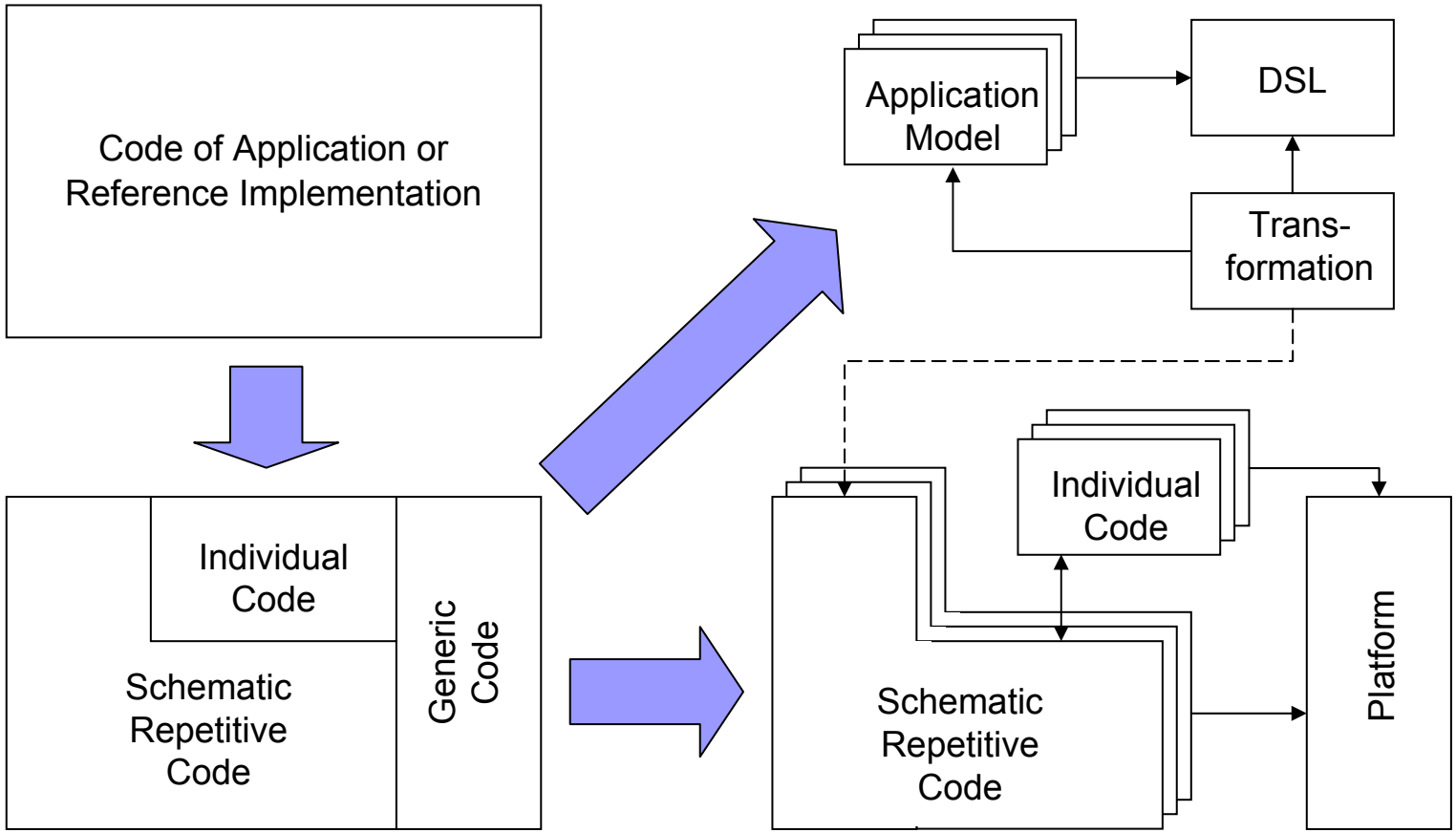
Metamodellek a szoftverfejlesztésben

MDSD – Bevezetés

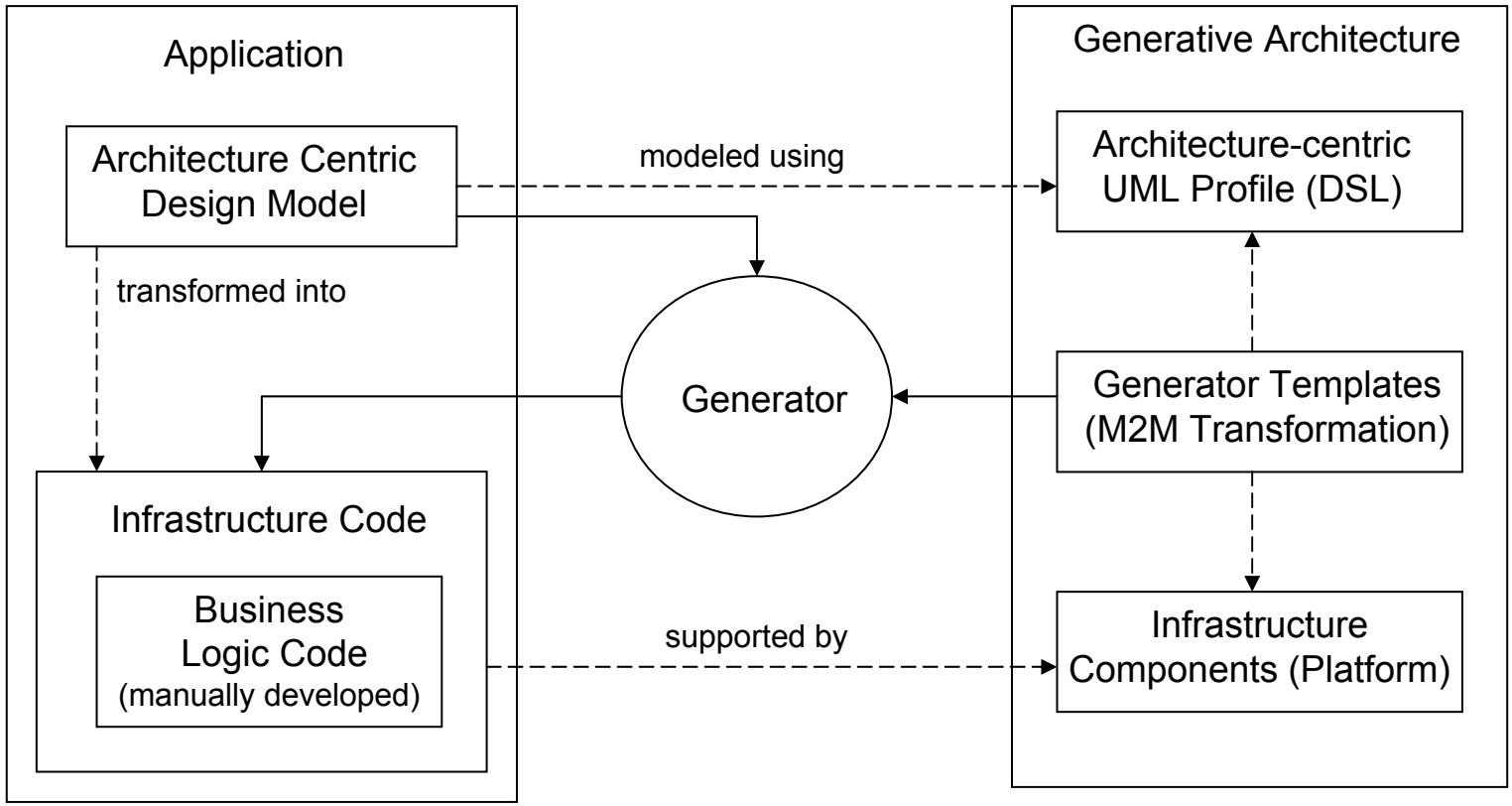
MDSD

- Model Driven Software Development
- MDA-val nagyban átfed, általánosabb
- Célok:
  - minőség, sebesség, karbantarthatóság
  - implementáció, mint aspektus
  - újrahasználható architektúra
  - interoperabilitás

MDSD


Code of Application or Reference Implementation
Application Model
DSL
Trans-formation
Individual Code
Generic Code
Schematic Repetitive Code
Individual Code
Schematic Repetitive Code
Platform

