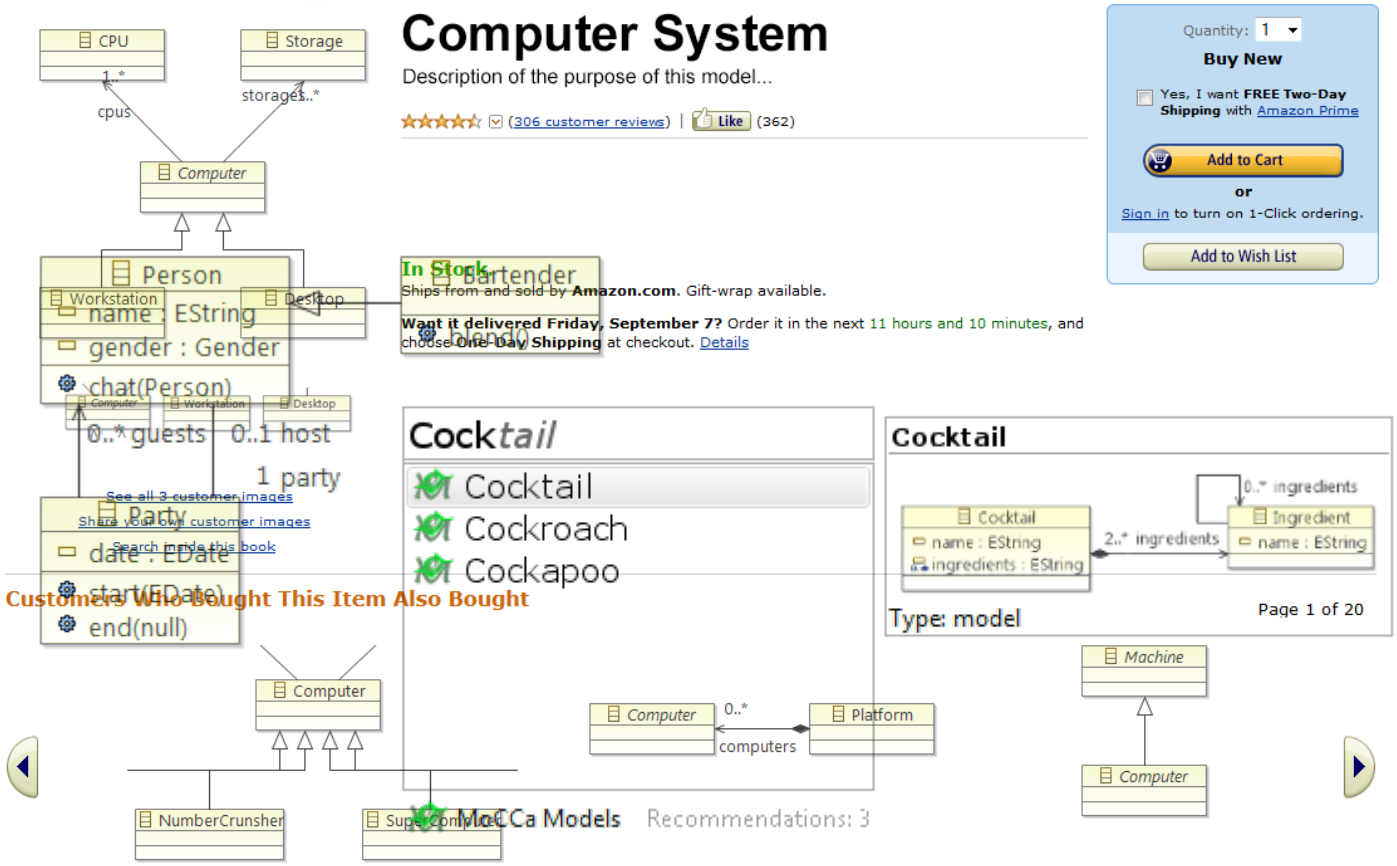
A Framework for Model Recommenders

Requirements, Architecture and Tool Support

Andrej Dyck, Andreas Ganser, and Horst Lichter

If You Take One Thing ...

