Project Template: Getting Started

In this guide we will:

1. Install Python
2. Install Flask
3. Open the Command Prompt
4. Create a new Flask project
5. Review example code

[Please note screenshots will be from a Windows computer.]

Step 1: Install Python

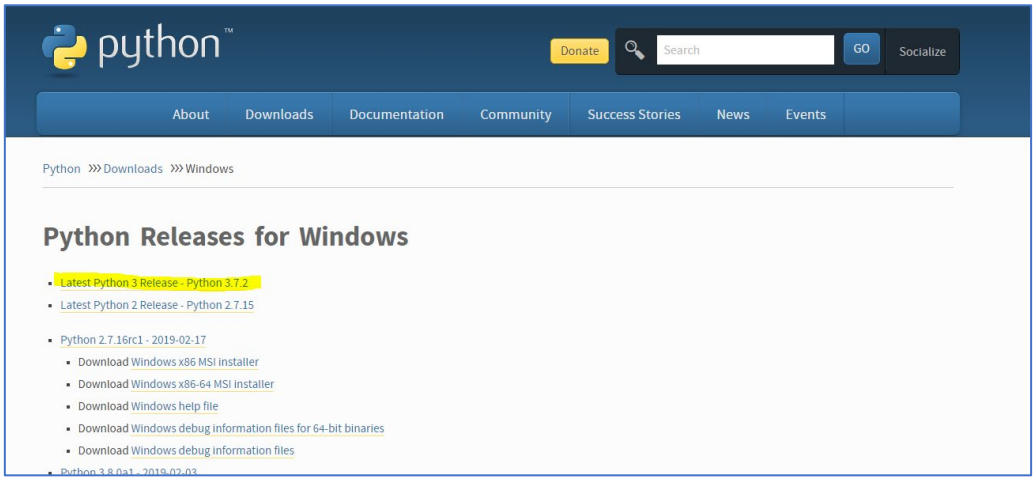
1. Choose the relevant link below to install **version 3.7.2.**

General link:

https://www.python.org/downloads/

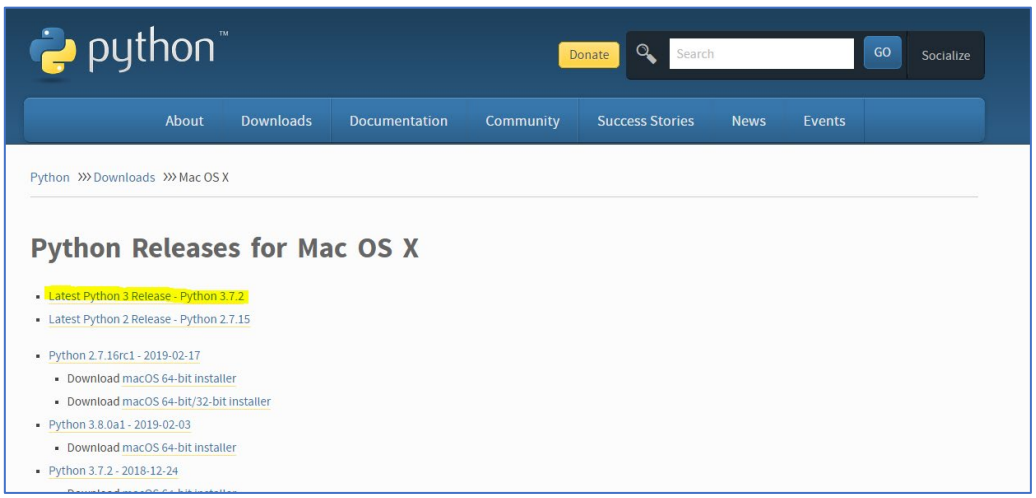
For Windows:

