

## 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

- 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

Advantages: Offers full control and flexibility, ideal for small projects or custom solutions.

Drawbacks: Requires more time and effort to build features like authentication, routing, and database management from scratch.

#### Django

Advantages: Provides a robust, scalable framework with built-in tools for common web development tasks, speeding up development.

Drawbacks: Less flexibility, with a steeper learning curve.

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

In MVT, the template (view) is directly integrated with the presentation layer, reducing the complexity of managing separate views and controllers. This

leads to a more streamlined development process, particularly in frameworks like Django, where the template system is tightly coupled with the framework, making it easier to manage the user interface and backend logic cohesively.

- 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 want to learn how to efficiently build robust web applications using Django's features like ORM, authentication, and templates.

- What do you want to get out of this Achievement?

I want to gain practical experience in developing full-stack web applications and deepen my understanding of Django's architecture.

- Where or what do you see yourself working on after you complete this Achievement?

After completing this Achievement, I see myself working on complex, data-driven web applications, either as part of a development team or on personal projects that leverage Django's capabilities.