

On Designing Recommenders for Graphical Domain Modeling Environments

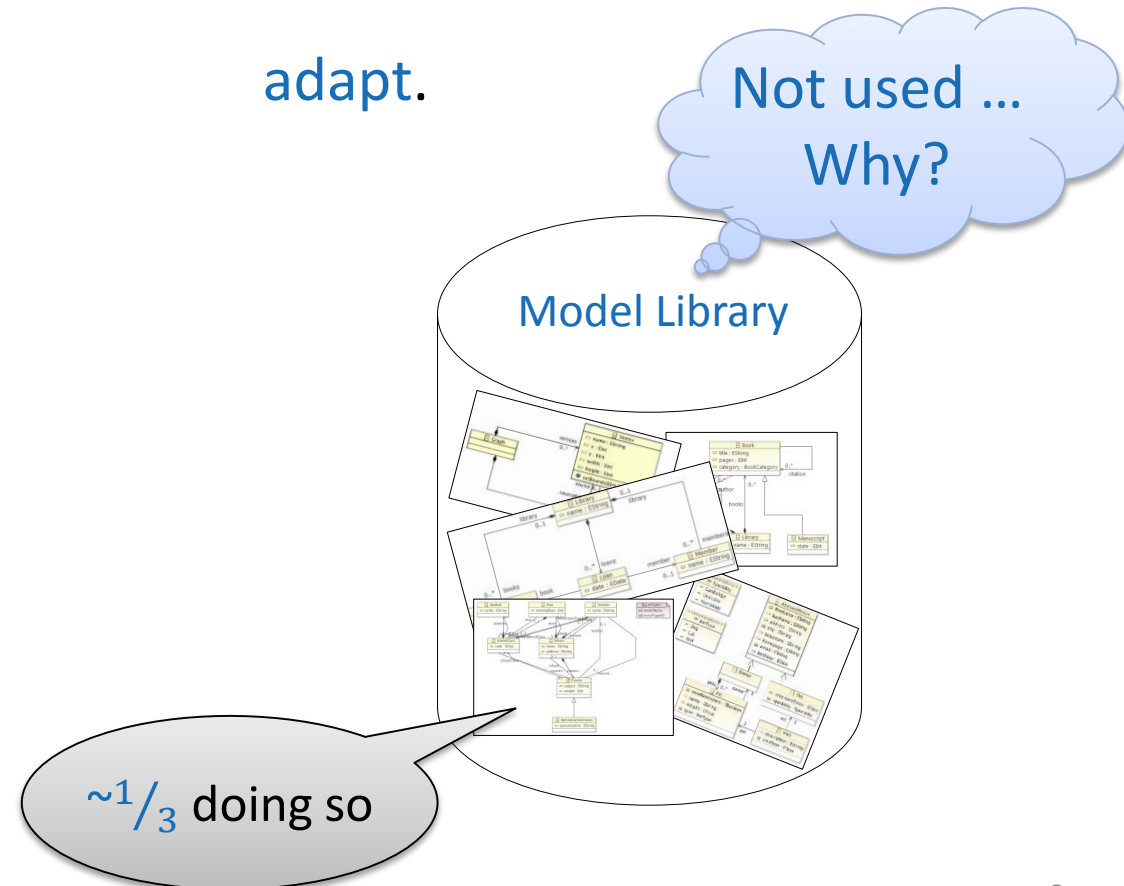
Andrej Dyck, Andreas Ganser and Horst Lichter
Software Construction, RWTH Aachen University

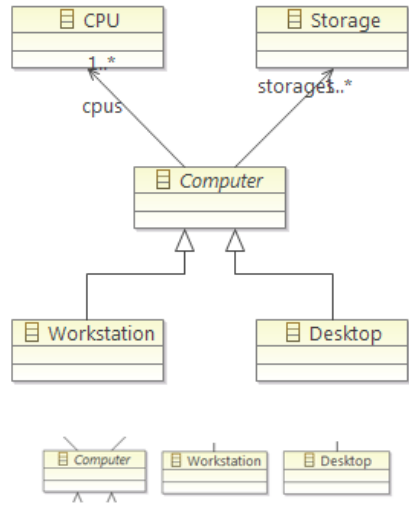
Task: design a domain model for a computer system

➤ You can either start from scratch ...