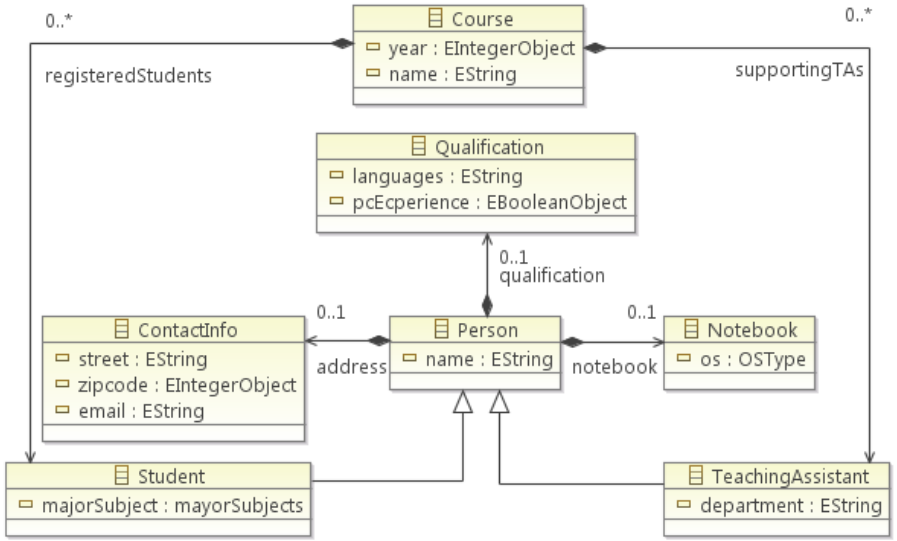


Why should I care …?

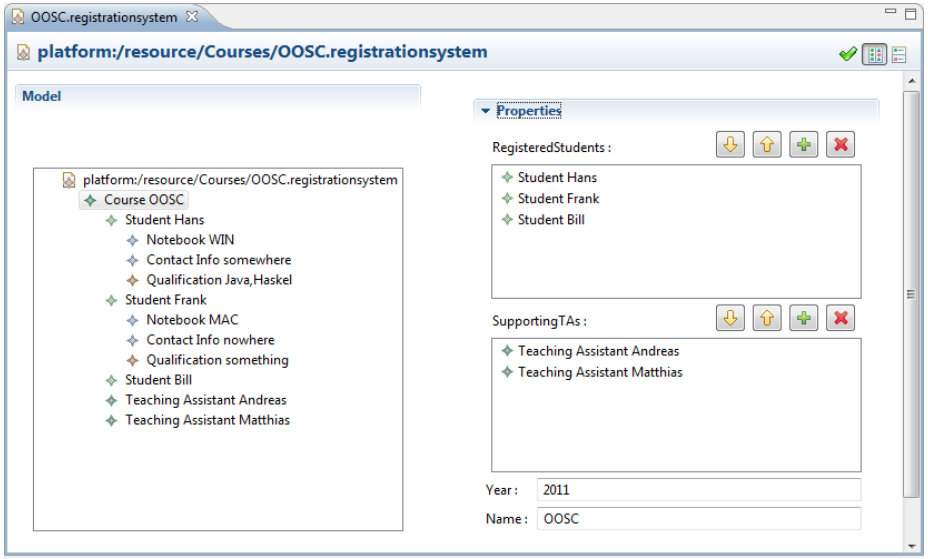
Setting the Scene

A lecture registration system (EMF/EEF)

Domain Model



Generated Editor (EEF)



How could we aid this …?

Setting the Scene

"On Designing Recommenders"

… let's sum up!

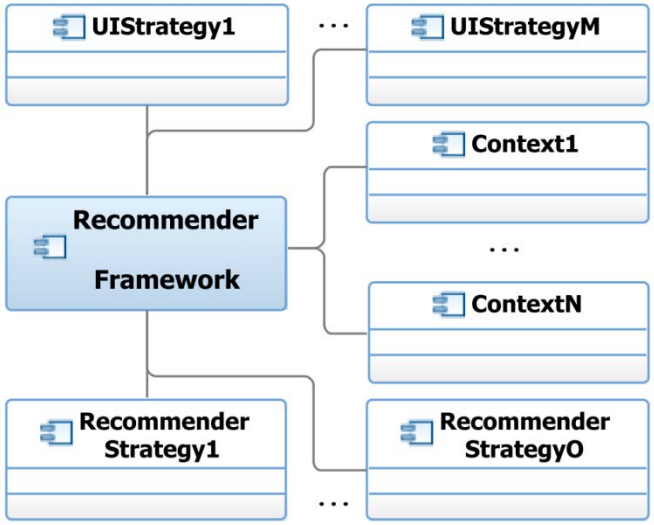
Recommender Framework

What are the Requirements?

