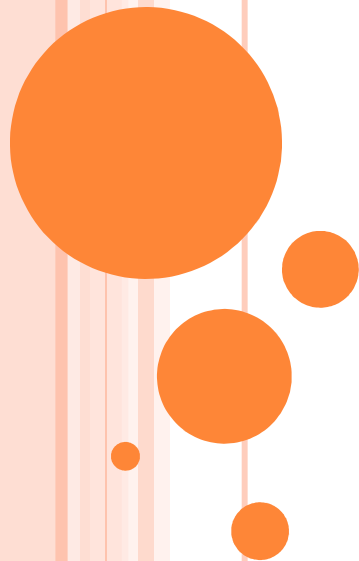


ASCII Talk Milestone I



Max Kleiner, November 2017

maxbox

Tool Time Table

- Talk2Task to communicate strict & static



- Cosine with “inverse user frequency” $f_i = \log(n/n_j)$, where n is number of users, n_j is number of users voting for item j



Algorithms for Collaborative Filtering 1:

CF Memory-Based Algorithms

$$w(a, i) = \frac{\sum_j f_j \sum_j f_j v_{a,j} v_{i,j} - (\sum_j f_j v_{a,j})(\sum_j f_j v_{i,j})}{\sqrt{UV}}$$

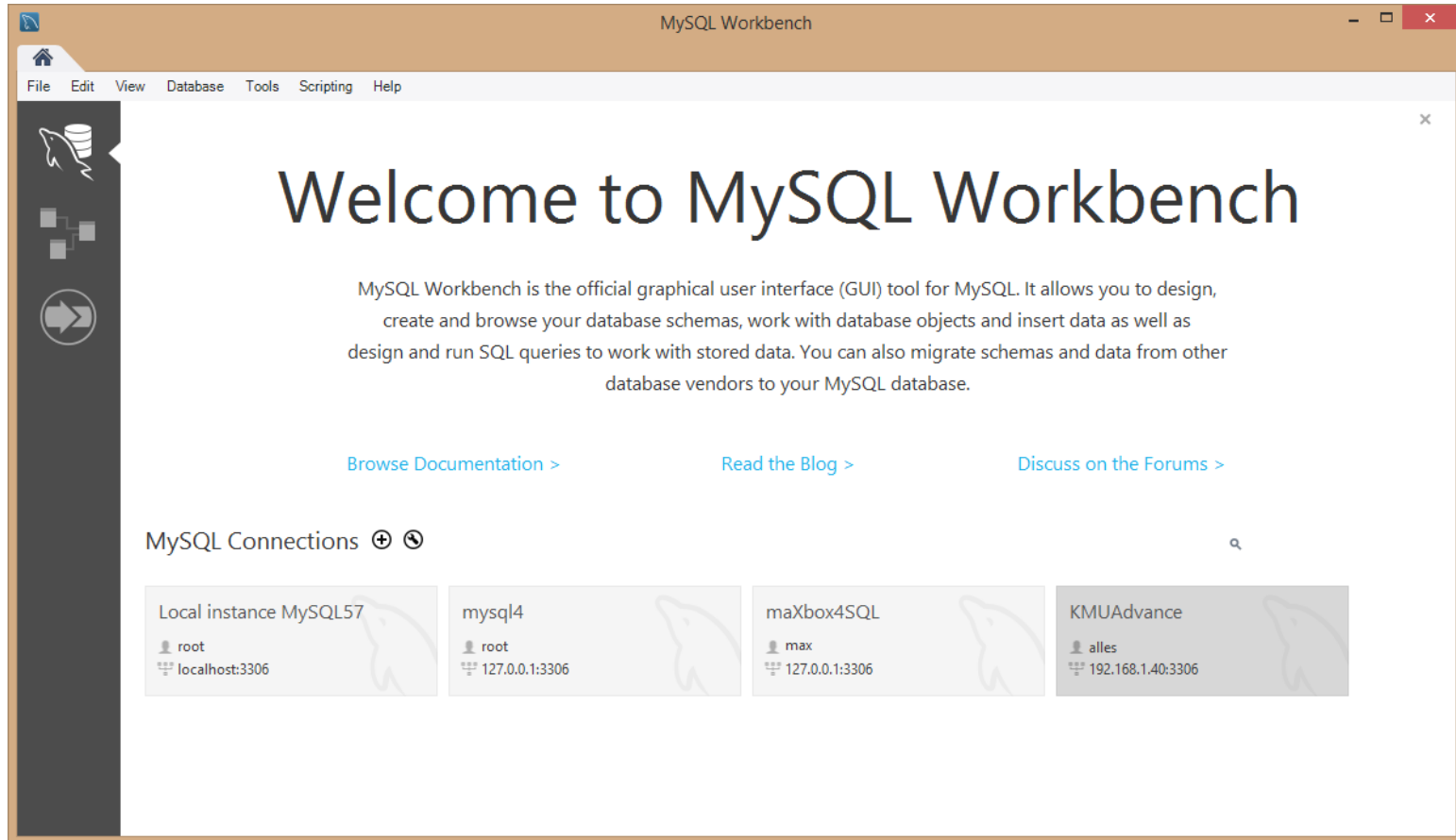
where

$$U = \sum_j f_j (\sum_j f_j v_{a,j}^2 - (\sum_j f_j v_{a,j})^2)$$

$$V = \sum_i f_i (\sum_i f_i v_{i,j}^2 - (\sum_i f_i v_{i,j})^2)$$



Goal: Techn Stack MySQL & Elasticsearch



Technology (Method, Algos, Tools) Toolset

- MSXML 6.0 or 4.0 MSXML6 is the latest MSXML product from Microsoft,
- SHAPE MS Data Access Components (MDAC) Software Development Kit (SDK).
- maXbox4 Script Engine (4.2.8) → ADO API
- MySQL Workbench 6.3.9
- ADO.NET Data Sets → Client Data Sets CDS
- External Services → XML Mapper, XSLT, WinSCP



SHAPE Nested Datasets

mX4 ADO DB Controls Workbench - (Blocks=0 Bytes=0)

File Edit View Settings Help

Source Fields Parameters Indexes Filters Locate MiscTest

Connection String:
 Provider=MSDataShape;Persist Security Info=False;Extended Properties="DSN=dsnAdv" ...

Master/Detail Tables
 verk_auftrag
 verk_position

Master/Detail Queries
 SHAPE {
 ...

Stored Procedure
 ...