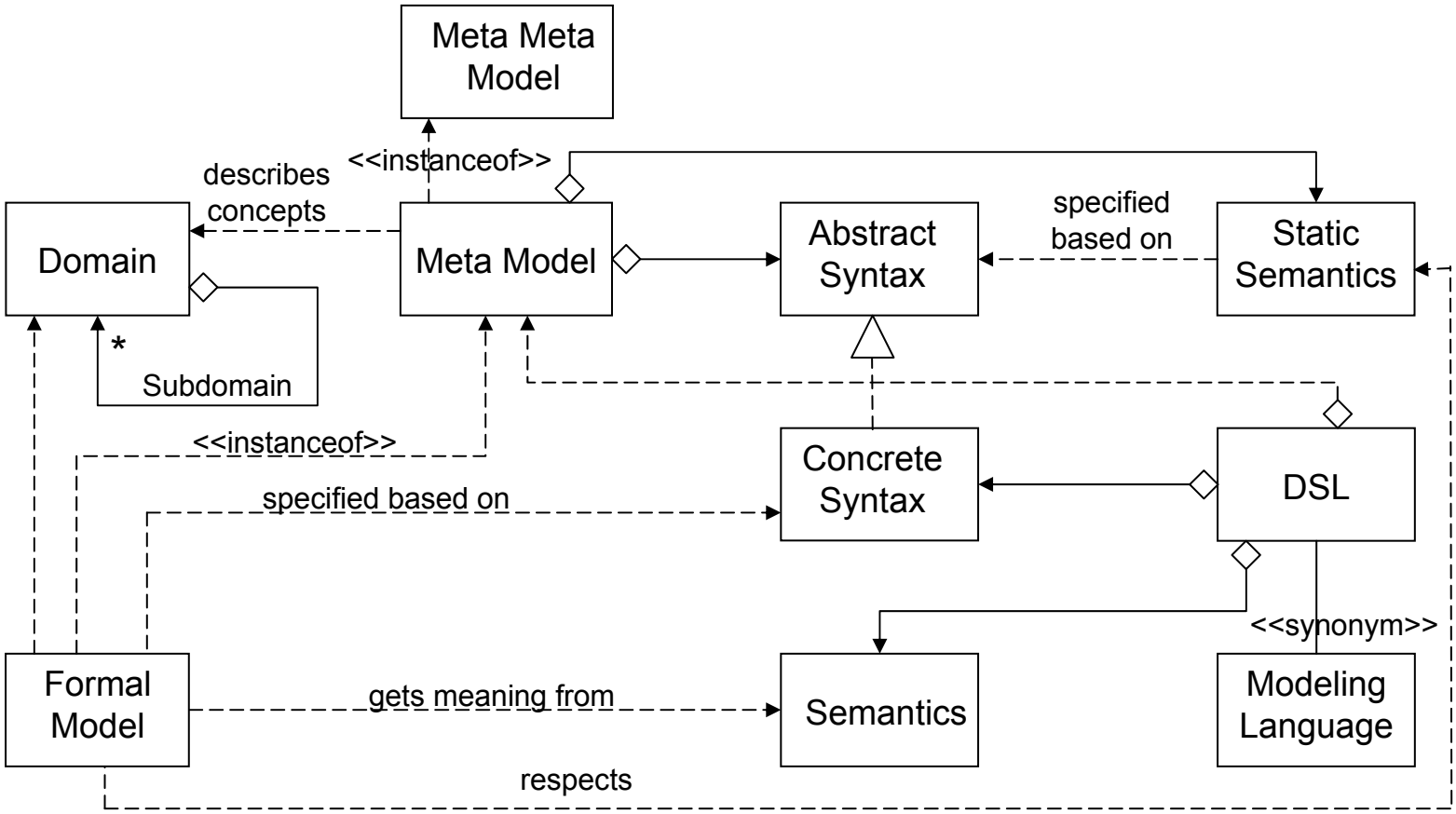
Architektúra központú MDSD



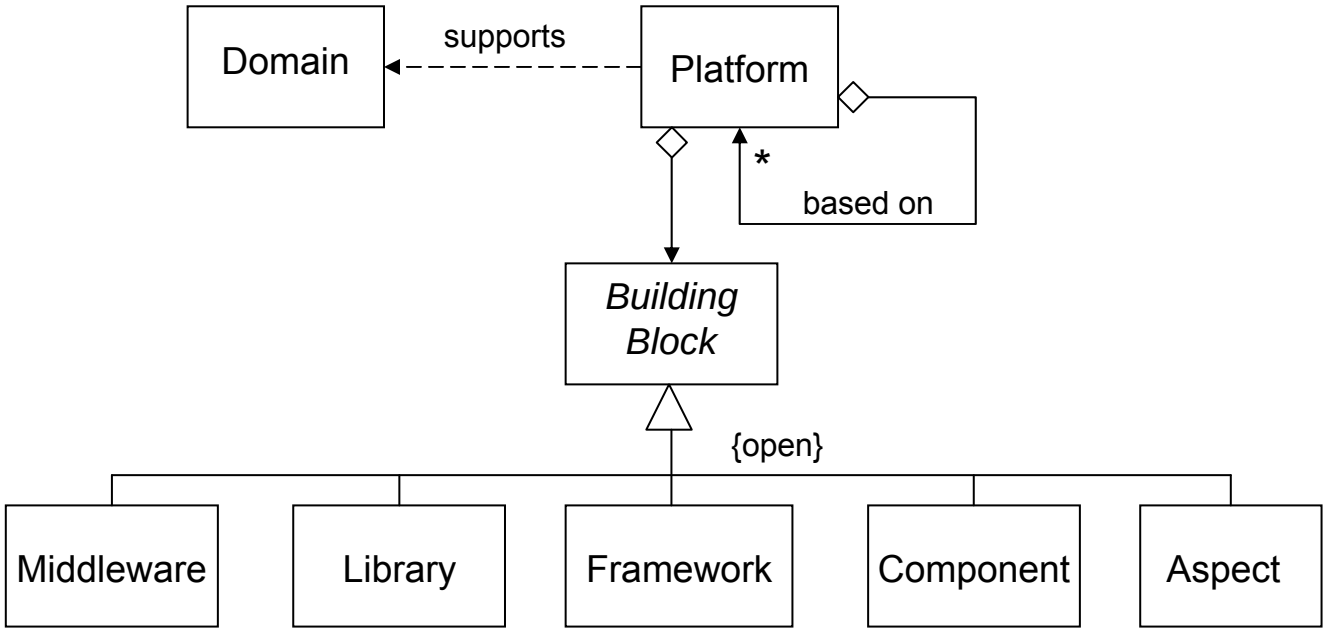
MDSD leírás

- Nézetek:
  - Modeling
  - Platforms
  - Transformation
  - Software System Family

