

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

- Django is popular because it uses Python, which is easy to read and powerful, supporting both backend and frontend development. Its MVT architecture allows for rapid development, fast processing, and scalability, while adhering to DRY principles for efficient code. Additionally, Django offers robust security features, supports content delivery networks, and has a large, supportive open-source community.

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

- Instagram: uses Django to manage its massive user base and handle the high volume of data and interactions efficiently.
- Pinterest: uses Django to manage its extensive content management system and ensure fast content delivery.
- Spotify: uses Django for its backend services to handle user data, playlists, and recommendations.
- Mozilla: uses Django for several of its web applications and services, including the Mozilla Developer Network (MDN) documentation site.
- Disqus: uses Django to manage user comments, data storage, and moderation tools effectively.

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

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

- i. Yes, because it has built-in authentication and user management features.
- **You need fast deployment and the ability to make changes as you proceed.**
  - i. Yes, because its MVT architecture supports rapid development and easy modifications.
- **You need to build a very basic application, which doesn't require any database access or file operations.**
  - i. No, a simpler framework like Flask would be more appropriate.
- **You want to build an application from scratch and want a lot of control over how it works.**
  - i. No, its built-in features may limit flexibility and control.
- **You're about to start working on a big project and are afraid of getting stuck and needing additional support.**
  - i. Yes, it's robust, scalable, and has extensive community support.

#### 4. Python version

```
(web-dev) C:\Users\Anthony\Documents\achievement2-practice>python --version
Python 3.12.4
```

#### 5. VirtualEnv create

```
C:\Users\Anthony\Documents>cd achievement2-practice

C:\Users\Anthony\Documents\achievement2-practice>mkvirtualenv web-dev
created virtual environment CPython3.12.4.final.0-64 in 353ms
creator CPythonWindows(dest=C:\Users\Anthony\Envs\web-dev, clear=False, no_vcs_ignore=False, global=False)
seeder FromAppData(download=False, pip=bundle, via=copy, app_data_dir=C:\Users\Anthony\AppData\Local\pypa\virtualenv)
added seed packages: pip==24.0
activators BashActivator,BatchActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator

(web-dev) C:\Users\Anthony\Documents\achievement2-practice>
```

## 6. Django install

```
(web-dev) C:\Users\Anthony>cd Envs
(web-dev) C:\Users\Anthony\Envs>web-dev\Scripts\activate.bat
(web-dev) C:\Users\Anthony\Envs>()
(web-dev) C:\Users\Anthony\Envs>if defined _OLD_VIRTUAL_PYTHONPATH (set "PYTHONPATH=") else (set "_OLD_VIRTUAL_PYTHONPATH=")
(web-dev) C:\Users\Anthony\Envs>py -m pip install Django
Collecting Django
  Using cached Django-5.0.7-py3-none-any.whl.metadata (4.1 kB)
Collecting asgiref<4,>=3.7.0 (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-0.5.0-py3-none-any.whl.metadata (3.9 kB)
Collecting tzdata (from Django)
  Using cached tzdata-2024.1-py2.py3-none-any.whl.metadata (1.4 kB)
Using cached Django-5.0.7-py3-none-any.whl (8.2 MB)
Using cached asgiref-3.8.1-py3-none-any.whl (23 kB)
Using cached sqlparse-0.5.0-py3-none-any.whl (43 kB)
Using cached tzdata-2024.1-py2.py3-none-any.whl (345 kB)
Installing collected packages: tzdata, sqlparse, asgiref, Django
Successfully installed Django-5.0.7 asgiref-3.8.1 sqlparse-0.5.0 tzdata-2024.1

[notice] A new release of pip is available: 24.0 -> 24.1.2
[notice] To update, run: python.exe -m pip install --upgrade pip
(web-dev) C:\Users\Anthony\Envs>python.exe -m pip install --upgrade pip
Requirement already satisfied: pip in c:\users\anthony\envs\web-dev\lib\site-packages (24.0)
Collecting pip
  Using cached pip-24.1.2-py3-none-any.whl.metadata (3.6 kB)
Using cached pip-24.1.2-py3-none-any.whl (1.8 MB)
Installing collected packages: pip
  Attempting uninstall: pip
    Found existing installation: pip 24.0
    Uninstalling pip-24.0:
      Successfully uninstalled pip-24.0
Successfully installed pip-24.1.2
(web-dev) C:\Users\Anthony\Envs>django-admin --version
5.0.7
```