

## 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 web applications access and manage data through Python objects referred to as models. Models are the single, definitive sources of information about data. They contain the essential fields and behaviors of data that we’re storing. By using Django models we can automatically map data to a database. Django models define the structure of stored data in the database, including field types, default values, selection list options, etc.

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.**

Software testing assures some degree validation is performed on a project to ensure it doesn’t contain any errors (i.e., “bugs”). Tests are methods to prevent and uncover bugs. They help you:

- Think of different scenarios and use cases for an application.
- Find bugs while developing an application.
- Create documentation for code.
- Identify early errors and deliver higher-quality, bug-free code.