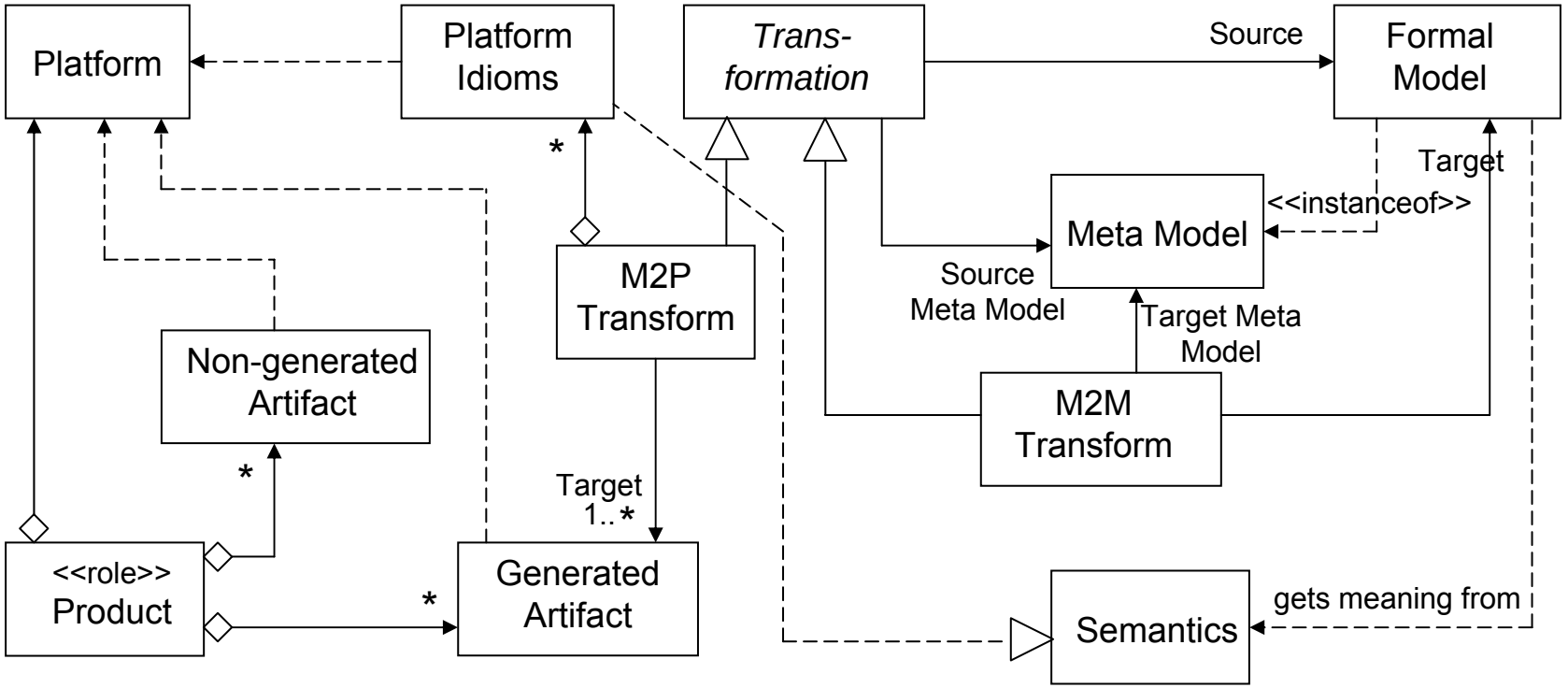
MDSD Modeling



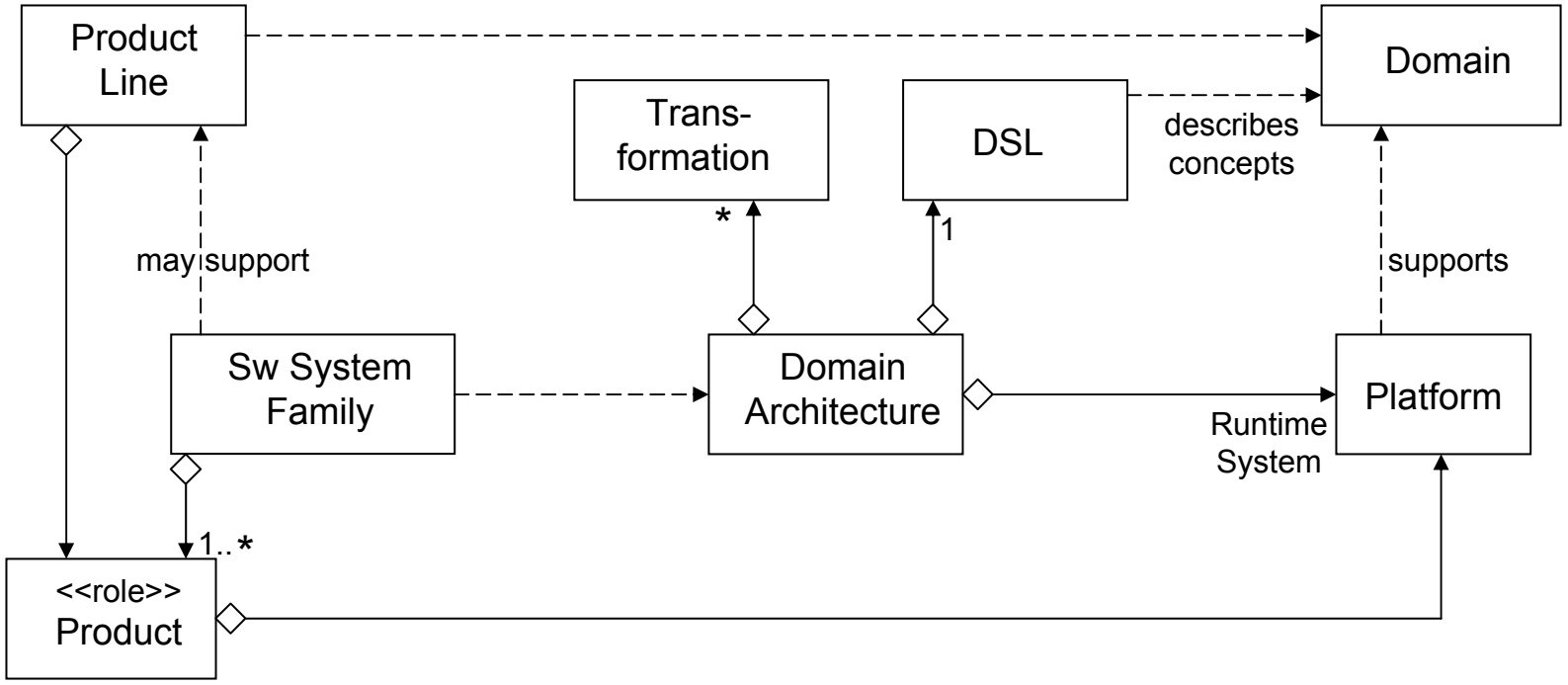
MDSD Platforms



