Reflection Questions Exercise 2.3

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

To start with, a Django model is a Python class that inherits attributes from Django.db.models.Model. The developer can assign attributes to the model, each representing a database field. Django then takes those attributes and automatically formats an SQL query to create a corresponding table. This exhibits an important advantage of Django; it automates the creation of the database table, so the developer doesn't have to open a session or write a query request every time a class is created.

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

Writing good tests as early as possible is part of creating a robust application. To me it falls in the same category as writing effective code comments and a clear README file. The tests will expose issues early on in the development process and save us time – it's much easier to stop and fix a bug on the spot than having to sort through old code at the end of the process. It also adds confidence as I move on to the next "step" in the development chain, knowing that whatever else comes, the code I've written works as intended.

In the case of this project, it's important to have the base Recipe model working before moving on to the more complicated features of the application. Once those come into play, it will make that troubleshooting process even harder if one cannot even enter a recipe in the database effectively.