

## **PROJECT 2**

Consider a teacher that has a repository of multiple-choice questions and, for each question, the correct alternative.

Each model represents a test developed by the teacher (a set of questions). Your mission is to make three different code-generators:

a) print the exam

b) print the correct answers

c) generate a Java program (or use another programming language of your choice) that allows the student to execute the exam using the computer and, when he finishes, prints the answers given.

To differentiate between the 3 student teams, items a and b must generate code in html, or latex, or mediawiki (each team chooses one).

Deliveries:

**1** – **November, 8th** - Metamodel and an instance\* of the metamodel (object model) that will be used when generating the exam. A unique version of the metamodel will be produced jointly by all teams, based on the three teams resulting metamodels. This will be done in the class of November, 9th so that the project can be continued with a unified metamodel.

\*Each team must create their own set of questions regarding the Software Reuse discipline, so that these questions can be used to illustrate the metamodel instance. Prepare at least 10 questions relative to at least 5 different reuse techniques from the 7 seen in the discipline: Software Patterns, Frameworks, Software components, Software Product Lines, Service-oriented Architecture, Systems of Systems and Model-driven Engineering.

2 - November, 23rd - Part a

3 - December, 3rd - Part b and c