

## 2.1 Task Questions

1. Django is popular among web developers for a number of reasons. One of the primary reasons is that it is a “batteries-included” framework, meaning it comes equipped already with most of the functionality needed for effective development such as authentication and additional plugins. Because of its under-the-hood set-up, it allows faster development by allowing developers to focus on the project logic rather than some of the tedious nuts and bolts elements of web development. It also employs a methodical and precise approach which is a boon to a lot of developers, though if you need greater adaptability for your app, it may not be the best choice.
2. A number of well-established companies use Django for their development. Some of the biggest include YouTube, Spotify, NASA, National Geographic, and Instagram.
  - YouTube is a video sharing platform that uses Django to add new features and implement upgrades as quickly as possible.
  - Spotify is an online audio-streaming platform that uses Django for backend services and data analysis and to create the algorithms that recommend new music to users based on their prior preferences.
  - NASA is an independent agency from the US government that focuses on space exploration and scientific discoveries. They use Django for the elements of their programs that require the most reliability, such as handling high-resolution imagery sharing.
  - National Geographic is an organization that specializes in science, nature, education, storytelling and media and uses Django to create a content management system for all of their online media.
  - Instagram is a photo and video sharing social media platform that uses Django to process its enormous amount of data and user interactions. It is actually the world’s largest deployment of Django.
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. Django would be useful in this situation because of its inherent scalability.
  - You need fast deployment and the ability to make changes as you proceed.

Yes. Django would be useful here because one of its primary features is its fast deployment and the specific organization of the framework allows for ease of change because the code is easy to track in development.

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

No. Django would not be useful for something as simple as this

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

No. Django has a very specific framework structure that does not lend itself to much developer control.

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

Yes. Django would be ideal for this because it is very scalable and has a large online community with extensive documentation for ample support if needed.

4.

```
MacBook-Air:~ Halcyon2020$ python3 --version  
Python 3.9.6
```

5.

```
(achievement2-practice) MacBook-Air:python Halcyon2020$
```

6.

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Successfully installed asgiref-3.7.2 django-4.2.1 sqlparse-0.4.4 typing-extensions-4.6.2
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