed. The default directory for sublime text is Local Drive C. However, if you desire to have sublime text installed in a different directory you can specify the file path in the text entry field or click on the file browser to select a folder.



After specifying the installation directory click on the Next button in order to advance to the next step of the installation.



Leave the checkbox unchecked and click Next to move to the next step of the installation process for sublime text.



Sublime Text in now ready to install. Click on Install to start installing Sublime Text 3 locally on your computer.

Depending on the processing power and memory of your computer, sublime text might take a few seconds to a few minutes to install. Once the installation is complete, click on the Finish button.

Sublime Text should now have been installed in your computer. In order to launch and use your sublime text, Tap the Windows key and then use the Windows Search bar to search for the launcher. Type sublime text in the text input field. Once the Sublime Text 3 launcher appears, click on the name to launch sublime text.

Sublime Text is now successfully installed on your Windows computer.

2.3. Install NumPy :

Assumptions (What I expect to already be installed):

- Python latest version
- Pip installed (If it is not already installed, download and install pip: https://pip.pypa.io/en/stable/installing/)

NumPy is a powerful library for Python that contains advanced numerical capabilities.

Install NumPy by downloading the correct installer using the link provided above (http://sourceforge.net/projects/numpy/files/NumPy/1.10.2/) then run the installer.

NOTE: There are a few installers based on your OS version AND the version of Python you have. It is important that you find the right installer for your OS and Python version!

2.4. Install pip :

Pip is a package manager specifically for Python. It comes in handy so much that I highly recommend that you install it to help manage python packages.
Go to the link provided above (https://pip.pypa.io/en/stable/installing/).

The easiest way to install pip on **Windows** is by using the 'get_pip.py' script and then running it in your command line:

python get_pip.py

2.5. Install SciPy :

On Windows use :

pip install scipy

Download the SciPy installer using the link provided above (http://sourceforge.net/projects/scipy/files/scipy/0.16.1/) and run it.

NOTE: There are a few installers based on your OS version AND the version of Python you have. It is important that you find the right installer for your OS and Python version!

2.6. Install Scikit-Learn :

Scikit-learn is a great data mining library for Python. It provides a powerful array of tools to classify, cluster, reduce, select, and so much more. I first encountered scikit-learn when I was developing prototypes for my first business venture. I wanted to use something that was easy and powerful. Scikit-learn was just that tool.

On windows use :

pip install sklearn

3. Test Installation

If you want to check that every thing is installled correctly.

Open Command Prompt and type python –version

Similarly to check other libraries type its name followed by "—version"