ADO Midas

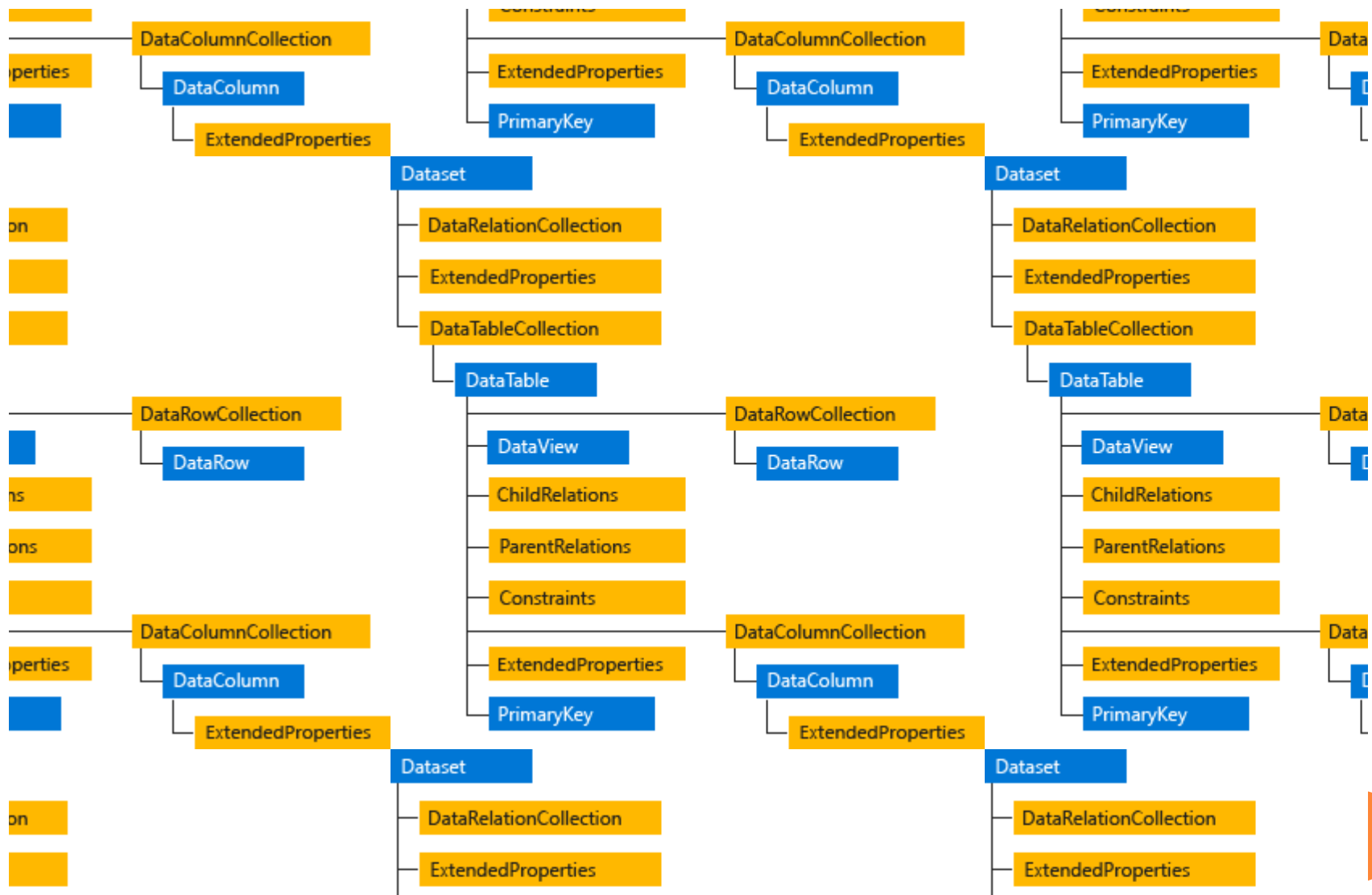
Auftrag	Kunde	Lieferadresse	Datum	Art	Text	Abteilung	Vertreter	Provision	Mitarbeiter
525001	14769	1110	02/10/2017	R	6228519	MEDI	DIR	0	GVO
525002	25633	25633	27/09/2017	R	Kontrolle OMRON M6 AC	SERV	DIR	0	PKL
525003	25634	25634	27/09/2017	R	Kontrolle OMRON M6 AC	SERV	DIR	0	PKL
525004	2586	2586	27/09/2017	R	Kontrolle OMRON M6 AC	SERV	BER	0	PKL
525005	2583	2583	27/09/2017	R	Kontrolle OMRON M6 AC	SERV	BER	0	PKL
525006	14769	1110	27/09/2017	R	AIR Plug blau zu OMRON M3 (HEM-7131-E)	MEDI	DIR	0	SFR
525007	14769	1112	02/10/2017	R	6228515	MEDI	DIR	0	GVO
525008	1629	1629	27/09/2017	R	OMRON Blutdruckmessgerät mit Stethoskop S1	MEDI	DIR	0	BME
525009	15963	15963	27/09/2017	R	SONETIK Batterie Typ A312	MEDI	FAL	0	GVO
525010	15324	23691	27/09/2017	R	Nachbelastung Sonetik Batteriefachtüren	MEDI	CDI	0	SFR
525011	15963	15963	04/10/2017	R	Schallschlauch 2B rechts Blist 2St Nachlieferung	MEDI	FAL	0	GVO
525012	2954	2954	06/10/2017	R	Fortis Aktion 2017	MEDI	CDI	0	GVO
525013	14769	1112	27/09/2017	R	4751057 BESO	MEDI	DIR	0	GVO