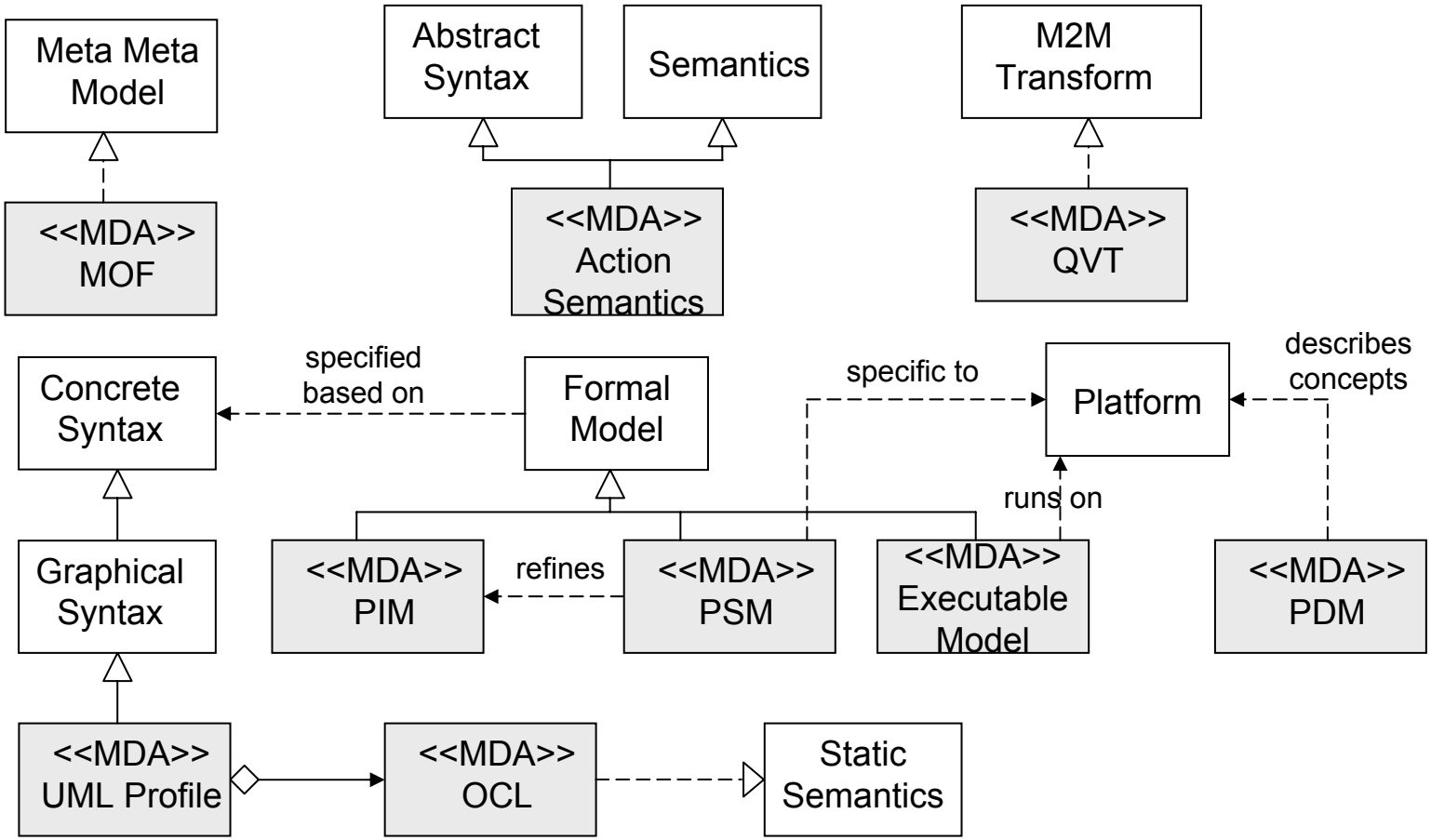
MDSD Transformation



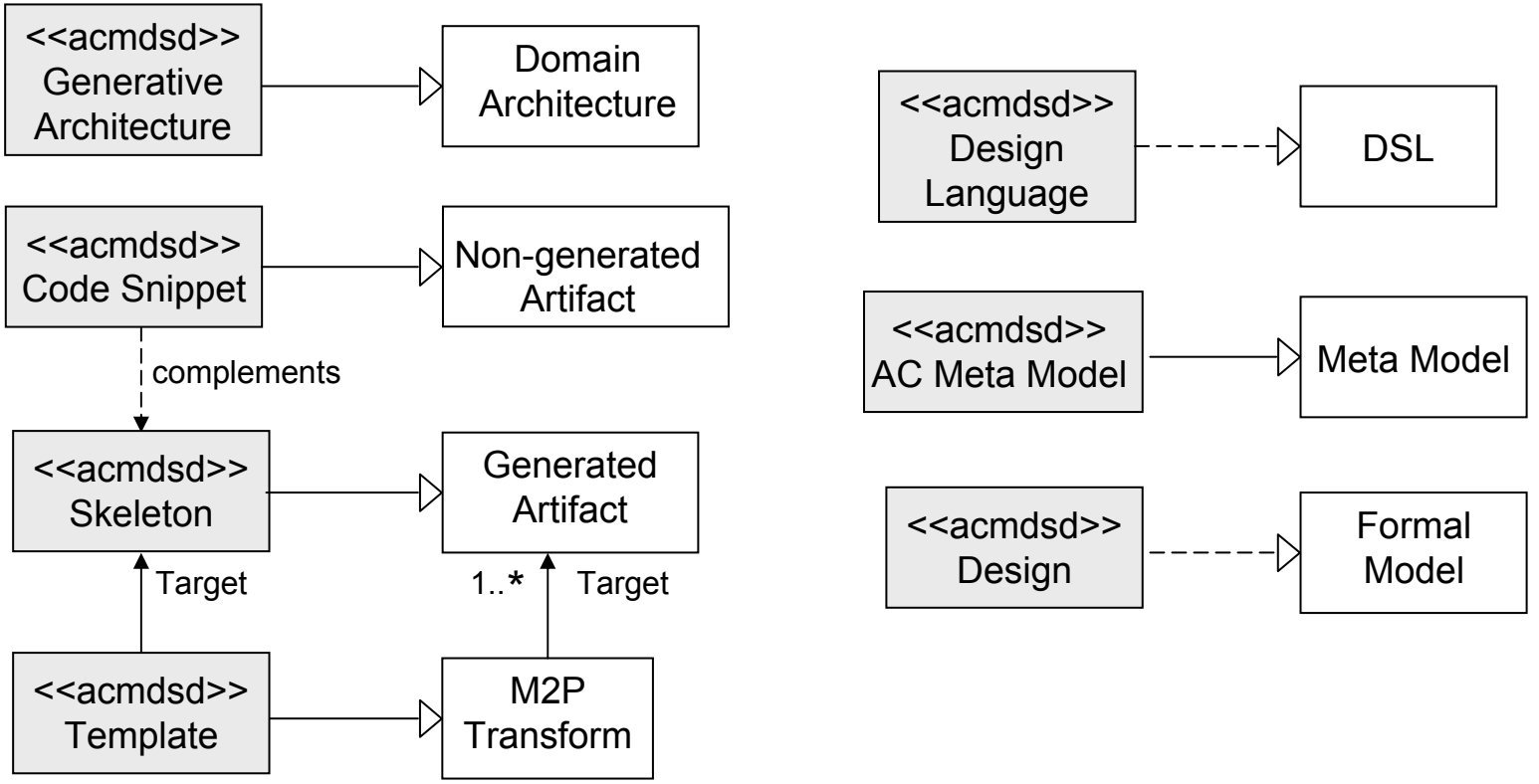
MDSD Sw System Family



