C3 – Assignment #5 – Django

Vitor Freitas has developed a comprehensive tutorial for learning the Django web framework which is available at this URL: https://simpleisbetterthancomplex.com/series/beginners-guide/1.11/, and this tutorial forms the basis of this assignment (which is in two parts).

Part 1 is worth 15% and involves working through the entire tutorial, building the example webapp, and deploying it on your laptop. Part 2 is worth 5% and involves deploying the built webapp to PythonAnywhere. Note: you cannot deploy to PythonAnywhere during Part 1 – you must deploy the webapp to your laptop first (to allow for demonstration in the lab).

The Django tutorial is made up of seven parts. You are to read and work through all seven parts, implementing all of the discussed functionality, noting the following:

- The first part of the tutorial, which deals with installation, assumes you don't have Python installed. Obviously, this is *not* true for you. This part of the tutorial also discusses using a virtual environment to control the setup within which your webapp executes. This is an **optional** step. If, having read the section on virtual environments and having decided that they are something that you'd find useful and wish to use, note that Anaconda comes with an alternative to `virtualenv` that you may find useful. Refer to the Anaconda documentation for more details.
- The first part of the tutorial also covers manually installing Django. This is made much simpler in Anaconda. Rather than using the commands in the tutorial, simply install Django with this Anaconda command: `conda install django`
- Note that the latest version of Django is release 2 (and this is what Anaconda installs). The tutorial is based on the last version of release 1. This shouldn't have too much of an impact on how you build your example webapp[1].
- Part 7 of the tutorial discusses deploying a complete Django webapp to the cloud. You should read through this part of the tutorial, noting its contents, then deploy your webapp to Python Anywhere.

Assignment Specification & Notes

1. Use Python 3 as your programming language, and Django 2 as your framework.
2. This is your final CA and is worth a combined total of 20% of your final mark. While this CA is active, no new material will be presented in class. You are to work on this assignment during our remaining class sessions (as well as on your own time), and I will be in attendance in class to discuss the assignment as needed.
3. Due date: 12:00 noon on Friday, February 16th 2018.
4. You will be required to demonstrate the example webapp working on your laptop to me in the lab (during any of the remaining scheduled classes). You are also required to send me the URL of your Python Anywhere deployment. Marks are allocated for a successful demonstration on your laptop, as well as a successful deployment to the cloud. Note: the demonstration of the completed webapp is a "one-shot deal". You cannot demonstrate your webapp to me more than once, so make sure its working correctly prior to showing it to me for your one-and-only time. If it crashes or fails during your demonstration, you will be docked marks – you will not be given the chance/time to fix it. As stated, the demonstration is a one-shot deal, so be ready.

1 Famous last words...