Auftrag	Eintrag	Position	Art	Ident	Arbeit	Text
525001	1	1	1	1AQE12		NOTON Gehörschutz Aquastop Erwachsen 1-Paar Blister Einheit mit 12
525001	2	2	1	3NC12		NOTON Gehörschutz Classic 3-Paar Blister Einheit mit 12 x 3-Paar Blister
525001	3	3	1	5NC50		NOTON Gehörschutz Classic 5-Paar Packung Einheit mit 50 x 5-Paar Pac

Unmodified 1 of 1190

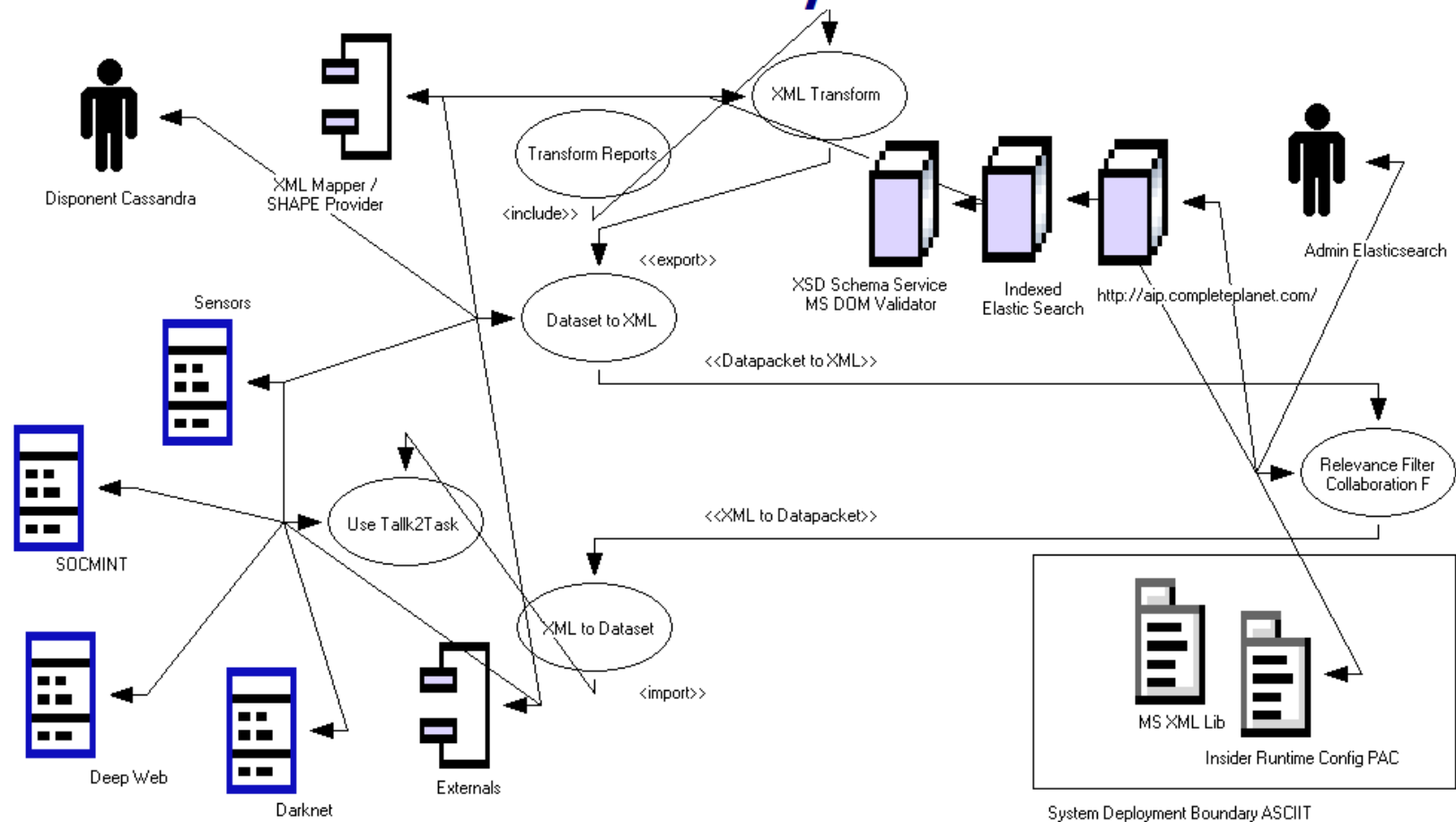


Methods Discussion & Dataset

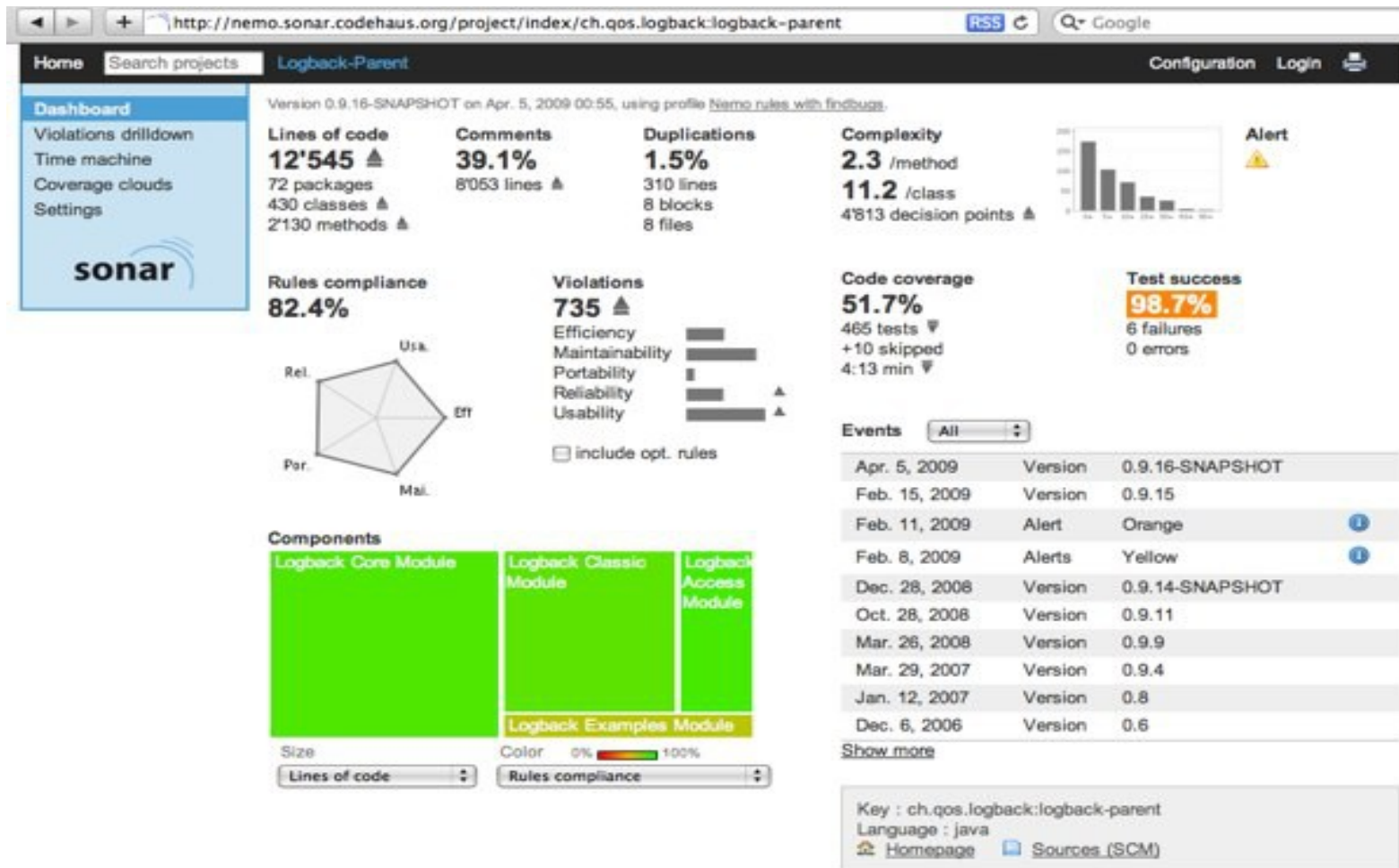


Distribute

ASCIITalk Space