➤ ... or use existing models and adapt.





Computer System

Description of the purpose of this model...

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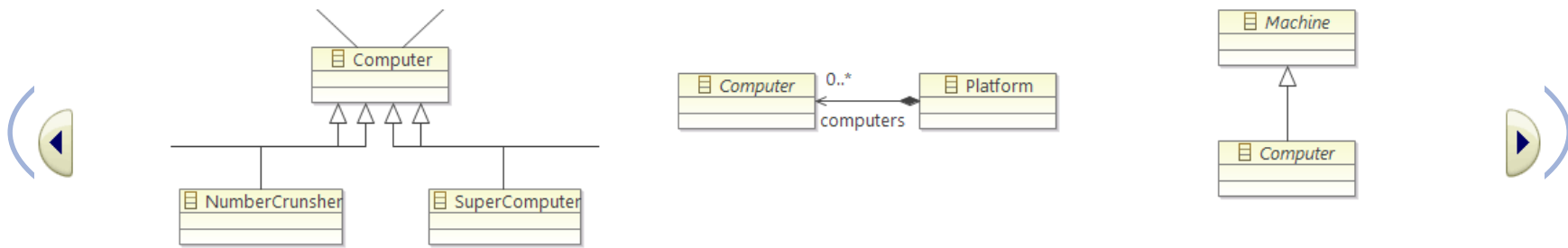
