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Exercise 2.1

Why is Django so popular among web developers?

Django is a popular web development framework that is well suited for fast prototyping and frequent changes. It is backed by a large open source community, making it easy to find support.

Five large companies that use Django:

YouTube – Django ensures that new features and updates are implemented in the shortest time possible.
Spotify – Uses Python for backend, combined with Django to ensure optimum functionality of the app.
Instagram – Django helps process massive amounts of data and user interactions.
Dropbox – Django is used to facilitate synchronization, sharing options, and allow large file storage.
NASA – Django ensures that all sites sharing knowledge keep running efficiently.

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 – Django handles scaling large amounts of data efficiently, likely what is needed for multiple users.

You need fast deployment and the ability to make changes as you proceed:
Yes – Django allows for quick prototyping to kickstart development and implement fast changes.

You need to build a very basic application, which doesn't require any database access or file operations:
No – Django is best suited to manage data and backend logic.

You want to build an application from scratch and want a lot of control over how it works:
No – Django is opinionated, which means you have to forfeit some control in order to leverage it.

You're about to start working on a big project and are afraid of getting stuck and needing additional support:
Yes – Django is very popular and has a large open source community, making it easy to find support and scale the project.

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

Set up and create a virtual environment and name it achievement2-practice:

```
(achievement2-practice) jacob@jacob-desktop:~/Deskt
op/repos/careerfoundry/python-specialization/achiev
ement-2$ workon achievement2-practice
(achievement2-practice) jacob@jacob-desktop:~/Deskt
op/repos/careerfoundry/python-specialization/achiev
ement-2$
```

Install Django and verify the installation by checking the version:

```
(achievement2-practice) jacob@jacob-desktop:~/Deskt
op/repos/careerfoundry/python-specialization/achiev
ement-2$ django-admin --version
4.2.16
(achievement2-practice) jacob@jacob-desktop:~/Deskt
op/repos/careerfoundry/python-specialization/achiev
ement-2$
```