

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?

Advantages of Vanilla Python -

You have complete control over how you structure your code and implement features.

No need to load a full framework, which can be beneficial for very simple projects or scripts.

Drawbacks of Vanilla Python-

You need to write a lot of code from scratch, which can be time-consuming and error-prone.

Many features like authentication, routing, and database interaction have to be manually implemented or rely on third-party libraries.

Advantages of Django:

Built-in Features: Comes with many built-in features like authentication, ORM, and an admin panel, which speeds up development.

Standardized Structure: Provides a clear structure for your projects, making it easier to maintain and scale.

Drawbacks of Django:

Can be complex for beginners to learn and understand.

For very simple projects, Django might be overkill and add unnecessary complexity.

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

In my opinion is that MVT simplifies the development process by integrating the template directly into the framework. This tight integration ensures a cleaner separation between the backend and the presentation layer, making it easier to manage and render dynamic web pages..

- 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?

Goal 1: Understand Django's Core Features

Goal 2: Build a Functional Web Application

Goal 3: Improve Problem-Solving Skills