Recommender Framework

1. Multiple Data Sources
2. Multiple Recommender Algorithm
3. Multiple Editing Environments
4. Multiple User Interfaces
5. Non-Blocking User Interface
6. Decoupled Back-Ends
7. Easy to Use

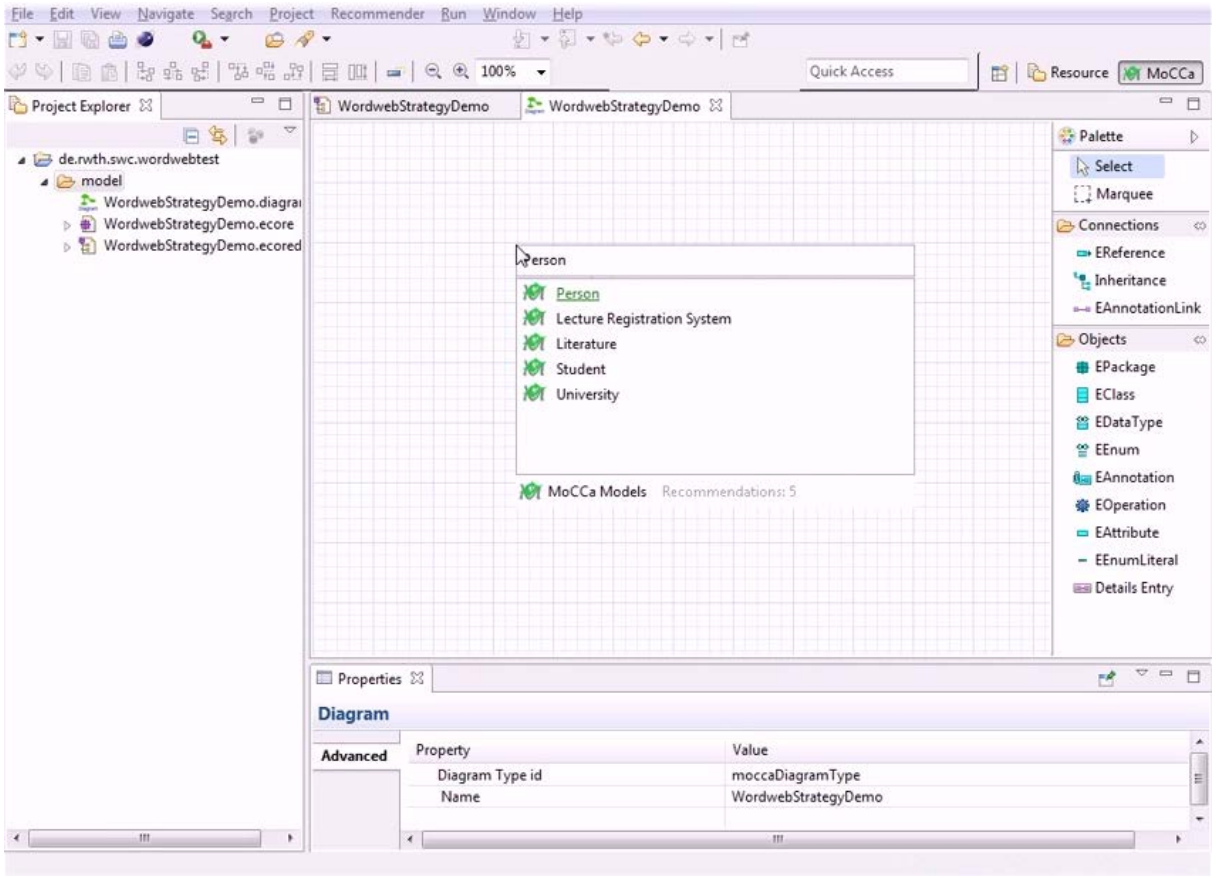
Proposed Solution

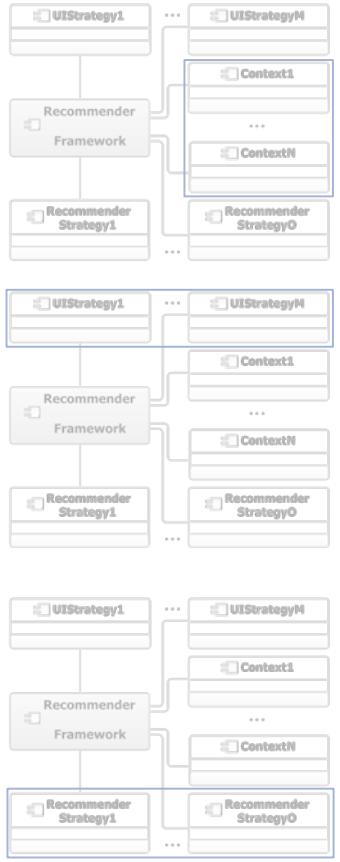


How about an Example …?

