

Exercise02_1: Q & A

1. Write two to three sentences on why Django is so popular among web developers.

Ans:

Django is widely used by web developers because it follows the "batteries-included" philosophy, providing built-in tools for authentication, database management, and security, which speeds up development. It uses the Model-View-Template (MVT) architecture, making it easy to structure applications while maintaining a clean and scalable codebase.

2. list five large companies that use Django. Specify what the company's product or service is and what they use Django for.

Ans:

Company	Industry	How They Use Django
Instagram	Social Media	Handles web-based user interactions, content management, and API development.
Spotify	Music Streaming	Uses Django for backend services, handling user playlists, and managing music recommendations.
Dropbox	Cloud Storage	Manages file sharing, authentication, and API endpoints with Django.
Mozilla	Web Browsing & Open Source	Uses Django to maintain various internal and public-facing applications, including support systems and add-on management.
Pinterest	Social Media & Image Sharing	Implements Django for handling large-scale image sharing and user-generated content.

3. For each of the following scenarios, explain if you would use Django (and why or why not):

- a. You need to develop a web application with multiple users.

Ans:

Yes, use Django.

Django has built-in authentication and user management, making it easy to implement login systems, permissions, and roles for different users.

- b. You need fast deployment and the ability to make changes as you proceed.

Ans:

Yes, use Django.

Django's modular design allows for rapid development, and its ORM (Object-Relational Mapper) simplifies database modifications without much hassle.

- c. You need to build a very basic application, which doesn't require any database access or file operations.

Ans:

No, don't use Django.

Django might be overkill for simple applications that do not require a database. Instead, using Flask or static HTML/CSS with JavaScript might be more efficient.

- d. You want to build an application from scratch and want a lot of control over how it works.

Ans:

No, don't use Django.

Django is opinionated, meaning it enforces certain conventions. If you need full control over every aspect of the application, a microframework like Flask or even a lower-level framework might be a better choice.

- e. You're about to start working on a big project and are afraid of getting stuck and needing additional support.

Ans:

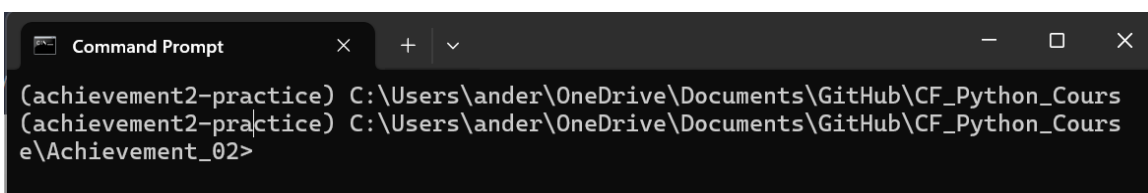
Yes, use Django.

Django has excellent documentation, an active community, and many third-party packages that can help you overcome development challenges. Its scalability also makes it ideal for large projects.

4. Download and install Python

```
(web-dev) C:\Users\ander\Envs\web-dev\Scripts>python --version
Python 3.8.7
(web-dev) C:\Users\ander\Envs\web-dev\Scripts>
```

- 5. If you haven't done so already, set up and create a virtual environment and name it achievement2-practice



```
Command Prompt
(achievement2-practice) C:\Users\ander\OneDrive\Documents\GitHub\CF_Python_Cours
(achievement2-practice) C:\Users\ander\OneDrive\Documents\GitHub\CF_Python_Cours
e\Achievement_02>
```

6. Install Django and verify the installation by checking the version.

```
Command Prompt
(achievement2-practice) C:\Users\ander\OneDrive\Documents\GitHub\CF_Python_Course\Achievement_02>py -m pip install Django
Collecting Django
  Using cached Django-4.2.19-py3-none-any.whl.metadata (4.1 kB)
Collecting asgiref<4,>=3.6.0 (from Django)
  Using cached asgiref-3.8.1-py3-none-any.whl.metadata (9.3 kB)
Collecting sqlparse>=0.3.1 (from Django)
  Using cached sqlparse-0.5.3-py3-none-any.whl.metadata (3.9 kB)
Collecting backports.zoneinfo (from Django)
  Using cached backports.zoneinfo-0.2.1-cp38-cp38-win_amd64.whl.metadata (4.7 kB)
Collecting tzdata (from Django)
  Using cached tzdata-2025.1-py2.py3-none-any.whl.metadata (1.4 kB)
Collecting typing_extensions>=4 (from asgiref<4,>=3.6.0->Django)
  Using cached typing_extensions-4.12.2-py3-none-any.whl.metadata (3.0 kB)
Using cached Django-4.2.19-py3-none-any.whl (8.0 MB)
Using cached asgiref-3.8.1-py3-none-any.whl (23 kB)
Using cached sqlparse-0.5.3-py3-none-any.whl (44 kB)
Using cached backports.zoneinfo-0.2.1-cp38-cp38-win_amd64.whl (38 kB)
Using cached tzdata-2025.1-py2.py3-none-any.whl (346 kB)
Using cached typing_extensions-4.12.2-py3-none-any.whl (37 kB)
Installing collected packages: tzdata, typing_extensions, sqlparse, backports.zoneinfo, asgiref, Django
Successfully installed Django-4.2.19 asgiref-3.8.1 backports.zoneinfo-0.2.1 sqlparse-0.5.3 typing_extensions-4.12.2 tzdata-2025.1

[notice] A new release of pip is available: 24.3.1 -> 25.0.1
[notice] To update, run: python.exe -m pip install --upgrade pip

(achievement2-practice) C:\Users\ander\OneDrive\Documents\GitHub\CF_Python_Course\Achievement_02>
```