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Billing8-9

Starter code: Billing8

In this workshop you will refactor the Billing application to use the Spring framework for basic component assembly. The starter code in **Billing8** is itself update in a few ways, so start by reviewing those:

- The **Reporter** no longer works with a **Formatter** to produce text-based reports, and the package **com.amica.format** is gone. Instead, the class functions as more of a query engine, returning results in appropriate collections of data.
- All of the parsers in **com.amica.billing.parse** now implement an extended interface **Producer**, and so can format customer and invoice data back to writers.
- The **Updater** now relies on the provider "parser" to function also as a producer, and so can both read and write its data sets from/to any format.

Our high-level goal for this workshop is to build a new Spring component **InvoicePayer** that uses the **Updater** to pay a batch of invoices and then uses the **Reporter** to return an updated list of overdue invoices. This drives a need to make the main components of the application work as Spring components – while preserving their functionality and their internal uses of the configuration manager.

For the moment, you and your team will focus on design and planning. After reviewing the starter code, and considering the requirements, discuss and formulate answers to these questions:

1. What classes will be Spring components, and what components will depend on what other components?
2. How will each of them be configured into the running Spring application context: by **@Component** scanning, or by explicit configuration using **@Bean** methods?
3. How will dependencies be resolved: by autowiring, constructor injection, setter injection, or maybe just simple, programmatic configuration (e.g. calling a setter method)?
4. Given your answers to the above questions, what will the impact on existing tests?

You'll move ahead to implementing a solution after discussing with the instructor.