

## Module 15: Job Scheduling with Spring

### Exercise 15.1 – Spring Job Scheduling

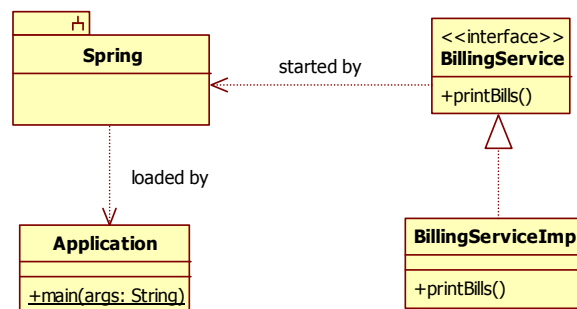
#### The Setup:

In this exercise, we will provide you with some basic timer code, and ask you to create another timer. Start by opening the **exercise15\_1** project, and add the following additional dependencies:

```
<dependency>
  <groupId>org.springframework</groupId>
  <artifactId>spring-context-support</artifactId>
  <version>4.0.2.RELEASE</version>
</dependency>
<dependency>
  <groupId>org.springframework</groupId>
  <artifactId>spring-tx</artifactId>
  <version>4.0.2.RELEASE</version>
</dependency>
<dependency>
  <groupId>org.quartz-scheduler</groupId>
  <artifactId>quartz</artifactId>
  <version>2.2.1</version>
</dependency>
```

#### The Application:

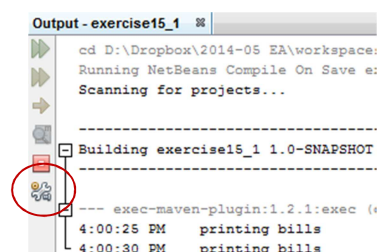
The Java code for this exercise is very straightforward, most of the intricacies of this exercise are found in the `springconfig.xml` file. The Application loads the `springconfig.xml` file. Spring has a cron trigger, executing a job every 5 seconds that calls `printBills()`.



Look through the `springconfig.xml` and the Java code to make sure you understand the different parts that work together to execute this timer. Running **Application.java** should output:

```
7:10:10 PM    printing bills
7:10:15 PM    printing bills
7:10:20 PM    printing bills
```

The application continues to run until you terminate it.



***The Exercise:***

Start by adding a new method called **generateBillingReport()** to the **BillingService** interface.

Then add this method to the **BillingServiceImpl** class – just like the **printBills()** method it should just print out the current time and the name of the method.

Then configure Spring to execute the **generateBillingReport()** method every 10 seconds, and change it so that **printBills()** executes every 7 seconds instead of every 5 seconds.

Your output should look like:

4:05:00 PM	generate billing reports
4:05:00 PM	printing bills
4:05:07 PM	printing bills
4:05:10 PM	generate billing reports
4:05:14 PM	printing bills
4:05:20 PM	generate billing reports