MDA specifikus

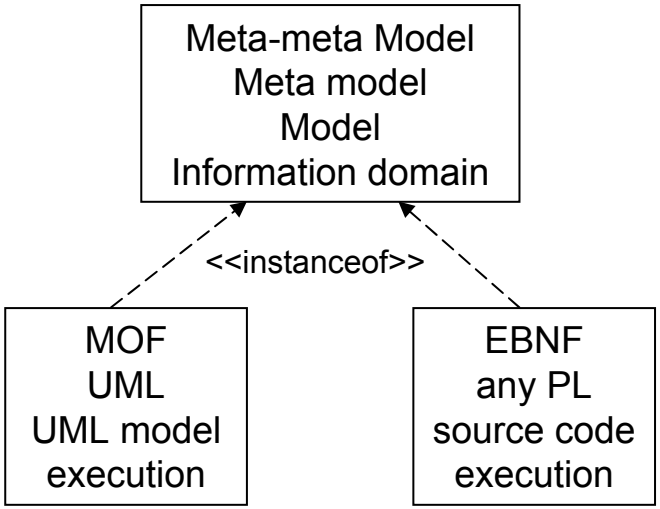


AC-MDSD specifikus

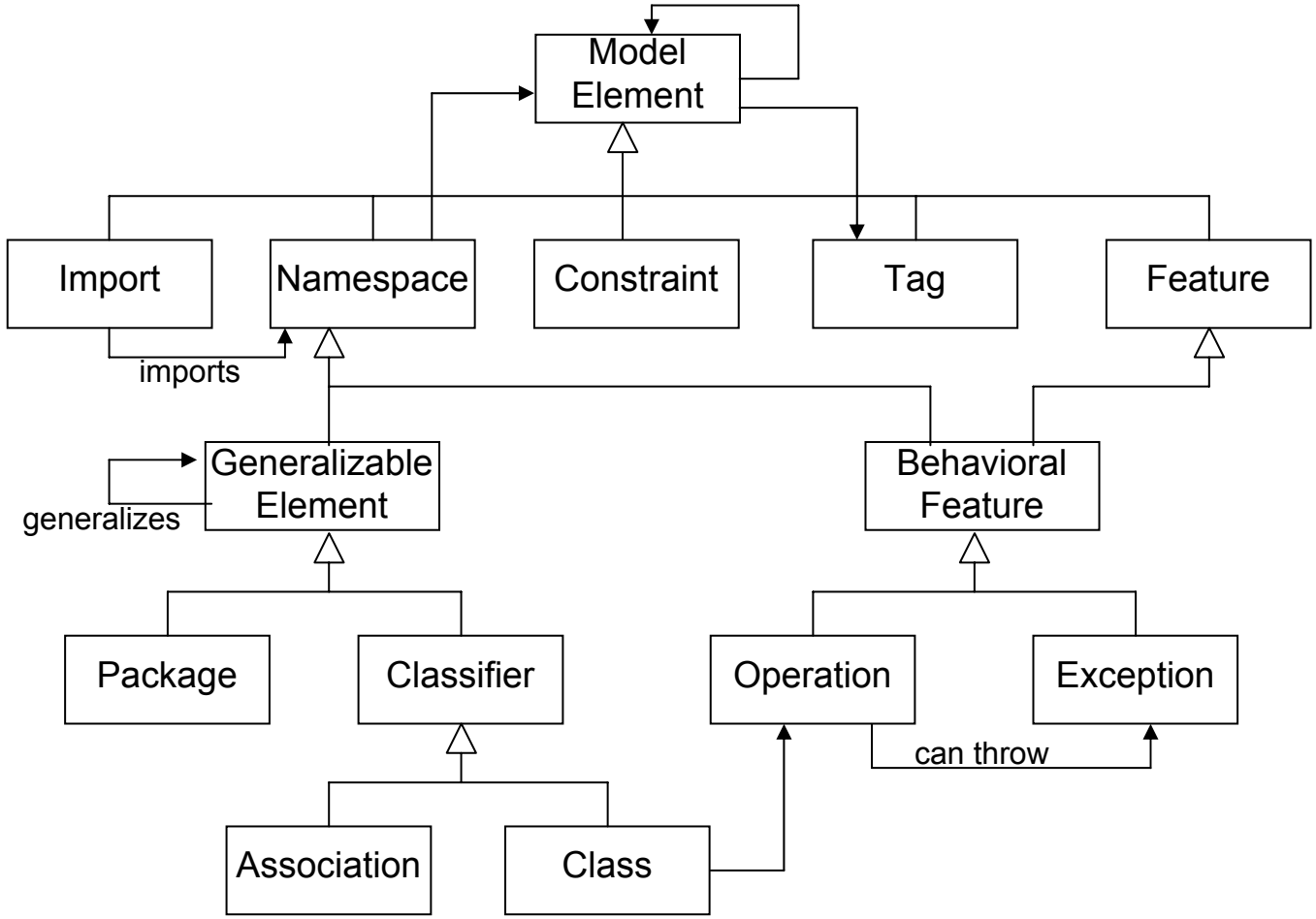


Metamodellezés

