## Exercise 2.1: Getting Started with Django

## Learning Goals

Explain MVT architecture and compare it with MVC Summarize Django's benefits and drawbacks Install and get started with Django

## Reflection Questions

1. Suppose you're a web developer in a company and need to decide if you'll use vanilla (plain) Python for a project, or a framework like Django instead. What are the advantages and drawbacks of each?

Vanilla Python's advantages are it is pretty easy to learn and understand, it is flexible allowing for control over the structure as well as being lightweight. The disadvantages include managing and maintaining a clean codebase without structure can be challenging, particularly if the project grows and many components may need to be build from scratch which can cause errors in development.

Django's advantages include its built in security measures, community and documentation for resources and support and rapid development with pre-built components and features. The disadvantages include less flexibility so it is not suitable for every project and learning the framework takes time to understand.

2. In your own words, what is the most significant advantage of Model View Template (MVT) architecture over Model View Controller (MVC) architecture?

The most significant advantage of Model View Template is the Template layer, which handles user interface and presentation. It is advantageous because you do not need to write the code for the view as opposed to the Controller in Model View Controller. This helps developers keep code more organised and in defined parts.

- 3. Now that you've had an introduction to the Django framework, write down three goals you have for yourself and your learning process during this Achievement. You can reflect on the following questions if it helps:
- What do you want to learn about Django?
- What do you want to get out of this Achievement?
- Where or what do you see yourself working on after you complete this Achievement?

My three goals are to:

- Understand the basic foundations of Django and how to use it
- Understand when it is best to use Django over other frameworks
  - Use Django to create my own projects