Exercise 2.3: Django Models

Reflection Questions :

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

  - **A:** Models are a key component of the Django web framework. They provide an abstraction layer for interacting with databases. They define the structure of the database tables. To name some of the many benefits: Data structure can be defined in one place, models are defined without specifying the database backend, API conveniently provides CRUD operations, query APIs provided for data retrieval, built-in validation for fields, customizable admin interface provided out-of-the-box, and the middleware necessary for handling database connections, transactions, and security features.

- *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.*

  - **A:** It can be crucial to write test cases at the beginning of a project to: Detect issues earlier for easier fixes, act as a documentation-like reference, catch unforeseen problems when refactoring code, provide project specification guidance, provide examples of how the code is expected to behave (to collaborating developers), reduce reluctance (increase confidence) in developing new features, and generally fosters a culture of quality in the development team.