Recommender Framework

By Examples

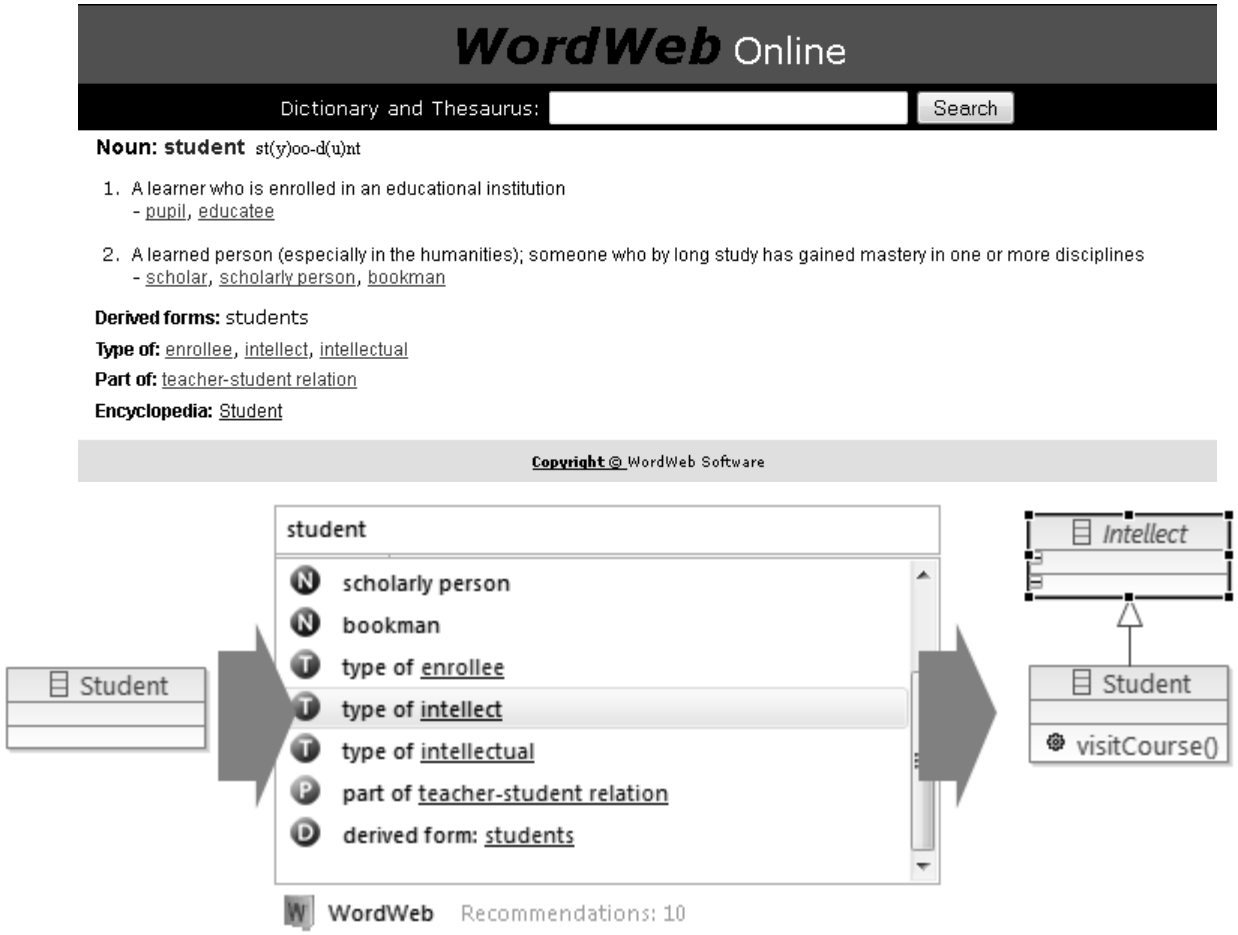




What did the Recommender Strategy do?

