

# Raphael Stauffacher Coding Assignment Instructions

## What I programmed

I completed the task but had some issues with using the file-based HSQLDB. I've never used that particular DB before so I downloaded it and messed around with it a bit but couldn't get it to work properly in a reasonable amount of time. So instead to complete the task, my program writes the result data into a text file in JSON format. If no arguments for the location of the logfile.txt and result.txt are presented when running the program from the command line, it uses C:\data\logfile.txt and C:\data\result.txt as default locations. The result.txt doesn't have to exist before running the program, it will get created automatically at the given location. I've used maven to resolve dependencies and build the program.

## File structure

I've divided classes in four packages. Logic, starter, test and util. Logic contains all the programmatic activities related to the task, starter is responsible for running the program and util contains some file related utility classes I programmed outside of this assignment. Finally in the test package, there's a JUnit class with three tests to verify the results.

## How to run it from the command line

1. 'mvn install' in project directory

```
C:\Users\Raphael\workspace\CreditSuisseCodingAssignment>mvn install
[INFO] Scanning for projects...
[WARNING]
[WARNING] Some problems were encountered while building the effective model for CreditSuisseCodingAssignment:CreditSuisse
[WARNING] 'build.plugins.plugin.version' for org.apache.maven.plugins:maven-jar-plugin is missing. @ line 10, column 12
[WARNING]
[WARNING] It is highly recommended to fix these problems because they threaten the stability of your build.
[WARNING]
[WARNING] For this reason, future Maven versions might no longer support building such malformed projects.
[WARNING]
[INFO]
[INFO] -----< CreditSuisseCodingAssignment:CreditSuisseCodingAssignment >-----
[INFO] Building CreditSuisseCodingAssignment 0.0.1-SNAPSHOT
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ CreditSuisseCodingAssignment ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Raphael\workspace\CreditSuisseCodingAssignment\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ CreditSuisseCodingAssignment ---
[INFO] Changes detected - recompiling the module!
[WARNING] File encoding has not been set, using platform encoding Cp1252, i.e. build is platform dependent!
[INFO] Compiling 9 source files to C:\Users\Raphael\workspace\CreditSuisseCodingAssignment\target\classes
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ CreditSuisseCodingAssignment ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Raphael\workspace\CreditSuisseCodingAssignment\src\test\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ CreditSuisseCodingAssignment ---
[INFO] No sources to compile
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ CreditSuisseCodingAssignment ---
```

## 2. 'mvn compile package' in project directory

```
C:\Users\Raphael\workspace\CreditSuisseCodingAssignment>mvn compile package
[INFO] Scanning for projects...
[WARNING]
[WARNING] Some problems were encountered while building the effective model for CreditSuisseCodingAssignment:CreditSuisse
[WARNING] 'build.plugins.plugin.version' for org.apache.maven.plugins:maven-jar-plugin is missing. @ line 10, column 12
[WARNING]
[WARNING] It is highly recommended to fix these problems because they threaten the stability of your build.
[WARNING]
[WARNING] For this reason, future Maven versions might no longer support building such malformed projects.
[WARNING]
[INFO]
[INFO] -----< CreditSuisseCodingAssignment:CreditSuisseCodingAssignment >-----
[INFO] Building CreditSuisseCodingAssignment 0.0.1-SNAPSHOT
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ CreditSuisseCodingAssignment ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Raphael\workspace\CreditSuisseCodingAssignment\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ CreditSuisseCodingAssignment ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ CreditSuisseCodingAssignment ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Raphael\workspace\CreditSuisseCodingAssignment\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ CreditSuisseCodingAssignment ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
```

## 3. 'cd target' in project directory

```
C:\Users\Raphael\workspace\CreditSuisseCodingAssignment>cd target
```

## 4. 'java -jar CreditSuisseCodingAssignment-0.0.1-SNAPSHOT.jar C:\data\logfile.txt C:\data\result.txt' in target directory

the two parameters behind the run command are for the logfile.txt and result.txt, any location can be chosen

the program should produce following output

```
C:\Users\Raphael\workspace\CreditSuisseCodingAssignment\target>java -jar CreditSuisseCodingAssignment-0.0.1-SNAPSHOT.jar C:\data\logfile.txt C:\data\result.txt
event duration for event with id scsmbstgra is 5 ms
event duration for event with id scsmbstgrb is 3 ms
event duration for event with id scsmbstgrc is 8 ms
calculation for event with id scsmbstgra already completed
calculation for event with id scsmbstgrc already completed
calculation for event with id scsmbstgrb already completed
C:\Users\Raphael\workspace\CreditSuisseCodingAssignment\target>
```

I coded this in Eclipse IDE therefore the project can also be imported in Eclipse or IntelliJ and run from there via the 'CodingAssignmentStarter' class.

If it's important for the assignment task I can try to get HSQLDB working on my setup to properly complete the task.

Best Regards,  
Raphael Stauffacher