

2.1 Task

- ❖ Write two to three sentences on why Django is so popular among web developers.
 - Django is popular among web developers because it offers a high-level, batteries-included framework that streamlines the development of secure and scalable web applications. Its built-in admin interface, ORM, and robust documentation make it easy to build and maintain complex projects quickly. Additionally, Django's emphasis on best practices, like DRY (Don't Repeat Yourself) and security appeals to both beginners and experienced developers.
- ❖ 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** – A global photo and video sharing social media platform.
Use of Django: Instagram initially used Django to rapidly scale its backend infrastructure, taking advantage of Django's ORM and scalability to handle massive volumes of user data and interactions.
 - **Spotify** – A leading music streaming service with millions of users worldwide.
Use of Django: Spotify has used Django for parts of its internal tools and data management systems due to its rapid development capabilities and strong community support.
 - **Pinterest** – A visual discovery and bookmarking platform.
Use of Django: Pinterest leveraged Django in its early development to speed up prototyping and build its content-heavy platform, benefiting from Django's robust templating and ORM systems.
 - **Mozilla** – The organization behind the Firefox web browser.
Use of Django: Mozilla uses Django for several of its web applications and internal tools, such as the Mozilla Developer Network (MDN), due to its security features and maintainability.
 - **Disqus** – A global blog comment hosting service used by millions of websites.
Use of Django: Disqus is built almost entirely on Django and serves as a real-world example of Django's ability to power high-traffic, content-rich applications.

- ❖ 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.**
 - **Use Django** – Django comes with built-in authentication and user management, making it ideal for applications that involve multiple users with different permissions and roles.
 - **You need fast deployment and the ability to make changes as you proceed.**
 - **Use Django** – Django supports rapid development with reusable components, a powerful ORM, built-in admin interface, and easy deployment tools, making it perfect for iterative development.
 - **You need to build a very basic application, which doesn't require any database access or file operations.**
 - **Don't use Django** – Django might be overkill for very simple projects due to its size and setup complexity. A lightweight framework like Flask would be a better choice here.
 - **You want to build an application from scratch and want a lot of control over how it works.**
 - **Maybe not Django** – While Django is flexible, it follows the "Django way" (convention over configuration). If you need full control over every aspect, a microframework like Flask or FastAPI might offer more freedom.
 - **You're about to start working on a big project and are afraid of getting stuck and needing additional support.**
 - **Use Django** – Django has excellent documentation, a large community, and many third-party packages. It's a solid choice for large projects, especially when you anticipate needing support or existing solutions.

Screenshot showing Python version, web-dev virtual environment, and Django version

```
[cashmoneyhoney@christohersair2 ~ % workon web-dev ]
[(web-dev) cashmoneyhoney@christohersair2 ~ % python3 --version ]
Python 3.8.7
[(web-dev) cashmoneyhoney@christohersair2 ~ % workon web-dev ]
[(web-dev) cashmoneyhoney@christohersair2 ~ % django admin --version ]
zsh: command not found: django
[(web-dev) cashmoneyhoney@christohersair2 ~ % django-admin --version ]
4.2.20
[(web-dev) cashmoneyhoney@christohersair2 ~ % ]
```