Recommender Framework

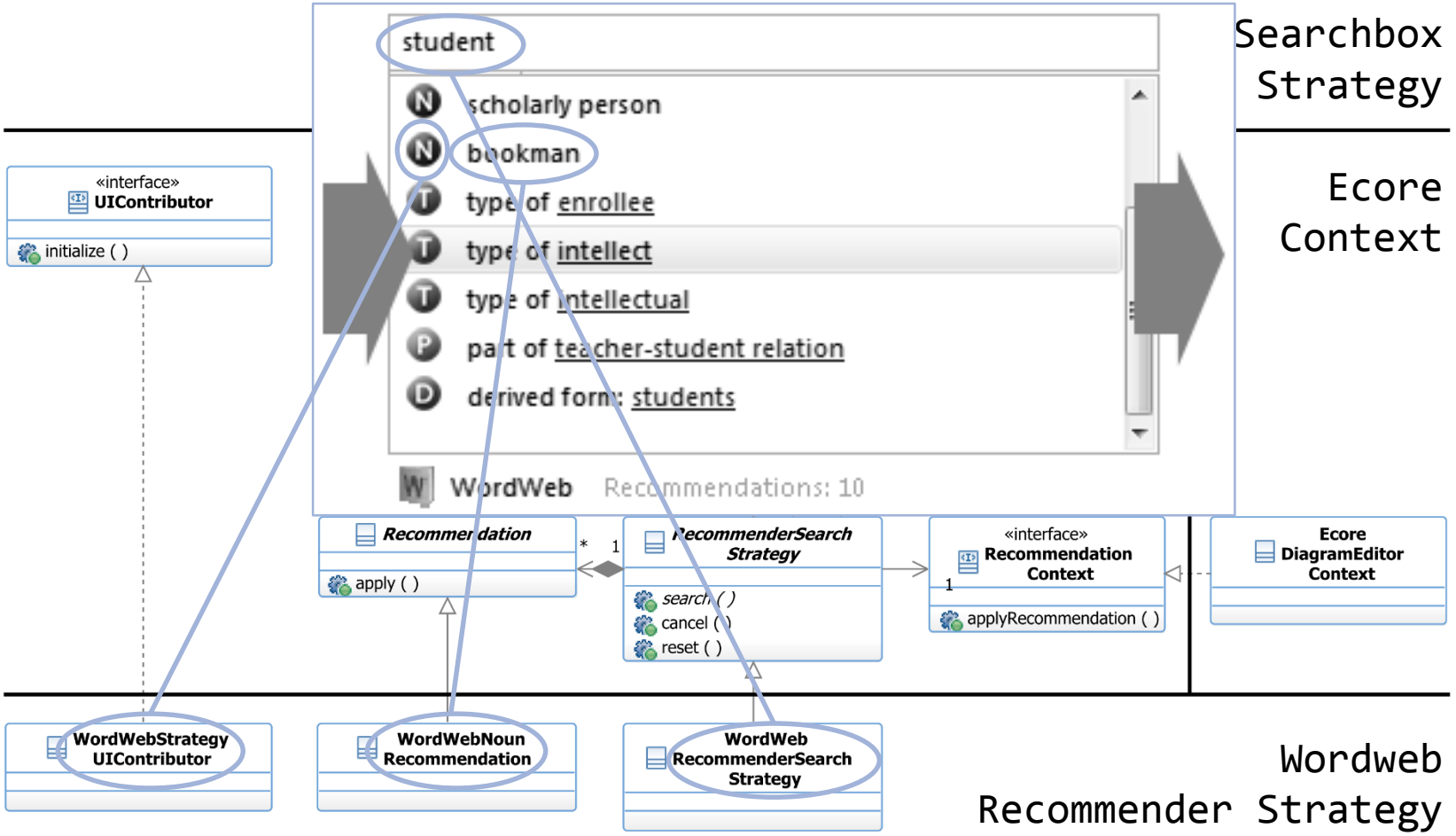
An Example



