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?
Some of the advantages of Vanilla Python is that it's light weight and gives the developer more flexibility and control but the drawbacks are the speed which you have to write code for user authentication, user interaction and form handling from scratch, and security which you have to implement security features.
The advantages of Django is its rapid development by using built in features, and security which Django has built in security features, scalability: Django's modular and reusable components helps with having a clean, maintainable code and easier to scale. Django also has large community and extensive documentation.
One drawback of Django is the flexibility. You have less control as a developer.

2. In your own words, what is the most significant advantage of Model View Template (MVT) architecture over Model View Controller (MVC) architecture?
With MVT you don't have to write code to fetch the data from the database and map it to the URL, you just need to specify which items to present to the user and the Template will prepare and send it.

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?
    I like to learn about Django's features, know how it's authentication processes work and how to implement REST APIs with Django.
    - What do you want to get out of this Achievement?
    I want to be able to have a better and complete knowledge of backend development with Python.
    - Where or what do you see yourself working on after you complete this Achievement?
    I see myself working on projects e-commerce or a fitness app with complex features.