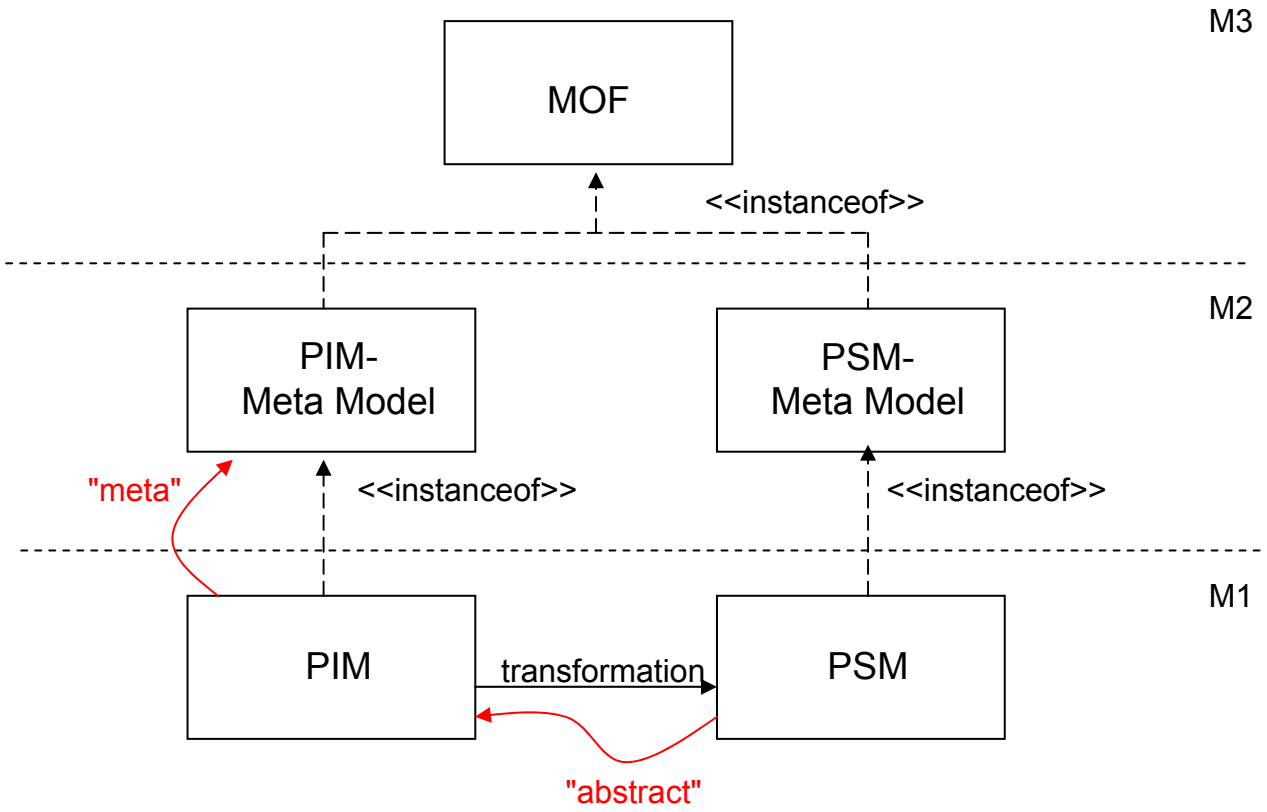
- 4-rétegű szerkezet – M3
- UML 2 – MOF 2
- Infrastructure – Superstructure



