

Lab 12

Part A: Scheduling

In the Bank application, add a new class `BankStatementPrinter`, that prints out every 20 seconds the details of all accounts to the console.

Part B: Events

In the Bank application, for every change in an account, do the following 2 things using events:

1. Send an email message to the account holder. We are not going to send a real email, but just do a `System.out.println()` to the console. (Don't worry about the email address because the Customer does not have an email address).
2. Write a trace record to the database using JPA with the following data:
 - Date & time
 - AccountNumber
 - Operation done on the account
 - Amount of the operation

Part C: Spring configuration

- a. Write a Spring Boot application where you provide the following data in **application.properties**:

- Application name
- Version
- Server URL
- Server name
- User firstname
- User lastname
- User username
- User password
- A list of countries

The application writes the configured values to the console.

- b. Change the application.properties file to a application.yml file

- c. Add validation to the properties:

- Application name not blank
- Version not blank
- Server URL not blank
- Server name
- User firstname
- User lastname
- User username not blank, between 8 and 15 characters
- User password not blank, between 8 and 15 characters
- A list of countries