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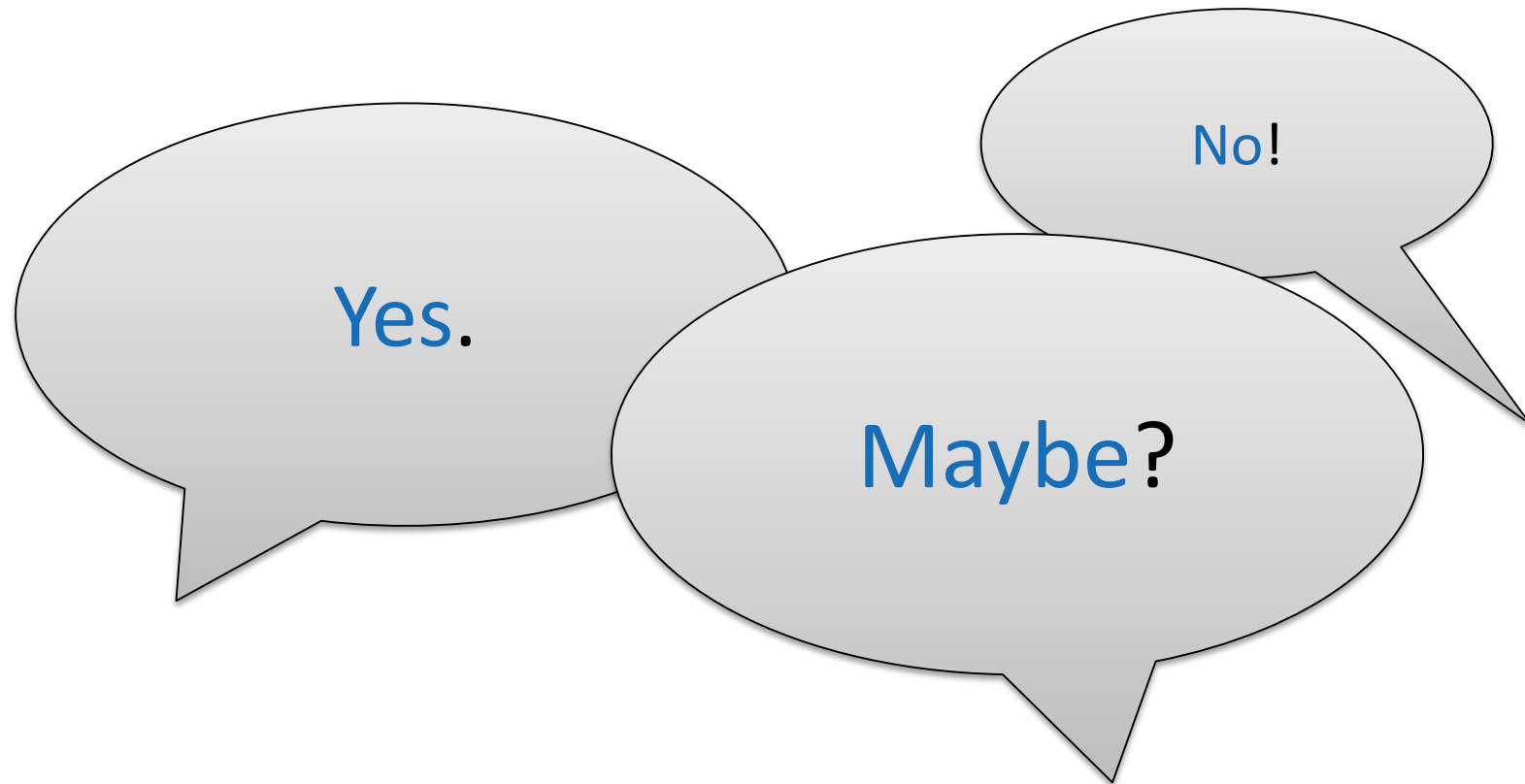
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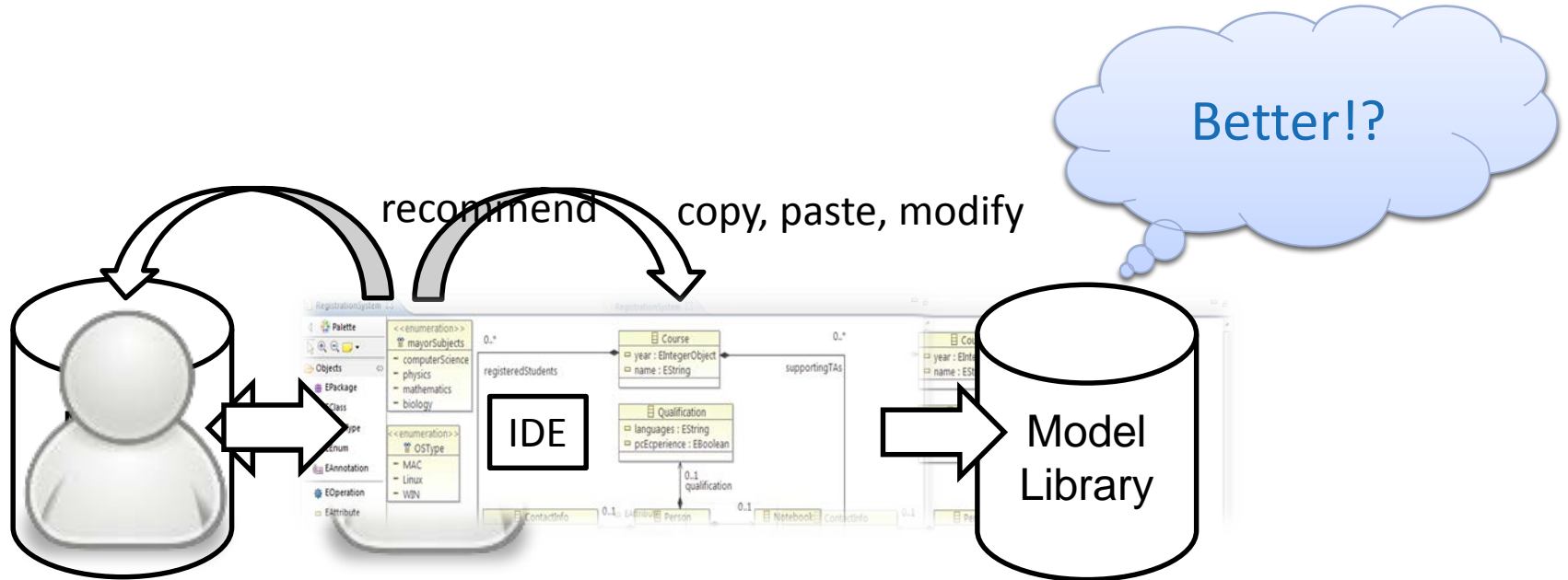