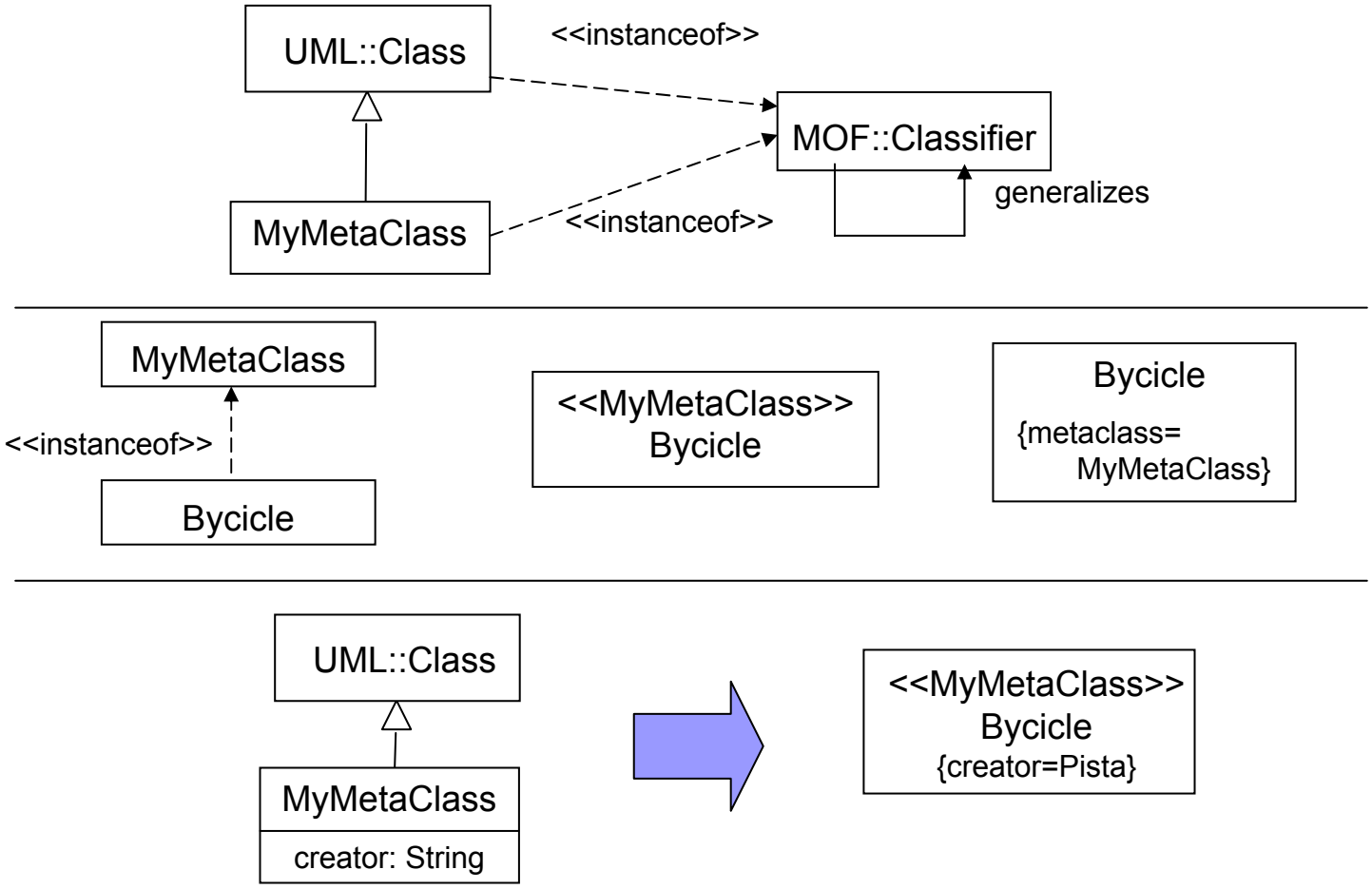
MOF – vázlat


Model Element
Import
Namespace
Constraint
Tag
Feature
imports
Generalizable Element
generalizes
Behavioral Feature
Package
Classifier
Operation
Exception
can throw
Association
Class