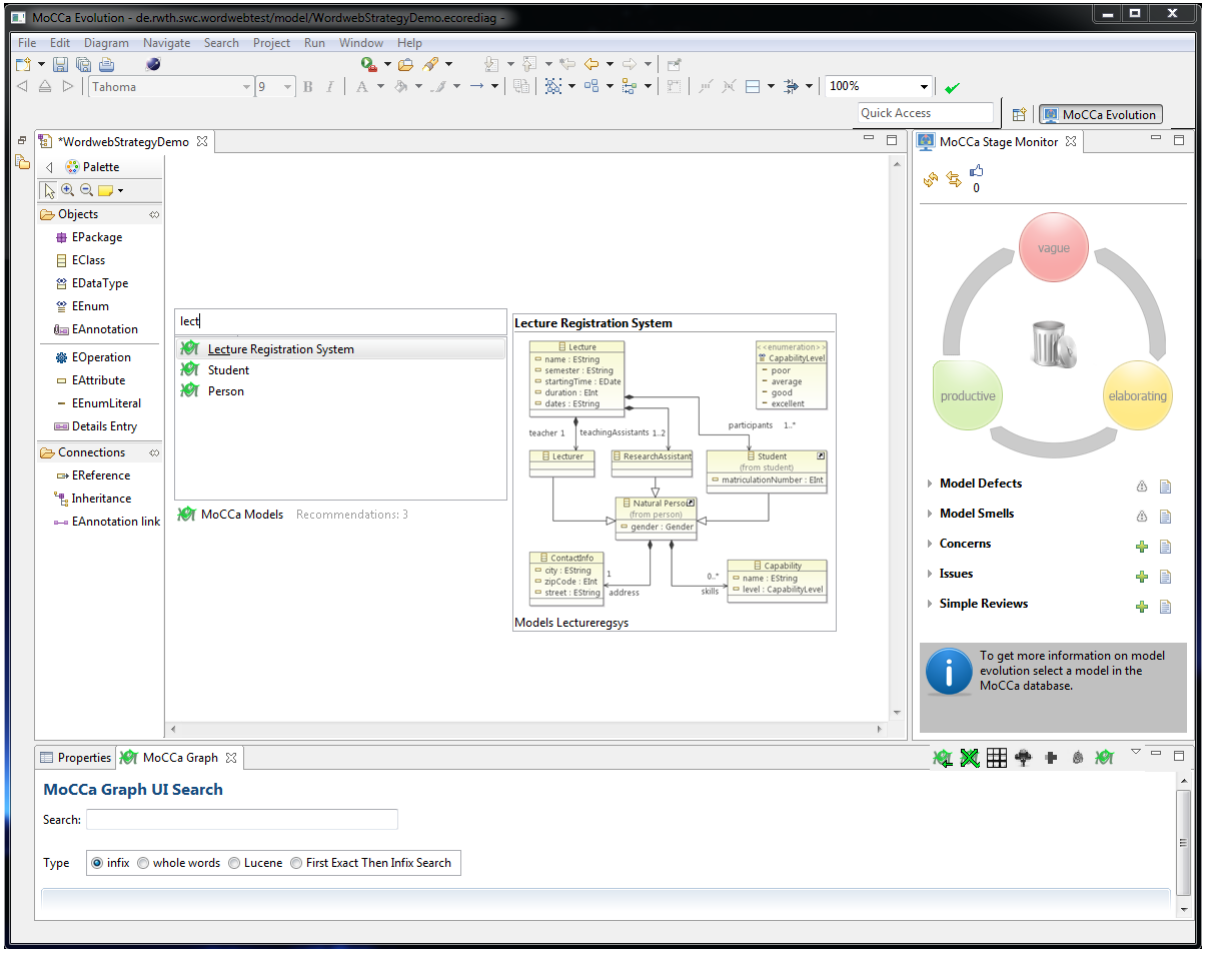
Is it always that simple …?

