Assignment A4

Define “Glot” a domain-specific language (DSL) for specifying Web Applications (the one developed in HW2 and HW3) on the EMF platform by using one among the following tools/notations:

- EMF
- Emfatic
- OCLInEcore

Task A4.1

Define a metamodel in Emfatic or EMF for describing your domain (as illustrated during the course) satisfying the following

- 9 metaclasses if the group is made of two candidates
- 12 metaclasses if the group is made of three candidates;

The metamodel must contain

- inheritance,
- relations, i.e., containment, non containment, opposite (optional),
- enumeration types,-attributes;

Each metaclass has at least one attribute or reference;

- Singleton or isolated metaclasses are not allowed

For the evaluation, we will consider:

- Metamodel completeness and coverage
- Model consistency and homogeneity
- Coverage of technological assets (containment and bi-directional references, inheritance, enumeration types, custom data types, etc.);

Task A4.2

Instantiate the metamodel by two concrete instances and make sure that each concept (represented as metaclasses) at the metamodel level can be instantiated in your models.

Task A4.3

Define metamodel constraints (and “critiques” in the case of EVL), operation, and derived fields in OCL or EVL/EOL

- 3 constraints (critique and constraints) to validate models
- 2 operations
- 2 derived fields (only for OCL)