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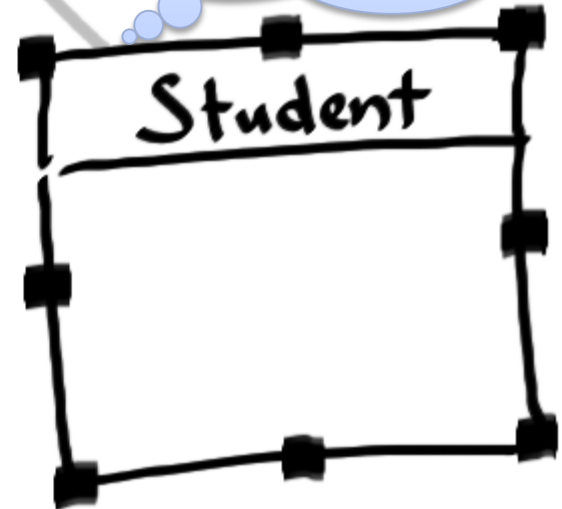
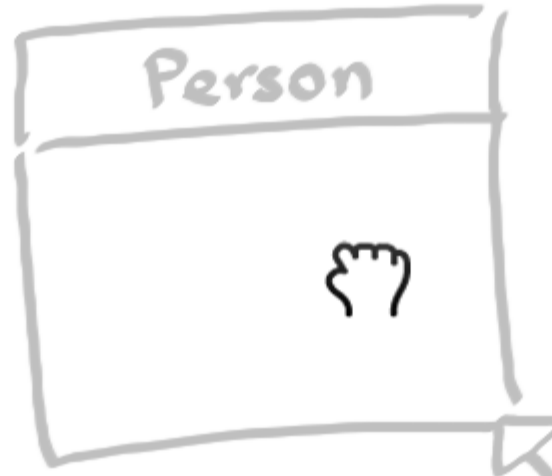
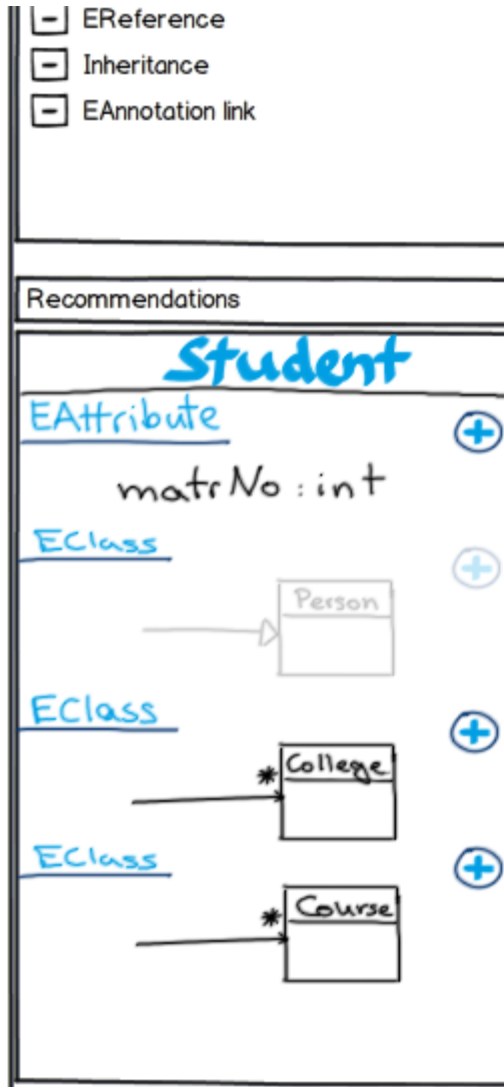


