Task4 Report

**Problem:**

Develop a metamodel of Declare (see the description of the language in the slides on OASE, as well as in [2,3]) and produce a graphical environment for drawing Declare models in Eclipse. You can use some alternative graphical representation for Declare constructs.

**Conceptual Model:**

**[Screenshot]**

Declare is a constraint-based language that uses LTL to formally specify the semantics of constraints [Ref Lecture Slide 7]. Declare language is generated by Activities and Templates. Activity class contains only the name attribute. It can be associated with Templates in zero-to-many relationship. Template class contains name and ltlExpression attributes. Declare language contains 4 different template types. These types are existence template, relation template, negation template and choice template. Existence template is associated with Activities in exactly one relationship. Relation template is associated with activities in two-to-many relationship. Negation template is associated with activities in exactly two relationships. Choice template is associated with activities in two-to-many relationship. Figure **X** shows the metamodel for Declare.

**Declare in Eclipse**

**[Screenshot]**

Figure **X** shows the metamodel, which is created in the eclipse of Declare language. As a distinction from the conceptual model, this model contains Connection class. The reason is Eclipse tool doesn’t allow bi-directional relationships.