



 **EGF Exercices – Factory Component–UC1**

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Understanding how to develop factory components with EGF

Plugin

- ▶ `org.eclipse.egf.usecase.fc.uc1`

Prerequisite

- ▶ Read the EGF Tutorial
- ▶ Understanding how to create factory components is explained in the « Eclipse Help/EGF section/Tutorials »

Problem Statement

- ▶ 1. Writing a Java Task with one parameter, named *value*, which displays:
« Hello [value]! »
- ▶ The default value of *value* is « World »
- ▶ 2. Writing a factory component which calls the Java Task 1) without value for « value », 2) with a value for « value »

Learning

- ▶ Creation of factory component and Java Task

Difficulty

- ▶ 1/5

Correction

- ▶ FC_UC1_1_FCAndTask.fcore

Problem Statement

- ▶ 1. Writing a factory component FC1 with one contract. This contract is used to invoke the Java task of the exercice 1.
- ▶ 2. Writing a factory component FC2 which calls FC1 and provides the value to FC1.

Learning

- ▶ Factory component contract

Difficulty

- ▶ 1/5

Correction

- ▶ FC_UC1_2_FCWithContracts.fcore

Problem Statement

- ▶ 1. Writing a PricerComputation Java task which computes an amount from a quantity and a price
- ▶ 2. Writing a PricerDisplay Java task which displays a quantity, a price and an amount
- ▶ 3. Writing a factory component which calls PricerComputation and PricerDisplay to compute and display an amount from a quantity and a price

Learning

- ▶ Factory component contract I / Out mode

Difficulty

- ▶ 2/5

Correction

- ▶ FC_UC1_3_FCPricer.fcore
- ▶ The correction presents 1) a solution with the task invocation, and 2) a solution with intermediary factory components only to understand In and out passing mode between factory components and tasks