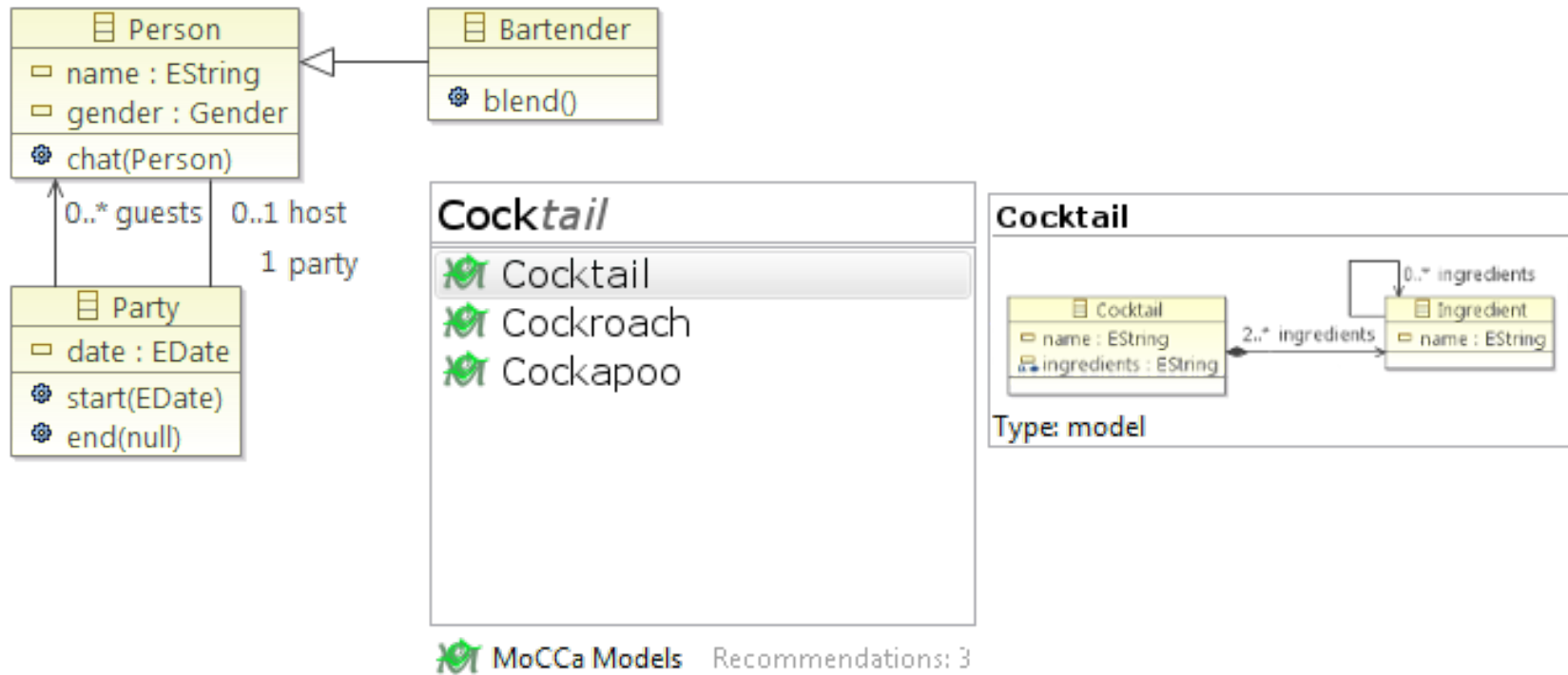
No!