Recommender Framework

Some more “static” details, if you like …



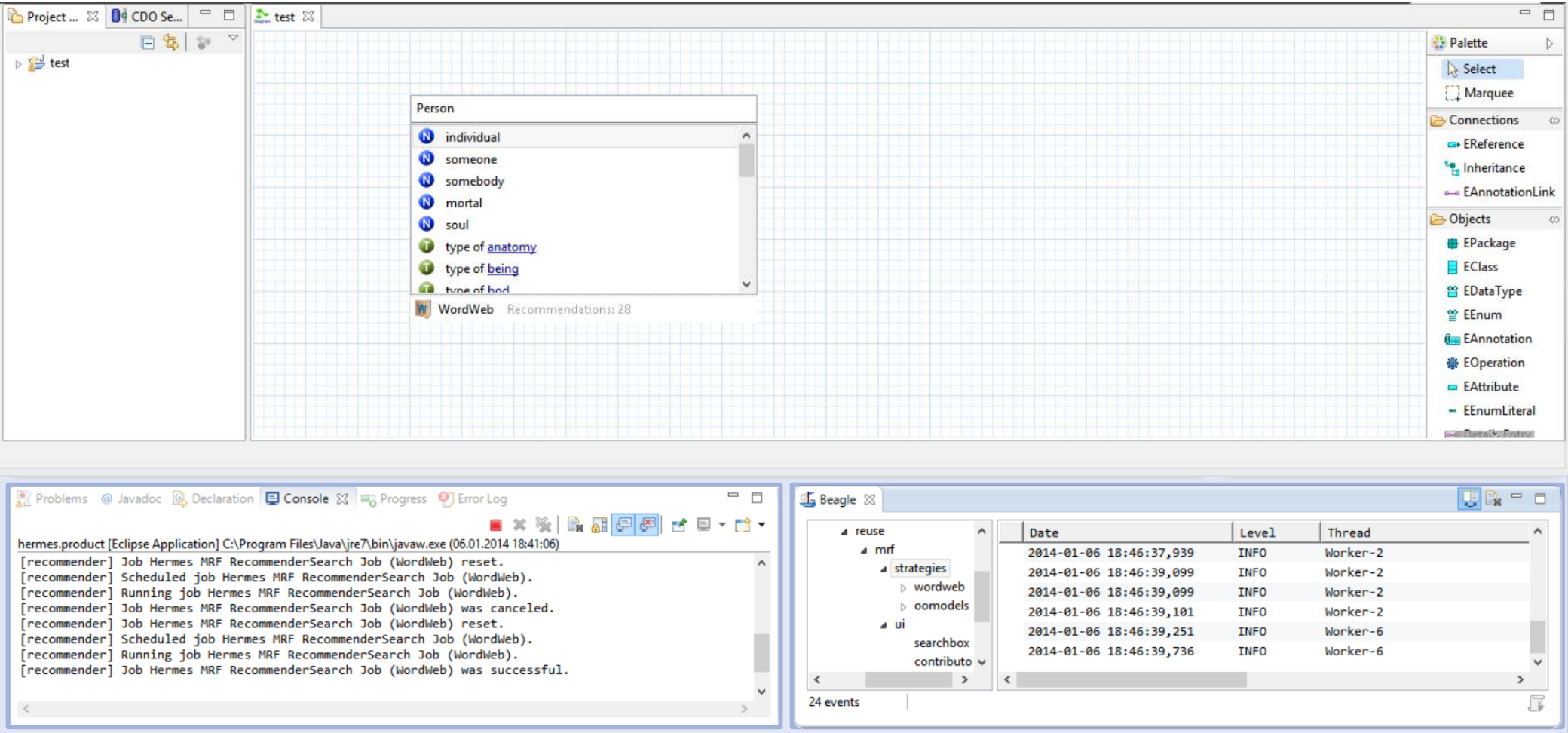
… a Software Prototype



Is that all …?

