Structuring Your Code

Spring Boot does not require any specific code layout to work. However, there are some best practices that help.

> 💡 TIP
>
> If you wish to enforce a structure based on domains, take a look at Spring Modulith.

Using the "default" Package

When a class does not include a `package` declaration, it is considered to be in the "default package". The use of the "default package" is generally discouraged and should be avoided. It can cause particular problems for Spring Boot applica-

> 💡 TIP
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> We recommend that you follow Java's recommended package naming conventions and use a reversed domain name (for example, `com.example.project`).

Locating the Main Application Class

We generally recommend that you locate your main application class in a root package above other classes. The `@SpringBootApplication` annotation is often placed on your main class, and it implicitly defines a base "search package" for certain items. For example, if you are writing a JPA application, the package of the `@SpringBootApplication` annotated class is used to search for `@Entity` items. Using a root package also allows component scan to apply only on your project.

> 💡 TIP
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> If you do not want to use `@SpringBootApplication`, the `@EnableAutoConfiguration` and `@ComponentScan` annotations that it imports defines that behavior so you can also use those instead.

The following listing shows a typical layout:

```
com
 +- example
     +- myapplication
         +- MyApplication.java
         |
         +- customer
         |   +- Customer.java
         |   +- CustomerController.java
         |   +- CustomerService.java
         |   +- CustomerRepository.java
         |
         +- order
             +- Order.java
             +- OrderController.java
             +- OrderService.java
             +- OrderRepository.java
```

The `MyApplication.java` file would declare the `main` method, along with the basic `@SpringBootApplication`, as follows:

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```java
@SpringBootApplication
public class MyApplication {

    public static void main(String[] args) {
        SpringApplication.run(MyApplication.class, args);
    }

}
```

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