

Exercise 2.1 - Task Answers

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2. Why is Django so popular among web developers?

The biggest factor in Django's popularity has to do with the fact that it is simple to use. The ease of use factor combined with it's principal of rapid development and DRY philosophy allows developers to focus most of their efforts on the unique code and logic related to their application.

3. Five large companies that use Django, and why.

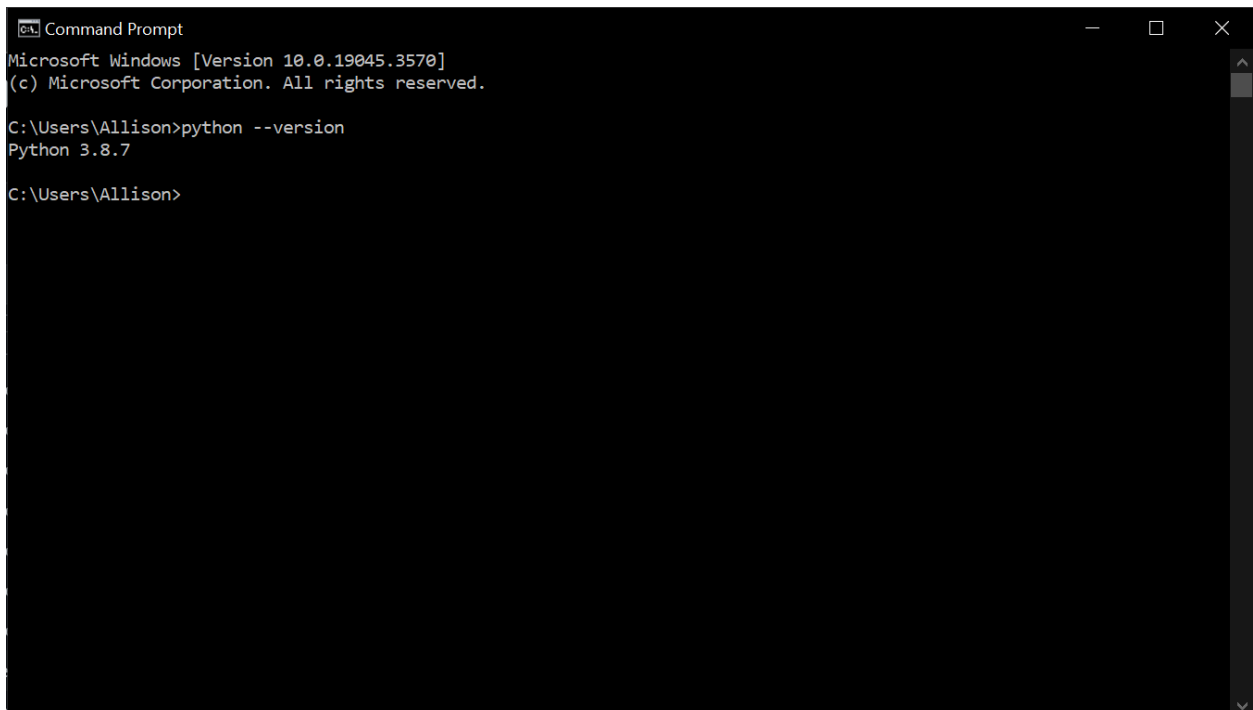
- *Instagram*
 - Built on python because of it's practicality and simplicity. When it came time to scale, Django allowed developers to be able to focus on building custom tools.
- *National Geographic*
 - Django inherently eases the development of data-driven, complex websites which is exactly what National Geographic hosts. They are able to take advantage of django CMS (Content Management System) and rely on it heavily for the education page.
- *Mozilla*
 - They use Django to allow their browser Firefox to better handle large amounts of traffic and API hits efficiently and effectively.
- *Spotify*
 - Spotify's back-end services and data analysis are handled using Python. They have incorporated Django to increase functionality.
- *Pinterest*
 - They are able to take advantage of Django's open source capacity, allowing them to easily and quickly modify their framework for growing needs.