https://www.python.org/downloads/windows/



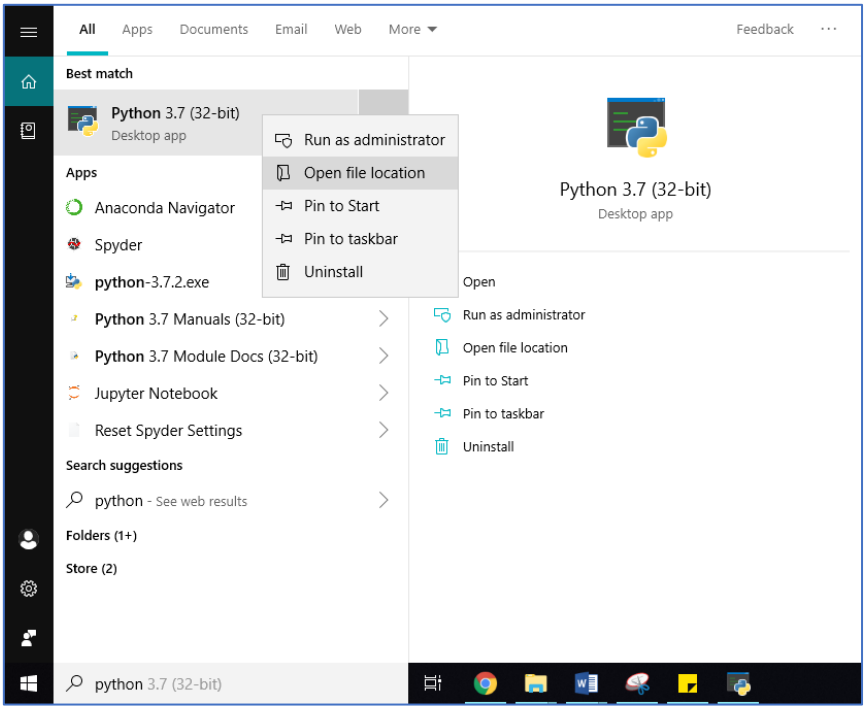
For Mac:

https://www.python.org/downloads/mac-osx/



1. Open the downloaded .exe file and you should arrive at the following screen. Click ‘Install Now’.

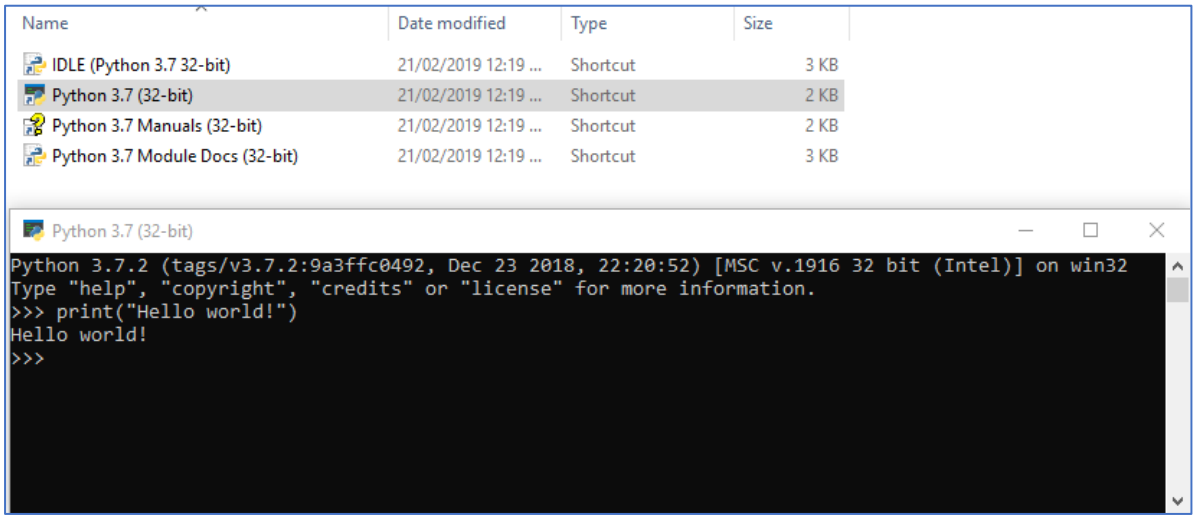
Check python is installed by first navigating to the folder where python is located. I did this by searching for Python with the search tool and opening the file location.



2. Open ‘Python 3.7’ and type in:

```
print("Hello world!")
```

Your output should match with the image below. If you do not receive the correct output, something has likely gone wrong with the Python installation.



