School of Computer Science

COMP30670: Software Engineering
Semester II

Assignment 1
On: 13/02/2018
Due: 23/02/2018

Q1: _____ **(15points)**

There are different ways to structure a python project- some well known examples are:

1. CookieCutter
2. Python Project Template
3. Pyscaffold
4. SampleMod

Each of these takes a slightly different approach to creating a python project. The task each is trying to solve is slightly different. Try each of them and for each, write a brief description:

(a) How does the tool configure your project? [5]

(b) Did you find any issues configuring your new project with the tool? If so, what are they? [5]

(c) Give a couple of reasons why you would/would not use this tool in the future, every time you create a new python project? [5]

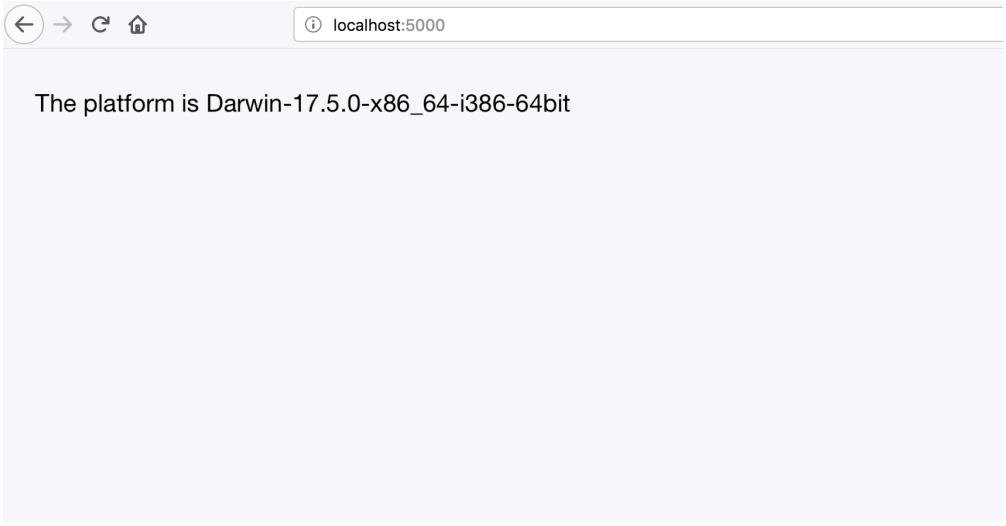
Q2: _____ **(85points)**

For this question you will re-use your `systeminfo` module and the `flask` module which is on Slide 51 of Software Necessities.

(a) Your `systeminfo` project should be a python module which can be installed from git using `pip install git+https://github.com/username/systeminfo`. You should ensure the project is properly structured according to your tool of choice from Question 1. You need to focus on the `setup.py` and the `packages` key to get this to work. Once the `systeminfo` project is correctly installed, then you should be able to do this in a new project: [25]

```
1 import sysinfo # your own sysinfo module
2
3 def main():
4     output = sysinfo.get_platform_info()
5     print(output)
6     return
```

(b) Now create a new python project called `flask_platform` (or you could think of a better name!). Use the tool of your choice from Question 1 to structure the project. There should be a `README.md` file explaining how to use it. The project should create a flask application (following the template in Software Necessities). This flask application should import your `systeminfo` module and use it to display the platform information of the machine the flask app is running on. [60]



(c) *Bonus part*: []

If you get your flask application working with your sysinfo module, then write a setup.py file which allows it to be run as a console command. Then install the application in your virtual environment on EC2 and try to make it work there. You will need to investigate the security group settings in EC2 to allow access to port 5000.