4. Explain if you should use Django for the following scenarios:

- *You need to develop a web application with multiple users.*
 - Yes - Django would be good here, as it is built with security in mind. Built-in automated encryption would make it easy to keep your user's data secure.
- *You need fast deployment and the ability to make changes as you proceed.*
 - Yes - Django's MVT architecture ensures that development can be fast and easy.
- *You need to build a very basic application, which doesn't require any database access or file operations.*
 - No - Django is not the best option for simple projects, and since database access is not needed here Django is not the right choice

- *You want to build an application from scratch and want a lot of control over how it works.*
 - No - Django is a highly structured framework and requires that things be done the “Django Way”. If you want a lot of control than Django is not the right choice.
- *You’re about to start working on a big project and are afraid of getting stuck and needing additional support.*
 - Yes - Django is great for scalability and large projects. Additionally, Django is open source with a huge community of supporters, making it easy to find support when you need it.

5. Python version screenshot

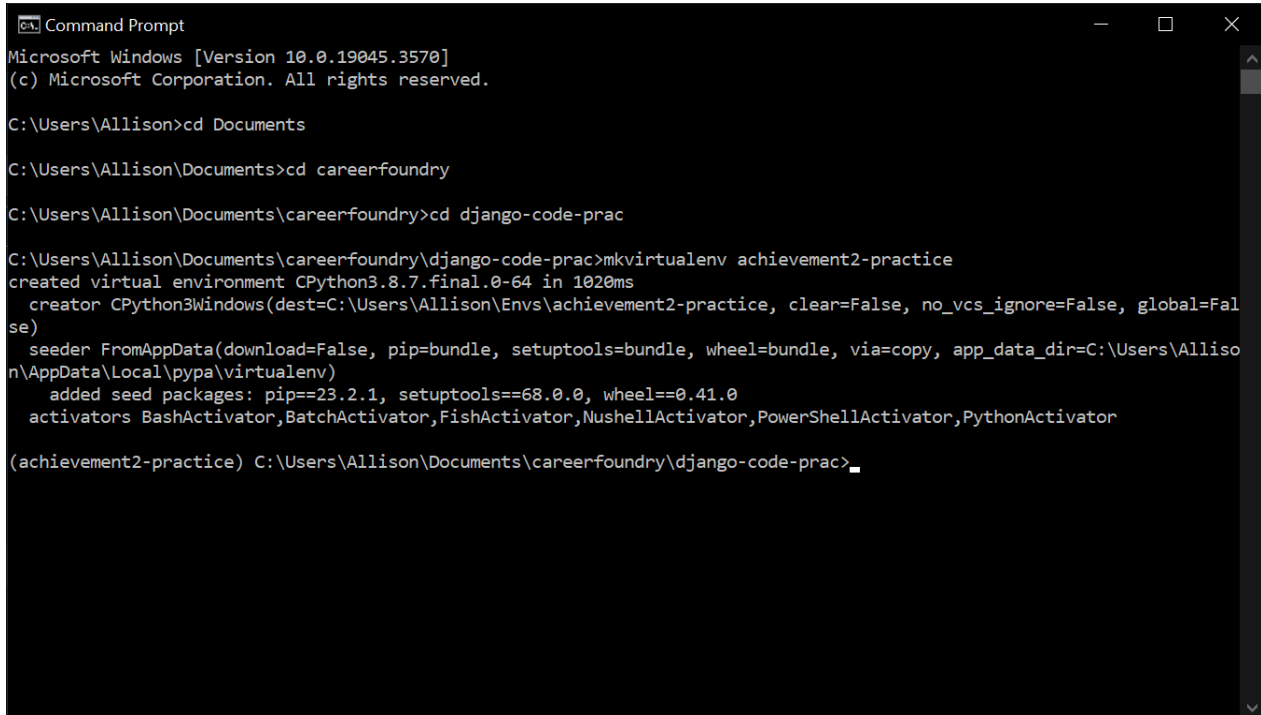
A screenshot of a Windows Command Prompt window. The title bar reads "Command Prompt". The window content shows the following text: "Microsoft Windows [Version 10.0.19045.3570]", "(c) Microsoft Corporation. All rights reserved.", "C:\Users\Allison>python --version", "Python 3.8.7", and "C:\Users\Allison>". The prompt is at the end of the last line.