Step 2: Open the Command Prompt

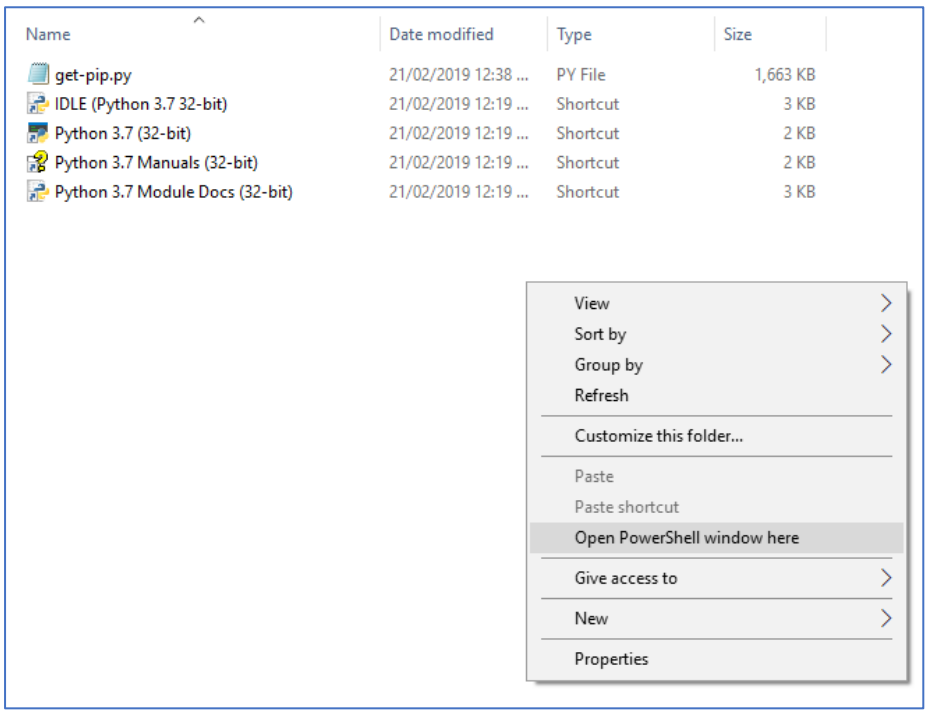
It is important you can open the command prompt on your device. Please follow the instructions below to test you are able to do so.

For Windows:

For windows devices, the command prompt is known as Windows PowerShell.

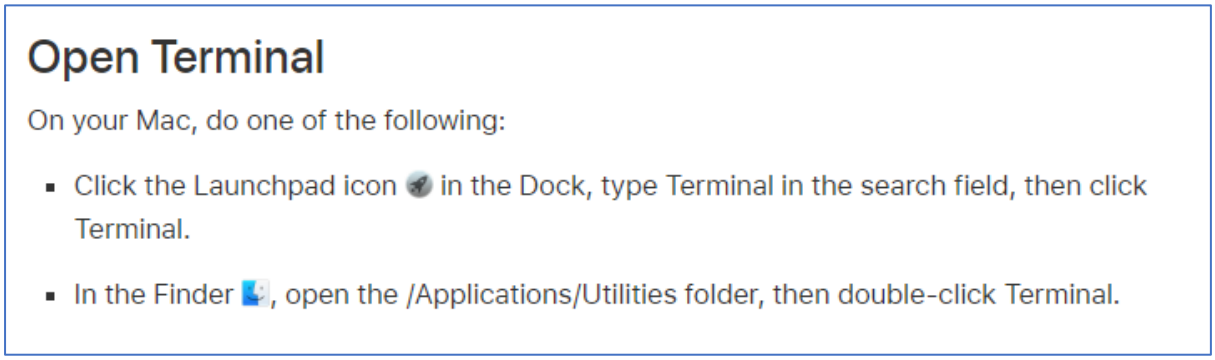
Instructions:

1. Navigate to the folder you are looking for in File Explorer.
2. Holding down shift and then right-click.
3. Click on 'Open PowerShell window here'.



For Mac:

https://support.apple.com/en-au/guide/terminal/open-or-quit-terminal-apd5265185d-f365-44cb-8b09-71a064a42125/mac



Step 3: Install Flask

http://flask.pocoo.org/docs/1.0/installation/#install-flask

1. Before you can install **Flask**, you will need to make sure that **pip** is installed. The newest python versions should install with this automatically, however, if you need to manually install it then follow the instructions from the link below.

   https://pip.pypa.io/en/stable/installing/

Check you have installed pip by running:

*For mac users, 'command line' = 'terminal'

Command line:	pip --version
Windows PowerShell:	py -m pip –version

Your output should be the version details:

```
PS C:\Users\Anastasia\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Python 3.7> py -m pip --version
pip 19.0.3 from C:\Users\Anastasia\AppData\Local\Programs\Python\Python37-32\lib\site-packages\pip (python 3.7)
PS C:\Users\Anastasia\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Python 3.7>
```

2. Next, we will install **Flask**. In the command prompt use the relevant command.

Command line:	pip install Flask
Windows PowerShell:	py -m pip install Flask

If package should be installed into non-default "python3.8 -m pip install Flask"

