



 **EGF Exercices – EMF – UC2**
EGF 0.3.0

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Understanding basic EMF generation with EGF

Correction of the exercices

- ▶ Download the org.eclipse.egf.usecase.emf.uc2.zip file from the [EGF wiki](#)
- ▶ Use the libray model and project in the org.eclipse.emf.examples.library.zip file

Prerequisite

- ▶ Installation of Eclipse 3.6 and egf 0.3.0
- ▶ Read the EGF Tutorial
- ▶ Read the « reuse and customization » EGF tutorial
- ▶ Read the « EMF Generation Patterns » EGF tutorial
- ▶ Understand the « EMF-UC1 » use case



Problem Statement

- ▶ Writing a factory component which applies an EMF generation with patterns for a given genmodel file
- ▶ Indications:
 - ▶ Start from the UC EMF UC1 / Exercice #2
 - ▶ Create the « Viewpoint container » and « Domain viewpoint » if they don't exist, and create a Domain URI element which refers a genmodel
 - ▶ Create the invocations to the « EMF [Model | Edit | Editor] Pattern » factory components. The domain URI element is the single parameter.

Learning

- ▶ Understanding a simple EMF generation with patterns

Difficulty

- ▶ 2/5

Correction

- ▶ EMF_Library_UC2_1.fcore

Problem Statement

- ▶ The set and get feature methods must be created for Writer. On the other hand, it would be useful to know the books of a library and the stock of a library.
- ▶ Indications:
 - ▶ Create four patterns: 1) for Writer and Library, 2) for generating the get and set methods. The get/set patterns inherit from the « Class.getGenFeature.TODO.override » and « Class.setGenFeature.TODO.override » patterns.
 - ▶ In the preCondition, write the precondition to apply the pattern
 - ▶ In a doGenerate method, write the get/set generation code
 - ▶ Invoke « EMF [Model | Edit | Editor] Pattern » factory component. For the Model, add a pattern substitution. This is a list of three substitution [super-pattern EMF pattern] / [pattern created for overriding]
 - ▶ In the plugin.xml dependencies, don't forget to add a dependency toward « org.eclipse.egf.emf.pattern » which contains the « Class.getGenFeature.TODO.override » pattern

Learning

- ▶ Understanding a customization of the EMF generation with patterns

Difficulty

- ▶ 3/5

Correction

- ▶ EMF_Library_UC2_2.fcore