

Exercise 2.1: Questions

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

Developers like to use Django as it maintains the same architecture, works fast and is secure and scalable and it follows DRY principles, so it helps to optimize code structure and avoid repetitive code.

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

YouTube

Originally developed as a PHP-based project, YouTube is a video-sharing platform. Django plays a key role in ensuring that new features are added, and upgrades are implemented in the shortest time possible. Moreover, it eliminates mistakes and allows the YouTube team of developers to perform flawlessly.

Spotify

Spotify is an online audio-streaming platform. It has revolutionized the way people listen to music. Spotify uses Python for its backend services and development and combines it with the Django framework to ensure optimum functionality of the app.

Instagram

Instagram is a photo and video-sharing social media platform that has a massive audience. According to Statista, this site has [1 billion monthly active users](#). This means the app has incredibly large amounts of data and user interactions to process. The Django framework helps Instagram perform all these tasks seamlessly.

Disqus

Disqus is a platform that provides a network-based comments system. Its ease of use and powerful features make it very popular amongst the blogging community. Django's scalability and a wide variety of ready-to-implement solutions allow Disqus to easily meet the needs of its growing number of users.

Dropbox

Dropbox is a popular cloud storage service for pictures, videos, and documents. It's available online letting millions of users can access it regardless of their location. Dropbox uses the Django framework to facilitate synchronization, enable sharing options, and allow storage of large files.

Taken from: <https://careerkarma.com/blog/companies-that-use-django/>

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.**

Yes, because it can handle multiple users and sessions at the same time and has built-in authentication and authorization.

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

Yes, because it can handle rapid-paced development and allows making changes on the fly.

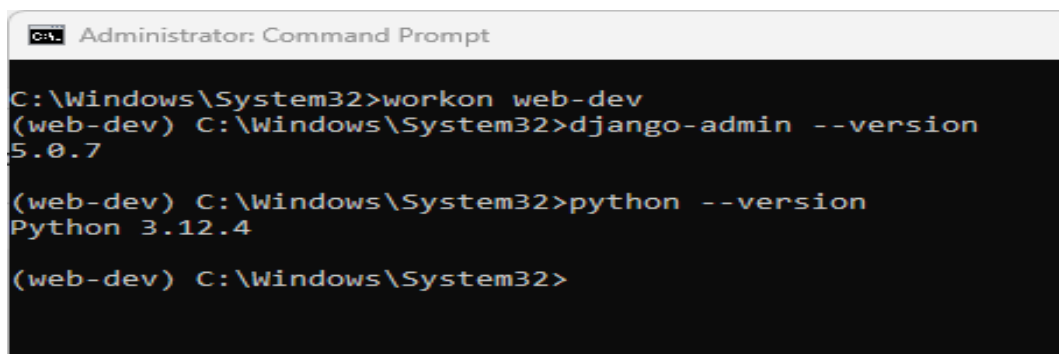
- **You want to build an application from scratch and want a lot of control over how it works.**

No, Django would not be the way to go as it has to follow Django rules and structures reducing your control on how it works.

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

Yes, Django is open source and has a large and active community, so it would be feasible to reach out to the community whenever you need help with something in the project.

4. Download and install Python

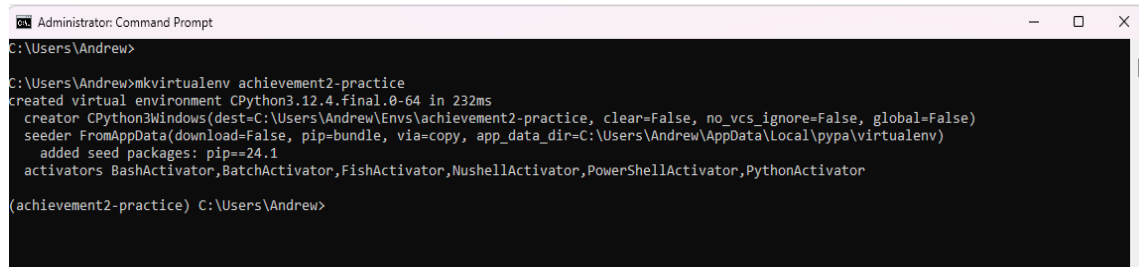


```
Administrator: Command Prompt
C:\Windows\System32>workon web-dev
(web-dev) C:\Windows\System32>django-admin --version
5.0.7

(web-dev) C:\Windows\System32>python --version
Python 3.12.4

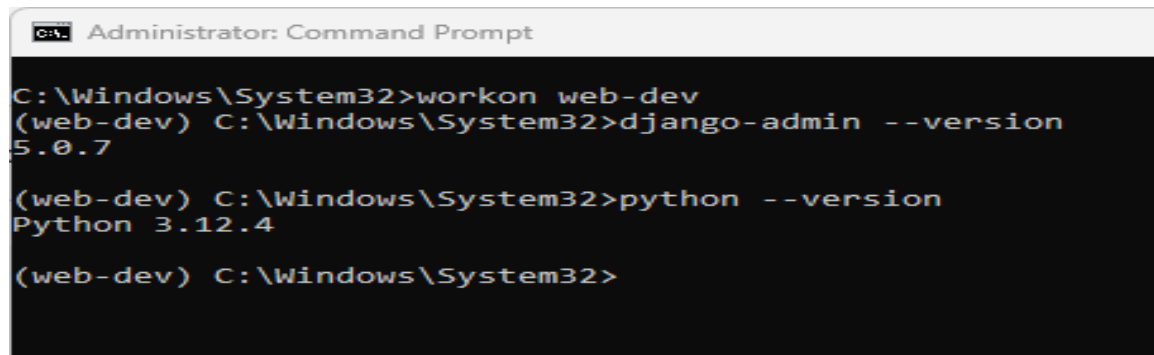
(web-dev) C:\Windows\System32>
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5. If you haven't done so already, set up and create a virtual environment and name it achievement2-practice.



```
Administrator: Command Prompt
C:\Users\Andrew>
C:\Users\Andrew>mkvirtualenv achievement2-practice
created virtual environment CPython3.12.4.final.0-64 in 232ms
creator CPython3Windows(dest=C:\Users\Andrew\Envs\achievement2-practice, clear=False, no_vcs_ignore=False, global=False)
seeder FromAppData(download=False, pip=bundle, via=copy, app_data_dir=C:\Users\Andrew\AppData\Local\pypa\virtualenv)
added seed packages: pip==24.1
activators BashActivator,BatchActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator
(achievement2-practice) C:\Users\Andrew>
```

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



```
Administrator: Command Prompt
C:\Windows\System32>workon web-dev
(web-dev) C:\Windows\System32>django-admin --version
5.0.7

(web-dev) C:\Windows\System32>python --version
Python 3.12.4

(web-dev) C:\Windows\System32>
```