Check you have installed Flask by running:

Command line:	flask --version
Windows PowerShell:	py -m flask --version

Your output should be the version details:

```
PS C:\Users\Anastasia\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Python 3.7> py -m flask --version
Flask 1.0.2
Python 3.7.2 (tags/v3.7.2:9a3ffc0492, Dec 23 2018, 22:20:52) [MSC v.1916 32 bit (Intel)]
PS C:\Users\Anastasia\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Python 3.7>
```

3. Finally, we will install **flask_wtf.** In the command prompt use the relevant command.

Command line:	pip install flask_wtf
Windows PowerShell:	py -m pip install flask_wtf

Step 4: Create a new Flask project

1. Create a project folder called ‘myproject’ and place the provided file, ‘flaskblog.py’, within this folder.
2. Use an IDE to open your folder ‘myproject'.

I have chosen to use Visual Studio Code (VS Code), but there are many others available for writing Python applications.

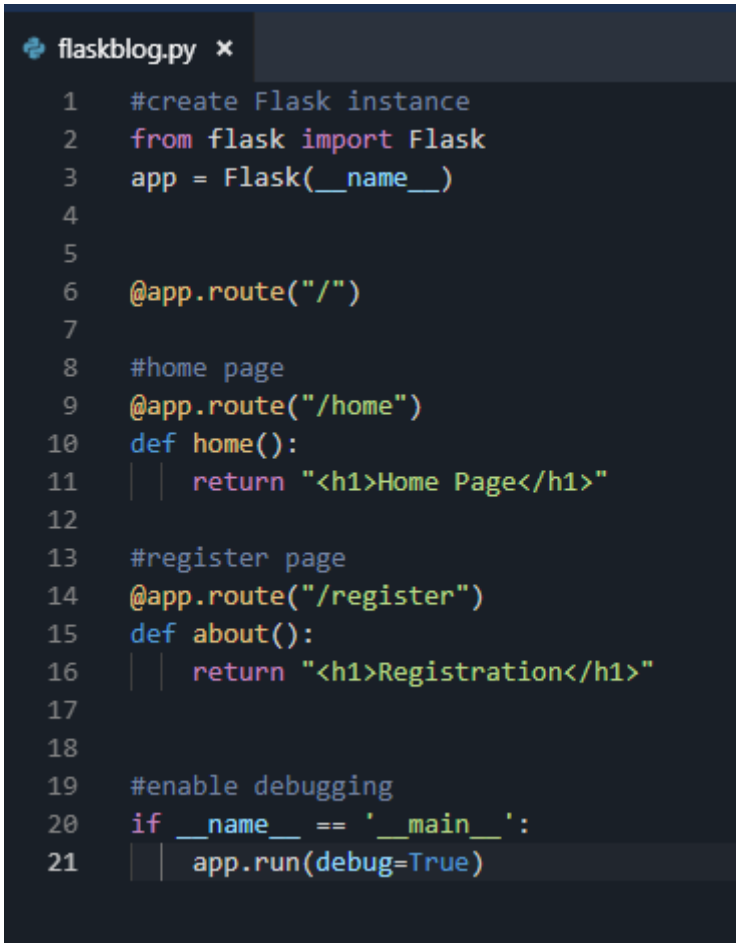
To get Python up and running on VS Code following the instructions in the following link:

https://code.visualstudio.com/docs/python/python-tutorial

Navigate to the sections ‘Prerequisites’ and ‘Select a Python interpreter’ and follow the instructions.

3. Ensure you can view the contents of ‘flaskblog.py’.

   The file contents should look like the following (colours and layout may differ depending on your chosen IDE):



4. Run the file.
   In VS Code you can right-click the code and select ‘Run Python File in Terminal’.

   Your output should be similar to the following:

```
/Programs/Python/Python37-32/python.exe "c:/Users/Anastasia/Google Drive/2019_SEM 1/INFS7901/myproje
ct/flaskblog.py"
 * Serving Flask app "flaskblog" (lazy loading)
 * Environment: production
   WARNING: Do not use the development server in a production environment.
   Use a production WSGI server instead.
 * Debug mode: on
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 910-011-960
 * Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

5. Check the application is running using the provided link.

Your webpage should look like this:

Observe that adding ‘/home’ or ‘/register’ to the end of the URL will change the heading.

Step 5: Review example code

The provided code performs three main functions:

- Create Flask instance.
- Routing (adds pages, i.e. home and register).
- Enabling debug mode.

Review the code to understand how this functionality has been added.