

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

Python is a very well known and heavily used programming language and Django is a full-stack web development framework for Python. It offers fast development, fast processing, scalability, security, supports CDNs and follows the DRY-principle. Also, it comes with a lot of functionality out of the box.

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.

1 Instagram

Instagram utilizes Django to manage its vast user base and handle millions of daily interactions. Django's scalability allows Instagram to process and store massive amounts of data efficiently, ensuring a seamless user experience as the platform grows.

2 Mozilla

Mozilla, the organization behind the Firefox browser, uses Django for various web-based applications, including their support sites. Django's emphasis on security and rapid development aligns well with Mozilla's need to maintain secure and responsive web services.

3 Spotify

Spotify uses Django primarily for its backend services where it benefits from Django's ability to support machine learning features and manage data-heavy operations, crucial for delivering personalized music recommendations and handling millions of active users.

4 Dropbox

Dropbox uses the Django framework to facilitate synchronization, enable sharing options, and allow storage of large files.

5 YouTube

Although Google owns YouTube, the platform initially adopted Django to support its web application needs. Django helps YouTube manage and serve billions of video requests daily, providing a stable and flexible framework to meet high traffic demands.

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

1. You need to develop a web application with multiple users.
Multiple users will need a backend with access to a database, which makes Django the perfect choice.
2. You need fast deployment and the ability to make changes as you proceed.
As Django offers fast deployment and is great for scaling, it would be perfect for this.
3. You need to build a very basic application, which doesn't require any database access or file operations.
For this a, Django is not a good choice, because this app can probably be written in vanilla Python.
4. You want to build an application from scratch and want a lot of control over how it works.
Not sure, what "how it works" means exactly, but let's interpret it as "flexibility in the structure of the application".
In that case, Django is probably not the best choice, as it has its own exact project structure and a Django-way of doing things.
5. You're about to start working on a big project and are afraid of getting stuck and needing additional support.
Sure, I would use Django for that, because it offers everything needed for large projects (see 5 big companies above) and because of its popularity, Django has a big community that offers support.

Screenshots

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Eingabeaufforderung
Microsoft Windows [Version 10.0.19045.4780]
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C:\Users\David>python --version
Python 3.8.7

C:\Users\David>cd C:\Users\David\Sync\CareerFoundry\3-Python-For-WebDevelopers\Python1\Achievement 2

C:\Users\David\Sync\CareerFoundry\3-Python-For-WebDevelopers\Python1\Achievement 2>workon

Pass a name to activate one of the following virtualenvs:
=====
achievement2-practice
cd-python-copy
cf-python-base

C:\Users\David\Sync\CareerFoundry\3-Python-For-WebDevelopers\Python1\Achievement 2>workon "achievement2-practice"
(achievement2-practice) C:\Users\David\Sync\CareerFoundry\3-Python-For-WebDevelopers\Python1\Achievement 2>django-admin
--version
4.2.15

(achievement2-practice) C:\Users\David\Sync\CareerFoundry\3-Python-For-WebDevelopers\Python1\Achievement 2>
```