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CareerFoundry Task 2.1

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

   Django is a Python framework that has everything you need included in it, so everything works together seamlessly. It is quick and enables rapid development of data-driven, secure websites. It has great documentation and has a 'batteries included' nature to it so you can focus on the product logic.

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 - a social media platform that uses Django for its reliability, capacity, and its ability to handle high capacity and the enormous amount of audience activities performed on the platform daily.
   ○ Pinterest - a visual search engine that allows users to search according to interest and save searches based on interest categories. Pinterest uses Django to handle multiple tasks, scale, and maintain top-notch functionality.
   ○ Spotify - an audio streaming platform that uses Python for its backend and Django to optimize functionality.

- ○ YouTube - a video sharing platform that uses Django for adding new features and ensuring upgrades are implemented in the shortest time possible
- ○ NASA - focuses on civilian space programs, aeronautics and space research. NASA uses Django for ensuring knowledge sharing sites are running efficiently.

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. You would use Django for its scalability and ability to handle high amounts of user traffic.
   - ○ You need fast deployment and the ability to make changes as you proceed.
     - i. For this you would also want to use Django for its scalability. It continues to provide seamless website operations as the site is growing and changing.
   - ○ You need to build a very basic application, which doesn't require any database access or file operations.
     - i. You would not need Django for this as it takes up a lot of memory and there are other options for basic applications.
   - ○ You want to build an application from scratch and want a lot of control over how it works.
     - i. You would want a different framework other than Django because with Django, you do not have complete control over how your application works.

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

  i. Django would be a great option because of its documentation and large community. You will always be able to find answer to any issues that may arise while building your project.

Python version:

```
4.2.11
● (achievement2-practice) christinmartin@Christins-Air Achievement2 % python --version
Python 3.8.7
○ (achievement2-practice) christinmartin@Christins-Air Achievement2 %
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Virtual Environment:

```
● christinmartin@Christins-Air python % cd Achievement2
● christinmartin@Christins-Air Achievement2 % mkvirtualenv achieveme
nt2-practice
created virtual environment CPython3.8.7.final.0-64 in 254ms
  creator CPython3Posix(dest=/Users/christinmartin/.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/christinmartin/Librar
y/Application Support/virtualenv)
    added seed packages: pip==24.0, setuptools==69.1.1, wheel==0.42.0
  activators BashActivator,CShellActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator
virtualenvwrapper.user_scripts creating /Users/christinmartin/.virtualenvs/achievement2-practice/bin/predeactivate
virtualenvwrapper.user_scripts creating /Users/christinmartin/.virtualenvs/achievement2-practice/bin/postdeactivate
virtualenvwrapper.user_scripts creating /Users/christinmartin/.virtualenvs/achievement2-practice/bin/preactivate
```

Installing Django

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VlrtualenvWrapper.user_scripts creating /Users/christinmartin/.virtualenvs/achievement2-practice/bin/get_env_details
(achievement2-practice) christinmartin@Christins-Air Achievement2 % pip install django
Collecting django
  Using cached Django-4.2.11-py3-none-any.whl.metadata (4.2 kB)
Collecting asgiref<4,>=3.6.0 (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-0.4.4-py3-none-any.whl.metadata (4.0 kB)
Collecting backports.zoneinfo (from django)
  Using cached backports.zoneinfo-0.2.1-cp38-cp38-macosx_10_14_x86_64.whl.metadata (4.7 kB)
Collecting typing-extensions>=4 (from asgiref<4,>=3.6.0->django)
  Using cached typing_extensions-4.11.0-py3-none-any.whl.metadata (3.0 kB)
Using cached Django-4.2.11-py3-none-any.whl (8.0 MB)
Using cached asgiref-3.8.1-py3-none-any.whl (23 kB)
Using cached sqlparse-0.4.4-py3-none-any.whl (41 kB)
Using cached backports.zoneinfo-0.2.1-cp38-cp38-macosx_10_14_x86_64.whl (35 kB)
Using cached typing_extensions-4.11.0-py3-none-any.whl (34 kB)
Installing collected packages: typing-extensions, sqlparse, backports.zoneinfo, asgiref, django
Successfully installed asgiref-3.8.1 backports.zoneinfo-0.2.1 django-4.2.11 sqlparse-0.4.4 typing-extensions-4.11.0
(achievement2-practice) christinmartin@Christins-Air Achievement2 % django-admin --version
4.2.11
(achievement2-practice) christinmartin@Christins-Air Achievement2 %
```