

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

- Django is built with most of the essentials for effective development, including important additional plugins for features such as user-friendly admin panels and authentication.
- Fast development, secure deployment, and scalability are some of Django's other key benefits. It removes the hassle of web development, letting you focus on creating your project logic.
- Django is based on Model View Template (MVT) architecture.

**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:** Social media platform for sharing primarily photos and videos content. Initially used Django for rapid development and scalability in handling large data sets and high user traffic.
- **Spotify:** Music streaming platform. Uses Django for backend infrastructure and managing complex data interactions, including user data and playlists.
- **Pinterest:** A platform for discovering and saving ideas via images and videos. Uses Django for backend development, managing user content, and providing a scalable solution for rapid growth.
- **Reddit:** Social platform for posting and discussion. Used Django for some parts of the site's backend infrastructure to handle large amounts of traffic and user data.
- **Eventbrite:** Event management and ticketing platform. Uses Django for the backend infrastructure to manage event listings, ticket sales, and user accounts.

**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.  
Yes I would use Django because of its Scalability.. Application with multiple users tend to get busy. Django is based on loosely coupled architecture, which makes it very simple to add new components.
- You need fast deployment and the ability to make changes as you proceed.  
Yes I would use Django. Django is based on MVT, making it suitable for fast prototyping, a lot of changes, and high-speed applications.
- You need to build a very basic application, which doesn't require any database access or file operations.  
No I wouldn't use Django. Django isn't always suitable for small projects. An application that doesn't require certain features, such as database access or file management doesn't really Django for implementation.
- You want to build an application from scratch and want a lot of control over how it works.  
No I wouldn't use Django. Django is a highly structured web framework that does things a certain way. So if I want full control over the application Django isn't the best choice.

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

Yes I would use Django. Django is a good choice for large-scale systems that need to be scalable and secure. Django is open source and has a huge community of contributors. Therefore, it's usually very easy to get support if I need it.

## STEP 5

```
Last login: Wed Jul 31 20:48:19 on ttys007
[slx@MacBook-Pro-3 ~ % python3.8
Python 3.8.7 (v3.8.7:6503f05dd5, Dec 21 2020, 12:45:15)
[Clang 6.0 (clang-600.0.57)] on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> █
```

## STEP 7

```
slx@MacBook-Pro-3 exercise2.1 % mkvirtualenv achievement2-practice
created virtual environment CPython3.8.7.final.0-64 in 904ms
creator CPython3Posix(dest=/Users/slx/.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/slx/Library/Application Support/virtualenv)
added seed packages: pip==24.1, setuptools==70.1.0, wheel==0.43.0
activators BashActivator,CShellActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator
virtualenvwrapper.user_scripts creating /Users/slx/.virtualenvs/achievement2-practice/bin/predeactivate
virtualenvwrapper.user_scripts creating /Users/slx/.virtualenvs/achievement2-practice/bin/postdeactivate
virtualenvwrapper.user_scripts creating /Users/slx/.virtualenvs/achievement2-practice/bin/preactivate
virtualenvwrapper.user_scripts creating /Users/slx/.virtualenvs/achievement2-practice/bin/postactivate
virtualenvwrapper.user_scripts creating /Users/slx/.virtualenvs/achievement2-practice/bin/get_env_details
(achievement2-practice) slx@MacBook-Pro-3 exercise2.1 % █
```

## STEP 8

```
[notice] To update, run: pip install --upgrade pip
(achievement2-practice) slx@MacBook-Pro-3 exercise2.1 % django-admin --version
4.2.14
(achievement2-practice) slx@MacBook-Pro-3 exercise2.1 % █
```