

## Exercise 2.3: Django Models

### Learning Goals

- Discuss Django models, the “M” part of Django’s MVT architecture
- Create apps and models representing different parts of your web application
- Write and run automated tests

### Reflection Questions

1. Do some research on Django models. In your own words, write down how Django models work and what their benefits are.

Django models define the structure of the data stored in databases, including default values, field types, etc. Django models are useful because you don’t have to talk to the database on your own, you just have to create the model structure and Django manages the rest of the database communication, and you don’t have to push SQL queries yourself.

2. In your own words, explain why it is crucial to write test cases from the beginning of a project. You can take an example project to explain your answer.

It’s important to write testing from the beginning of a project to check for bugs as they occur. If you test as you proceed, you won’t have to take additional time on manually checking your code as your app grows. Another benefit is thinking carefully about the requirements of the app when writing tests, which allows you to be proactive in your initial development and for hazard testing so other people don’t break your code. They also ensure reliability for your clients and users because everything has already been vetted. It is also good for increased coverage of low-level details of your app’s functionality. And lastly, they provide ample documentation for how your app is supposed to behave so you know what you are aiming for.