

Exercise 2.1

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

Django is a popular framework choice because it is easy to develop, has fast processing, and very scalable. Because of its popularity, there is a very large community of contributors that provide support and creative ways to use Django's features.

- 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.**

- a. Instagram:** Instagram is a social media app that allows users to share photos with followers. Instagram uses Django to increase efficiency and custom build tools for scaling.
- b. National Geographic:** National Geographic is a tv network and magazine series that focuses on science, technology and nature. National Geographic uses Django's CMS to organize its complex site.
- c. Spotify:** Spotify is an audio streaming application. Spotify uses Django for back-end services, data analysis, and to increase functionality.
- d. Pinterest:** Pinterest is a social media platform that allows users to explore topics of interest and share/save photos related to those topics. Pinterest uses Django's framework to create a user-friendly interface that can be modified as necessary.
- e. Eventbrite:** Eventbrite is an event management and ticketing service. Eventbrite uses Django's URL routing, form building, and unit testing features.

3. For each of the following scenarios, explain if you would use Django (and why or why not):

a. You need to develop a web application with multiple users

- i. I would use Django because it is very scalable and can handle the frontend and backend of a program that has many users and a lot of data.

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

- i. I would use Django because of its fast processing unless the site did not use a database.

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

- i. I would not use Django because there would be many unnecessary features for this project.

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

- i. I would not use Django as it is a very specific framework that comes with many functionalities pre-installed. For more control, it would be better to build an application from scratch.

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

- i. I would use Django because it is a popular language and there is a very large community of Django users who could provide support.

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

a. Run the appropriate command to check the Python version.

b. Take a screenshot of the terminal window with the command and version and paste it into your answers document.

```
[(web-dev) melissawhite@Melissas-Air ~ % python --version  
Python 3.11.0
```

5. If you haven't done so already, set up and create a virtual environment and name it `achievement2-practice`. Then:

- a. Activate the virtual environment.
- b. Take a screenshot of the activated environment and paste it into your answers document.

```
melissawhite@Melissas-Air ~ % mkvirtualenv achivement2-practice
created virtual environment CPython3.11.0.final.0-64 in 759ms
creator CPython3Posix(dest=/Users/melissawhite/.virtualenvs/achivement2-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/melissawhite/Library/Application Support/virtualenv)
added seed packages: pip==22.3.1, setuptools==65.5.1, wheel==0.38.4
activators BashActivator,CShellActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator
[virtualenvwrapper.user_scripts creating /Users/melissawhite/.virtualenvs/achivement2-practice/bin/predeactivate
virtualenvwrapper.user_scripts creating /Users/melissawhite/.virtualenvs/achivement2-practice/bin/postdeactivate
[virtualenvwrapper.user_scripts creating /Users/melissawhite/.virtualenvs/achivement2-practice/bin/preactivate
virtualenvwrapper.user_scripts creating /Users/melissawhite/.virtualenvs/achivement2-practice/bin/postactivate
[virtualenvwrapper.user_scripts creating /Users/melissawhite/.virtualenvs/achivement2-practice/bin/get_env_details
[(achivement2-practice) melissawhite@Melissas-Air ~ % ]
```

6. Install Django and verify the installation by checking the version. Then:

- a. Take a screenshot of the terminal with the command and version.
- b. Paste it into your answers document.

```
(achivement2-practice) melissawhite@Melissas-Air ~ % django-admin --version
4.1.4
```