

1. Write two to three sentences on why Django is so popular among web developers.
  - Django has many reasons why so many developers use Django. It is open source and backed by a large community and has an expansive documentation. Django uses the MVT architecture to organize and structure web applications, separating the data(MODEL), the user interface(TEMPLATE), and the logical flow(VIEW). Due to MVT, scalability is not a problem. MVT is based on loosely coupled architecture, which makes it very simple to add new hardware and components.
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 as its backend framework. It is used to handle various server-side functionalities, including user authentication, data storage, and API endpoints
  - Spotify - Python and django are used here for the back-end services and data analysis.
  - Pinterest - Django's open-source capacity means pinterest can modify the framework for its needs.
  - EventBrite - They migrated to Django in 2010, they felt moving to django would incite a more feature-rich and vibrant community. In the short term Django brought about benefits such as URL routing, form handling, unit tests, and more.
  - National Geographic - Django also has its own content management system(CMS) called django CMS which the Nat Geo education page relies on.

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.

- Django would be a good idea because you can handle user authentication.

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

- Yes, Django provides rapid development tools for speedy deployment and scalability.

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

- I would not use Django, as Django is more reasonable with applications that need to work with databases.

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

- From scratch Django wouldn't be a bad answer. If you want a lot of control you might be limited cause Django has a strict

guidelines you must follow. However this isn't a bad thing either, as it allows for more precise and consistent code.

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

- Django is a good place if you are afraid of getting stuck. It is open-source and backed by a large community of developers.

```
└─ python --version
Python 3.8.7
```

```
└─ [jarjar][quantum][+][main ? :10 ×][.../Achievement2-practice]
└─ mkvirtualenv achievement2-practice
created virtual environment CPython3.8.7.final.0-64 on 2022-01-10
creator CPython3Windows(dest=C:\code\virtualenv\achievement2-practice, clear=False, no_vcs_ignore=False, global=False)
seeder FromAppData(download=False, pip=bundle, setuptools=bundle, wheel=bundle, via=copy, app_data_dir=C:\Users\jarjar\AppData\Local\pypa\virtualenv)
added seed packages: pip==23.2.1, setuptools==64.0.41.2
activators BashActivator,BatchActivator,FishActivator,PowerShellActivator,PythonActivator
virtualenvwrapper.user_scripts creating C:\code\virtualenv\achievement2-practice\Scripts\predeactivate.bat
virtualenvwrapper.user_scripts creating C:\code\virtualenv\achievement2-practice\Scripts\postdeactivate.bat
virtualenvwrapper.user_scripts creating C:\code\virtualenv\achievement2-practice\Scripts\preactivate.bat
virtualenvwrapper.user_scripts creating C:\code\virtualenv\achievement2-practice\Scripts\postactivate.bat
virtualenvwrapper.user_scripts creating C:\code\virtualenv\achievement2-practice\Scripts\get_env_details.bat

└─ (achievement2-practice)[jarjar][quantum][+][main ? :10 ×][.../Achievement 2/Task 2.1]
└─ |
```

```
(web-dev)[jarjar@quantum]
sk 2.1]
└─ pip list
Package            Version
-----
asgiref            3.7.2
backports.zoneinfo 0.2.1
Django             4.2.5
pip                23.2.1
setuptools         68.2.0
sqlparse           0.4.4
typing_extensions  4.8.0
tzdata             2023.3
wheel              0.41.2
```