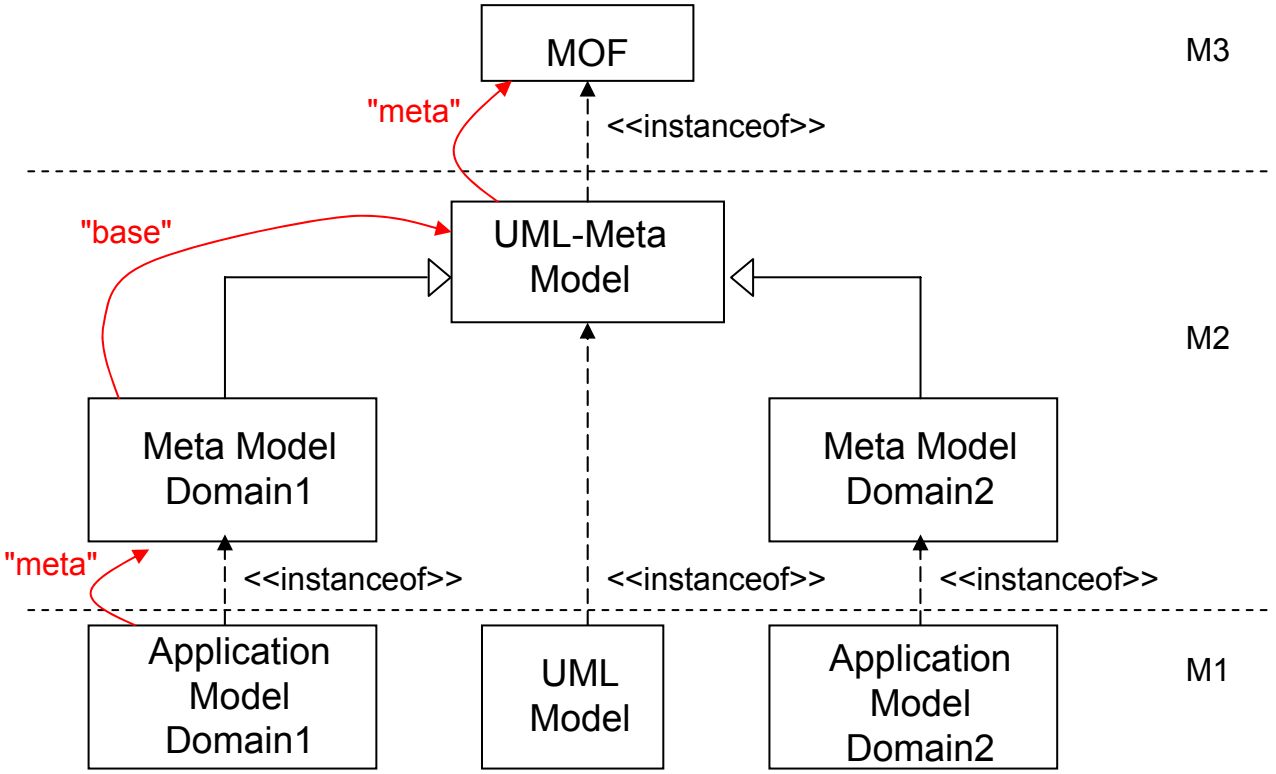
Meta vs. abstract



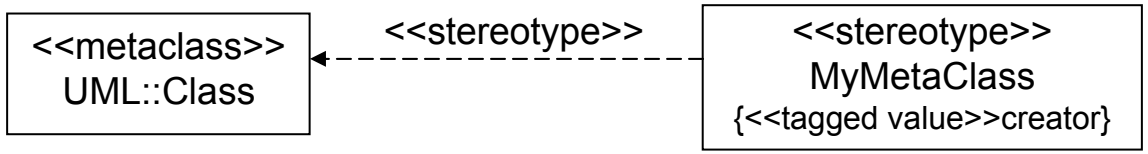
UML kiterjesztése - 1



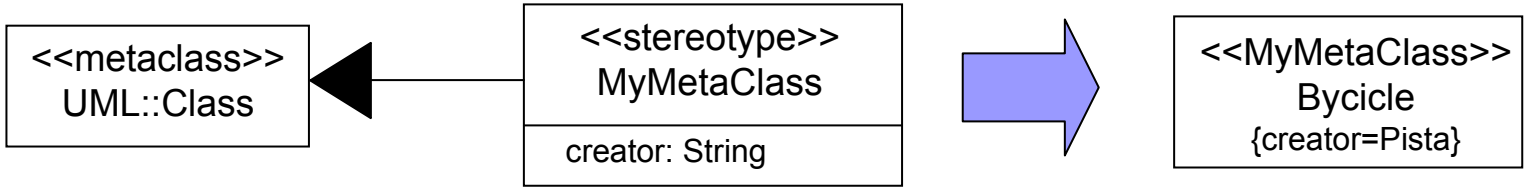
UML kiterjesztése - 1



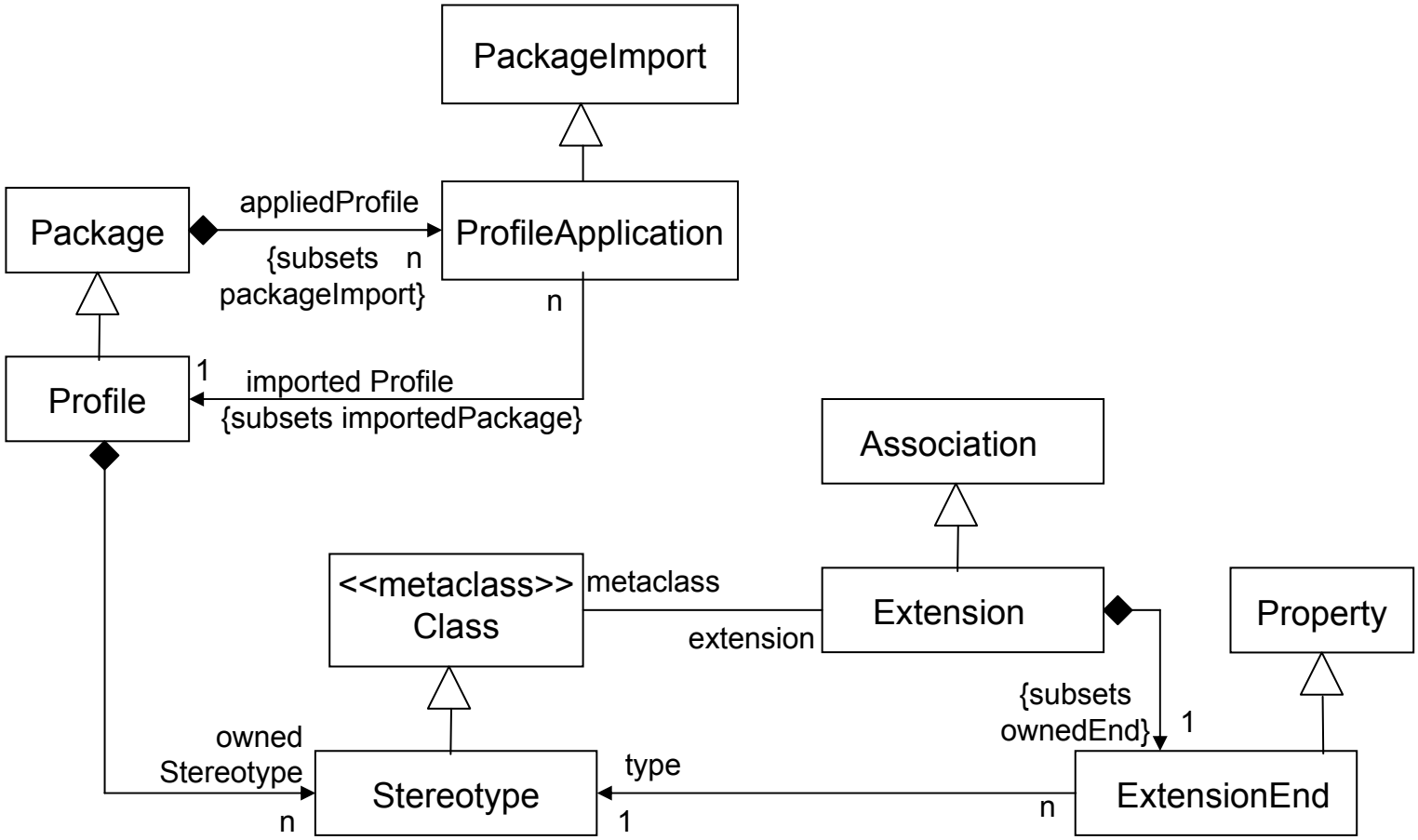
UML kiterjesztése - 2



- UML2 Profile - extension

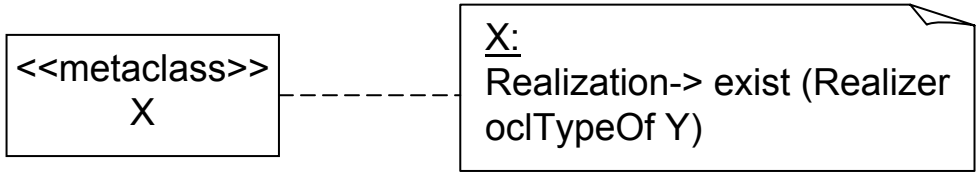


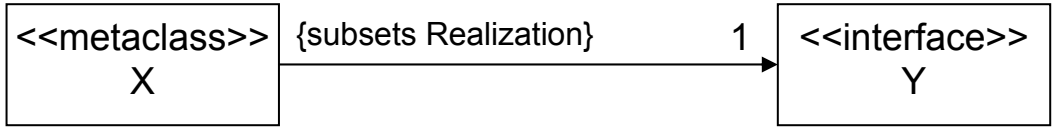
UML2 Profile



Metamodellezés - feladat

- Az X metaclass példányainak meg kell valósítani az Y interfészt





Metamodellezés - feladat

- Az X metaclass példányaiban legyen egy String ID attribútum