*“Maybe good for **teaching purposes and beginners**,
but not for experts.”*

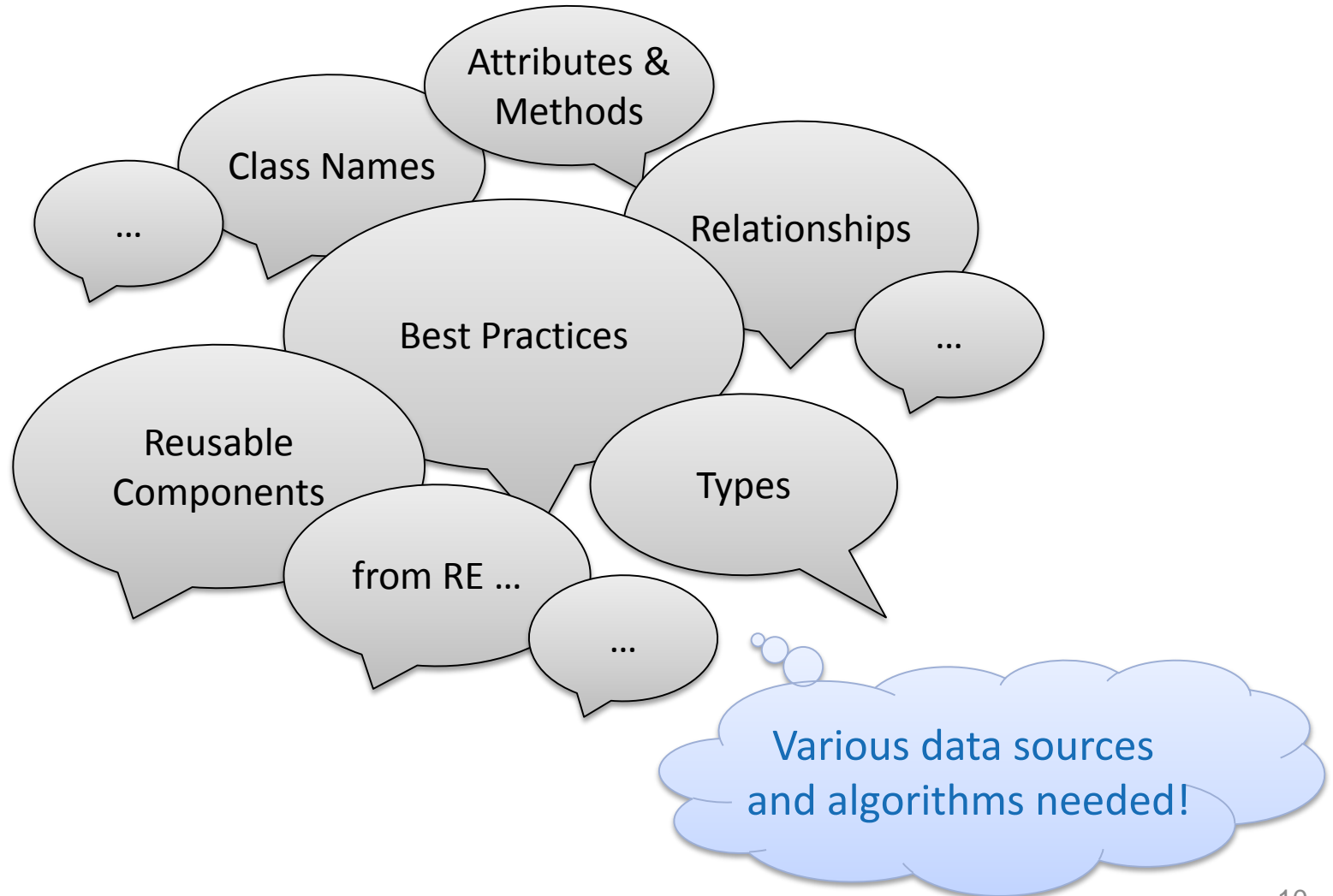












The image displays a screenshot of an EMF editor with several panels:

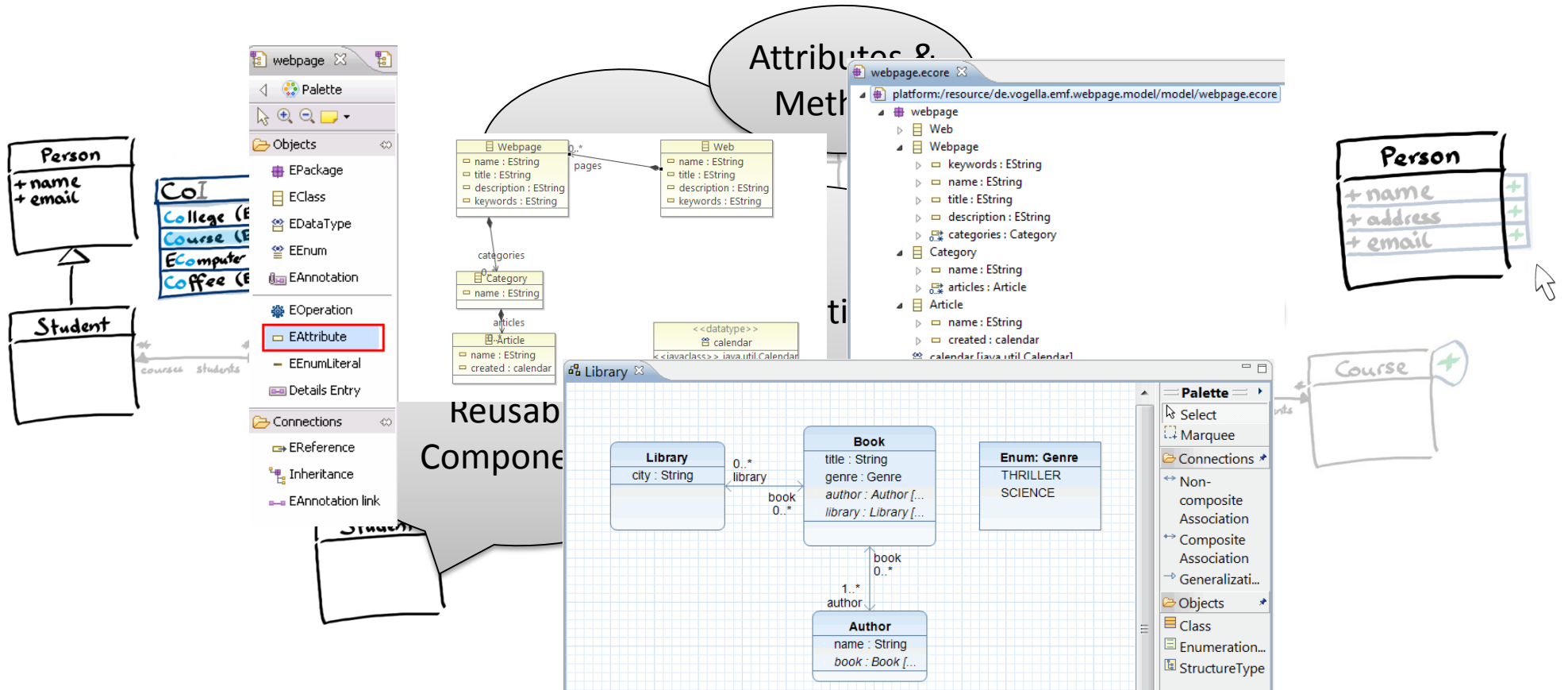
- Palette:** Lists various EMF elements like EPackage, EClass, EDataType, EEnum, EAnnotation, EOperation, **EAttribute** (highlighted with a red box), EEnumLiteral, and Details Entry.
- Objects:** Lists EPackage, EClass, EDataType, EEnum, EAnnotation, EOperation, **EAttribute** (highlighted with a red box), EEnumLiteral, and Details Entry.
- Connections:** Lists EReference, Inheritance, and EAnnotation link.
- Diagram Area:** Shows a class diagram with classes: Webpage, Web, Category, Article, and a datatype <<datatype>> <<javaclass>> java.util.Calendar. Relationships include 'pages' (0..* Webpage to Web), 'categories' (Webpage to Category), 'articles' (Category to Article), and 'calendar' (Article to java.util.Calendar).
- Tree View (webpage.ecore):** Shows a hierarchical structure:
 - webpage
 - Web
 - Webpage
 - keywords : EString
 - name : EString
 - description : EString
 - categories : Category
 - Category
 - name : EString
 - articles : Article
 - Article
 - name : EString
 - created : calendar

- Library View:** Shows a class diagram with classes: Library, Book, Enum: Genre, and Author. Relationships include:
- Library (0..* library) to Book (0..* book)
- Book (0..* book) to Author (1..* author)
- Enum: Genre (THRILLER, SCIENCE)

Various "contexts"

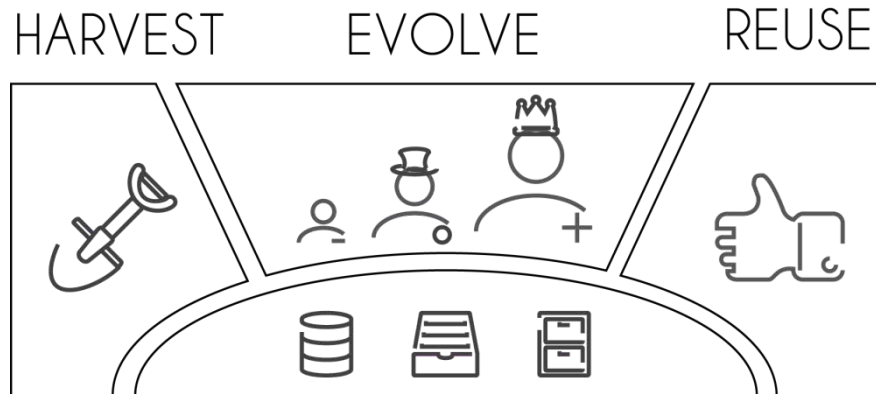
This is just the beginning ...





The HERMES Project

HERMES



MODELS EASILY AND SEAMLESSLY

References

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and more to come on

Harvesting Models and Related Algorithm

Context Management and Related Datastructures

Recommendation Strategies and Related Algorithm