



EGF Exercices – Pattern – UC3 **Reporting of Model-to-Text Transformations**

Benoît Langlois – Thales/TGS

Understanding how to realize M2T reporting and post-processing with EGF patterns

Plugin

- ▶ `org.eclipse.egf.usecase.pattern.uc3.m2treporting`

Prerequisite

- ▶ Read the EGF Tutorial
- ▶ Read the EGF Tutorial / Reporting of Model-to-Text Transformations

Problem Statement

- ▶ Writing a pattern which displays on the console the list of classes of an ecore model

Learning

- ▶ Report on console

Difficulty

- ▶ 1/5

Correction

- ▶ `Pattern_UC3_1_ReportOnConsole.fcore`

Problem Statement

- ▶ Writing a pattern which writes, in one file, the list of classes of an ecore model

Learning

- ▶ Using a reporter to write a generation result from patterns in one file

Difficulty

- ▶ 2/5

Correction

- ▶ Pattern_UC3_2_ReportInOneFile.fcore
- ▶ The result is created in a « test » project, folder « Pattern_UC3 »
- ▶ Two versions are proposed:
 - ▶ One factory component integrating the pattern and the production plan
 - ▶ A dissociation of a FC launcher which provides a reporter to a common FC which contains the pattern and the production plan

Problem Statement

- ▶ Writing a pattern which writes for each class, in separate files, the name of this class
- ▶ Difference with the previous exercise: just changing the reporter which splits the result of each pattern class by file (and not in one file)

Learning

- ▶ Using a reporter to write a generation result from patterns in several files

Difficulty

- ▶ 2/5

Correction

- ▶ Pattern_UC3_3_ReportInSeveralFiles.fcore
- ▶ Reuse of the common FC, created during the previous exercise, called with a FC providing the specific reporter

Problem Statement

- ▶ Like Exercise #2, writing a pattern which writes in one file the names of ecore classes
- ▶ Defining a sub-task of « Domain-Driven Pattern Strategy » which adds two parameters for setting the Project and Folder Names where the file is generated

Learning

- ▶ Adding new report parameters to a task which are used by a reporter

Difficulty

- ▶ 3/5

Correction

- ▶ `Pattern_UC3_4_ReportWithAdditionalReportParameters.fcore`

Problem Statement

- ▶ Implementing a factory component :
 - ▶ containing two patterns for class and attribute
 - ▶ which displays the name of each class and attribute
- ▶ Next, writing a class (e.g., MyPatternProcessor.java) for post-processing the output of the pattern-based generation

Learning

- ▶ Understanding the mechanism of M2T post-processing

Difficulty

- ▶ 3/5

Correction

- ▶ Pattern_UC3_5_patternOutputProcessor.fcore