

Task Questions

1. Write two or three sentences on why Django is so popular among web developers.
 - a. Django is popular among web developers because it is a “batteries-included” framework, meaning it arrives with most of the essential features needed for effective development and is user friendly. The architecture is suitable for small-to-large applications and is easy to modify and keeps the application loosely coupled, which allows it to be fairly easy to scale has a project’s needs grow.
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:
 - i. Social Media Platform
 - ii. Instagram uses Django to handle its backend server operations. Features can be quickly implemented because of Django’s ease of scalability, which is essential for Instagram’s growth and large user base.
 - b. Spotify:
 - i. Music Streaming Service
 - ii. Spotify used Django for backend services for managing their web interface and user account management. It is useful in building data pipelines and integrating with microservices.
 - c. Mozilla:
 - i. Open-source Software
 - ii. Mozilla used Django to build various internal and public-facing tools, such as Mozilla Add-ons. It is also used for portions of their main website and supports internal management of developer services.
 - d. Pinterest
 - i. Visual Discovery and Social Media Platform
 - ii. Pinterest uses Django as the foundation for its web application, allowing users to create, manage, and share visual content. It also helps them handle complex data management and feature deployment.
 - e. Disqus
 - i. Commenting Platform
 - ii. Disqus uses Django to power its entire platform, managing user comments, threads, and integrations with various websites. Django’s scalability is essential for handling millions of comments and interactions.
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 for multiple users.
 - i. Yes, Django would be a good choice because of its ability to support multiple users, user authentication, and session management. The architecture is very scalable and has the ability to grow with its user base.
 - b. You need fast deployment and the ability to make changes as you proceed.
 - i. Yes, Django would be a good choice for similar reasons. One of its strengths is the ability to scale and quick deployment of new features.

- c. You need to build a very basic application, which doesn't require any database access or file operations.
 - i. No, Django offers a lot of out-of-the-box solutions and small projects may not need these features, especially if no database or file operations are needed. Additionally, Django uses prewritten code and is more server intensive, which may be too heavy on low-bandwidth systems.
- d. You want to build an application from scratch and want a lot of control over how it works.
 - i. No, this is another example where Django has a lot of built-in features and generally sticks to its structure. The developer would lose some control over the internals of their system.
- e. You're about to start working on a big project and are afraid of getting stuck and needing additional support.
 - i. Yes, Django has a large, active community and comprehensive documentation. Additionally, Django has lots of third-party libraries and reusable components that can help reduce the risk of getting stuck.

4. Download and install Python.

```
(web-dev) C:\Users\beaug>python --version
Python 3.8.7
```

5. Create a virtual environment named "achievement2-practice", activate it, and take a screenshot.

```
C:\Users\beaug\careerfoundry\Python\Achievement 2>mkvirtualenv achievement2-practice
created virtual environment CPython3.8.7.final.0-64 in 5276ms
creator CPython3Windows(dest=C:\Users\beaug\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\beaug\AppData\Local\pypa\virtualenv)
added seed packages: pip==24.2, setuptools==74.1.3, wheel==0.44.0
activators BashActivator,BatchActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator

(achievement2-practice) C:\Users\beaug\careerfoundry\Python\Achievement 2>
```

6. Install and check Django version.

```
(achievement2-practice) C:\Users\beaug\careerfoundry\Python\Achievement 2>django
-admin --version
4.2.16
```