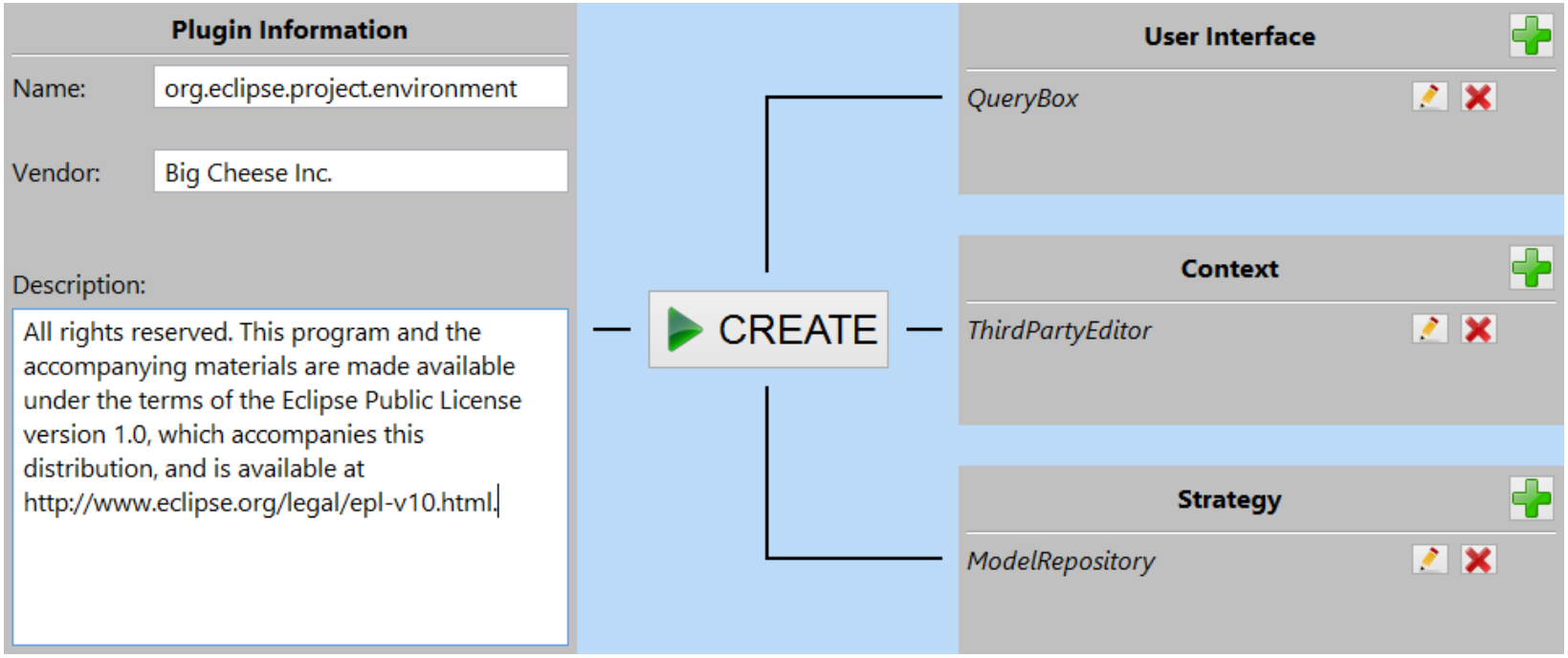
Recommender Framework

Simulation Environment



Recommender Framework

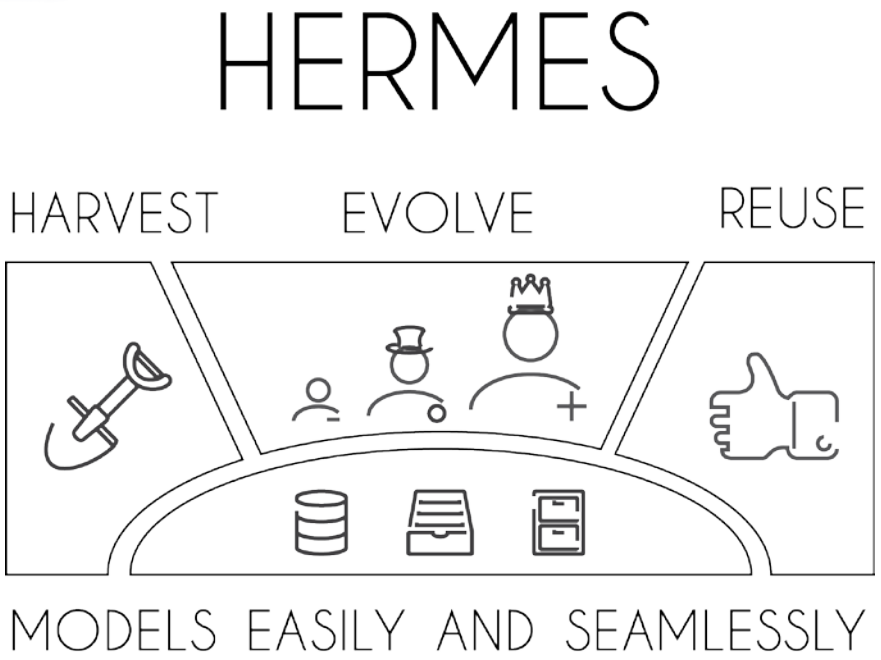
A Dashboard to Ease the Pain …



Some References

What else is going on ...?

The HERMES Project



References

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A. Ganser, H. Lichter, A. Roth, B. Rumpe, Proactive Quality Guidance for Model Evolution in Model Libraries, (MoDELS ME 2013, US)

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and more to come on

Harvesting Models and Related Algorithm

Context Management and Related Datastructures

Recommendation Strategies and Related Algorithm

Technologies and Frameworks