

1. Create a text document where you can write your answers to the following questions. You'll want to do some research online to help you develop your answers.
2. Write two to three sentences on why Django is so popular among web developers.

Some reasons python is popular include its easily understandable syntax making it easy to learn. It also has a robust and supportive online community. It is used by many large and renowned companies. It has hundreds of libraires and frameworks.

3. 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.

Firefox – switched from PHP to Django in order to handle the increased use/popularity

Google – Google search engine runs on Django for processing large data sets and analytics.

Instagram – first version of the app was created on Django, the strict framework and inclusive packages made it easy to setup and didn't require a lot of decision making for the back end allowing them to focus on UI and UX.

Pinterest – effective scalability without negatively affecting speeds

Spotify – The fast backend and machine learning options were desirable advantages.

4. 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.

Django could be used for a full-stack application but the little detail given here doesn't necessarily support its use here.

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

Django's built-in features would help with fast deployment but its strict structure may not be suitable for changes down the line.

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

Django's built-in features/packages would be 'dead weight' in an application that doesn't require database access or file operations.

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

Django's strict structure would not allow the control you want.

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

Django's wide spread use and adoption by large companies means it is well supported and documented.

5. Download and install Python (if you haven't done so already).

1. Run the appropriate command to check the Python version.
2. Take a screenshot of the terminal window with the command and version and paste it into your answers document.

```
Last login: Mon Oct  2 09:49:19 on ttys000
bradrichardson@MacBook-Pro ~ % python3 --version
Python 3.11.5
bradrichardson@MacBook-Pro ~ %
```

6. Open a new terminal window and go to the folder where you want to create your projects.
7. If you haven't done so already, set up and create a virtual environment and name it **achievement2-practice**. Then:
 1. Activate the virtual environment.
 2. Take a screenshot of the activated environment and paste it into your answers document.

```

bradrichardson@MacBook-Pro achievement_2 % mkvirtualenv achievement2-practice
created virtual environment CPython3.11.5.final.0-64 in 545ms
creator CPython3Posix(dest=/Users/bradrichardson/.virtualenvs/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=/Users/bradrichardson/Library/Application Support/virtualenv)
added seed packages: pip==23.2.1, setuptools==68.2.0, wheel==0.41.2
activators BashActivator,CShellActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator
virtualenvwrapper.user_scripts creating /Users/bradrichardson/.virtualenvs/achievement2-practice/bin/predeactivate
virtualenvwrapper.user_scripts creating /Users/bradrichardson/.virtualenvs/achievement2-practice/bin/postdeactivate
virtualenvwrapper.user_scripts creating /Users/bradrichardson/.virtualenvs/achievement2-practice/bin/preactivate
virtualenvwrapper.user_scripts creating /Users/bradrichardson/.virtualenvs/achievement2-practice/bin/postactivate
virtualenvwrapper.user_scripts creating /Users/bradrichardson/.virtualenvs/achievement2-practice/bin/get_env_details
(achievement2-practice) bradrichardson@MacBook-Pro achievement_2 % █

```

8. Install Django and verify the installation by checking the version. Then:
 1. Take a screenshot of the terminal with the command and version.
 2. Paste it into your answers document.

```

(achievement2-practice) bradrichardson@MacBook-Pro achievement_2 % pip install django
Collecting django
  Obtaining dependency information for django from https://files.pythonhosted.org/packages/bf/8b/c38f2354b6093d9ba310a14b43a830fdf776edd60c2e25c7c5f4d23cc243/Django-4.2.5-py3-none-any.whl.metadata
  Using cached Django-4.2.5-py3-none-any.whl.metadata (4.1 kB)
Collecting asgiref<4,>=3.6.0 (from django)
  Obtaining dependency information for asgiref<4,>=3.6.0 from https://files.pythonhosted.org/packages/9b/80/b9051a4a07ad231558fcd8ffcf89232711b4e618c15cb7a392a17384bbeef/asgiref-3.7.2-py3-none-any.whl.metadata
  Using cached asgiref-3.7.2-py3-none-any.whl.metadata (9.2 kB)
Collecting sqlparse>=0.3.1 (from django)
  Using cached sqlparse-0.4.4-py3-none-any.whl (41 kB)
Using cached Django-4.2.5-py3-none-any.whl (8.0 MB)
Using cached asgiref-3.7.2-py3-none-any.whl (24 kB)
Installing collected packages: sqlparse, asgiref, django
Successfully installed asgiref-3.7.2 django-4.2.5 sqlparse-0.4.4
(achievement2-practice) bradrichardson@MacBook-Pro achievement_2 % django-admin --version
4.2.5
(achievement2-practice) bradrichardson@MacBook-Pro achievement_2 % █

```