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Command Prompt
Microsoft Windows [Version 10.0.19045.3570]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Allison>python --version
Python 3.8.7

C:\Users\Allison>
```

7. Virtual environment screenshot



```
Command Prompt
Microsoft Windows [Version 10.0.19045.3570]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Allison>cd Documents

C:\Users\Allison\Documents>cd careerfoundry

C:\Users\Allison\Documents\careerfoundry>cd django-code-prac

C:\Users\Allison\Documents\careerfoundry\django-code-prac>mkvirtualenv achievement2-practice
created virtual environment CPython3.8.7.final.0-64 in 1020ms
creator CPython3Windows(dest=C:\Users\Allison\Envs\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=C:\Users\Allison\AppData\Local\pypa\virtualenv)
added seed packages: pip==23.2.1, setuptools==68.0.0, wheel==0.41.0
activators BashActivator,BatchActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator

(achievement2-practice) C:\Users\Allison\Documents\careerfoundry\django-code-prac>_
```

8. Django installation screenshot

```
Command Prompt

C:\Users\Allison\Documents\careerfoundry>cd django-code-prac

C:\Users\Allison\Documents\careerfoundry\django-code-prac>mkvirtualenv achievement2-practice
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added seed packages: pip==23.2.1, setuptools==68.0.0, wheel==0.41.0
activators BashActivator,BatchActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator

(achievement2-practice) C:\Users\Allison\Documents\careerfoundry\django-code-prac>py -m pip install Django
Collecting Django
  Obtaining dependency information for Django from https://files.pythonhosted.org/packages/b9/45/707dfc56f381222c1c798503546cb390934ab246fc45b5051ef66e31099c/Django-4.2.6-py3-none-any.whl.metadata
  Using cached Django-4.2.6-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/b9051a4a07ad231558fcd8ffc89232711b4e618c15cb7a392a17384bbeef/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)
Collecting backports.zoneinfo (from Django)
  Using cached backports.zoneinfo-0.2.1-cp38-cp38-win_amd64.whl (38 kB)
Collecting tzdata (from Django)
  Using cached tzdata-2023.3-py2.py3-none-any.whl (341 kB)
Collecting typing-extensions>=4 (from asgiref<4,>=3.6.0->Django)
  Obtaining dependency information for typing-extensions>=4 from https://files.pythonhosted.org/packages/24/21/7d397a4b7934ff4028987914ac1044d3b7d52712f30e2ac7a2ae5bc86dd0/typing_extensions-4.8.0-py3-none-any.whl.metadata
  Using cached typing_extensions-4.8.0-py3-none-any.whl.metadata (3.0 kB)
Using cached Django-4.2.6-py3-none-any.whl (8.0 MB)
Using cached asgiref-3.7.2-py3-none-any.whl (24 kB)
Using cached typing_extensions-4.8.0-py3-none-any.whl (31 kB)
Installing collected packages: tzdata, typing-extensions, sqlparse, backports.zoneinfo, asgiref, Django
Successfully installed Django-4.2.6 asgiref-3.7.2 backports.zoneinfo-0.2.1 sqlparse-0.4.4 typing-extensions-4.8.0 tzdata-2023.3

[notice] A new release of pip is available: 23.2.1 -> 23.3
[notice] To update, run: python.exe -m pip install --upgrade pip

(achievement2-practice) C:\Users\Allison\Documents\careerfoundry\django-code-prac>django-admin --version
4.2.6

(achievement2-practice) C:\Users\Allison\Documents\careerfoundry\django-code-prac>_
```