Python-Flask SW Installation Instructions For Windows

Markus Veijola

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Installation Instructions

* Download the Python installation file (.msi) from this Python3.4.3
* At the moment of writing this document the latest version is 3.4.3
* After download just start the installation wizard ” python-3.4.3.msi) (from downlaods folder) and follow the instructions.
* After installation the python is installed in C:\Python34 if you did not change anything during installation.

Installation Instructions

* Next you need to add few paths in PATH variable in windows environment.
* The paths you need to include are
  * C:\Python34
  * C:\Python34\Scripts
* To do this open start menu. Select Control Panel ->System and Security->System->Advanced System Settings
* From opened windows press ”Environment Variables” button.
* Select ”PATH” environment variable from upper window and press edit. Go end of the line and append previously mentioned paths there separeated by ”;”.

Installation Instructions

* Open command prompt and try following commands:
  * python –version
  * pip –version
* If you get version number after both command the Python environment is installed correctly in to your system.
* Next create a virtual environment for you projects (this means that modules etc. Are not installed system wide and you get yuor own sandbox for your project)
* To create virtual environment create a working directory fot your project i.e. **C:\Python_codes\my_first_project**.
* Open CMD in your working directory. Execute next command:
  * **python –m venv flask**
* Above command creates a private version of your Python interpreter inside a folder named flask

Activate Vitrualenv

* Next thing to do is to activate the created virtual environment.
* From CMD execute next command:

  flask\Scripts\activate

Installing Flask Modules

* Next you need to install the needed Flask modules. In this training we need several modules to be installed. To do this open command prompt in your working directory Scripts folder i.e. **C:\Python_codes\my_firts_project\flask\Scripts**
* Execute next commands in this folder:
  * pip install flask
  * pip install flask-login
  * pip install flask-openid
  * pip install flask-mail
  * pip install flask-sqlalchemy
  * pip install sqlalchemy-migrate
  * pip install flask-whooshalchemy
  * pip install flask-wtf
  * pip install flask-babel
  * pip install guess_language
  * pip install flipflop
  * pip install coverage

Installing Flask Modules

* Go to root of your working directory i.e. in our example C:\Python_codes\my_first_project.
* Inside a root directory create next kind of folder structure:
* my_first_project
  * app
  * app\static
  * app\templates
  * tmp
  * flask (this was created previously as virtual env)

Installing Flask Modules

* Go to the **app** folder and append **__init__.py** file in this directory.
* Files named __init__.py are used to mark directories on disk as Python package directories and are usually empty files.
* This file ensures that you can import .py files as modules in subdirectories etc. in your project. For example if you have next kind of structure… :
  * C:\my_project\app__init__.py
  * C:\my_project\app\nice_module.py
* …makes possible to import nice_module.py in other python files as follow:

```
import app.nice_module
#or
from app import nice_module
```

* If you remove the __init__.py file, Python will no longer look for submodules inside that directory, so attempts to import the module will fail.

Installing Flask Modules

* Now append next code in your __init__.py file (NOTE the file name has two underscores!!!!):

```
from flask import Flask

app = Flask(__name__)
from app import views
```

Installing Flask Modules

* Next create a file named **views.py** inside the **app** folder and apend next code there:

```
from app import app

@app.route('/')
def root():
return "Hello, World!"
```

Installing Flask Modules

* The final step to have a fully working web application is to create a script that starts up the development web server with our application.
* Let's call this script run.py, and put it in the root folder and fill it up with next code:

```
#!flask/bin/python
from app import app
app.run(debug=True)
```

Installing Flask Modules

* Next we can test that our Python flask environment works.
* Execute the run.py with next command:
  * flask\Scripts\python run.py
* NOTE! The prvious command uses Python interpreter from our virtual environment not form system level. This is important since we installed the Flask environment in virtual environment which is not available in system level interpreter.
* If everything went ok you should see something following in command prompt:
  * * Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)

Installing Flask Modules

* Now open browser window write next url address **localhost:5000** and you should see text **”hello world”** in browser window. If so, you are ready to go with Python-Flask! Enjoy!