10. Java integration

For this lab requiring Java code development, it is advisable to equip yourself with a Java development-oriented Eclipse in which the JasperReport plugins have been added.

10.1 Maven project setup (Optional)

The goal is to build an executable jar that can generate the parameter report.

Write a pom.xml:
- which defines the following dependencies:
  ◦ jasperreport
  ◦ groovy language
  ◦ hsqldb database
- Automates the generation of reports found in the src / main / resources directory

10.2 Java report generation program

In this lab, we are going to develop a Java program to perform all the phases of generating a report. We use the report made in previous lab on parameters and localization.

The Java program can take several parameters:
- The country that is used to filter the data.
- A parameter used to indicate the language of generation of the report

A code skeleton is provided

10.3 Scriptlet

<u>Utility method</u>

We want to add in the summary part of the report of TP5, the time taken by the generation of the report.

For that we put a class of type *JRDefaultScriptlet* implementing the 2 methods :

> *beforeReportInit ()* : Starts a timer

> *long getReportTime ()* : Returns the elapsed time

Once tuned, a jar file is generated and the jar is placed in the classpath of the jasperSoft project.

To use it, all you have to do is reference the full name of the class in a scriptlet element of the report.

If the referencing is correct the *getReportTime ()* method is available in the expression window.

<u>Manipulating Variables</u>

We also want to handle the variable firstLetter (indicating the first letter of the current page) in

order to add on the current page the first letter of the previous page.

Define a new variable in the JasperReport report and assign it via the scriptlet.