THE TEST OVERVIEW



Ruleset

Define a Ruleset to feed Toolset

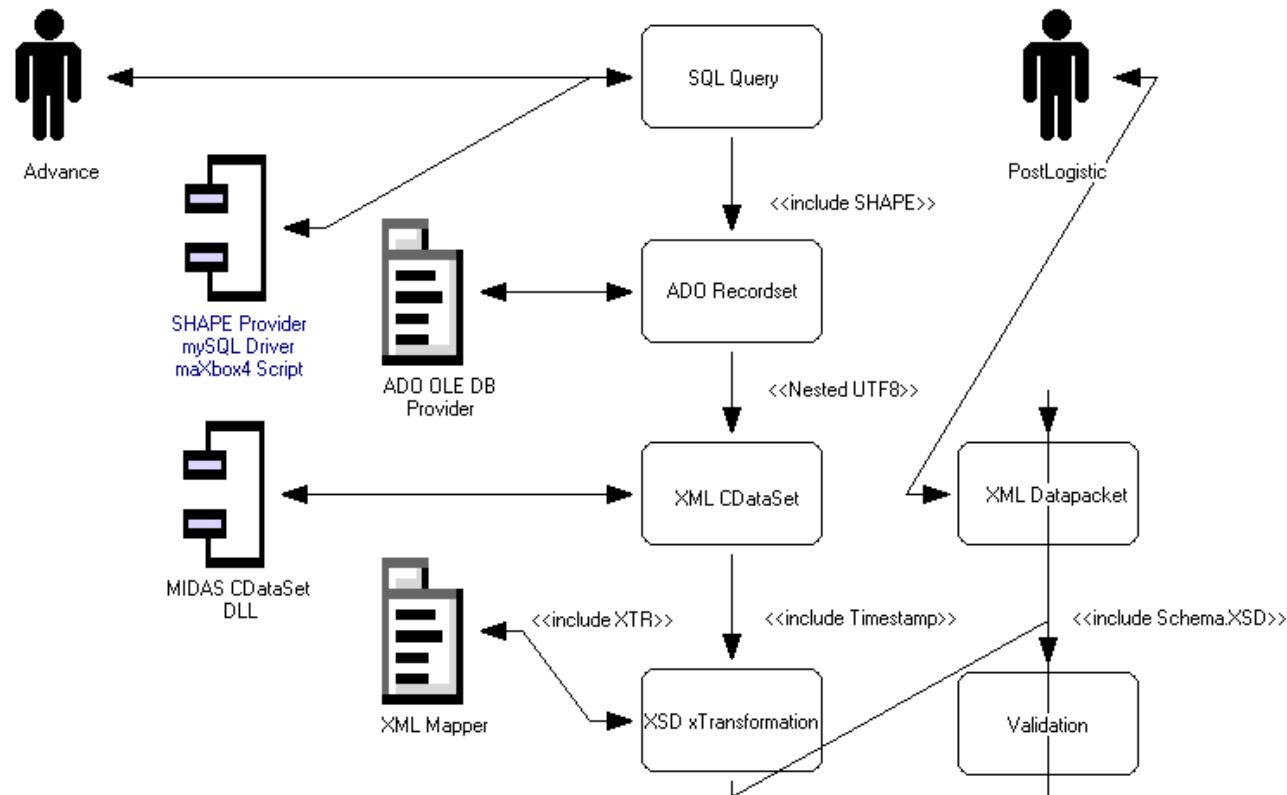
Event > [Condition] / [*]Action()

○ UML Activity & State Events (Pipes & Filter)

- Cosine with “inverse user frequency” $f_i = \log(n/n_j)$, where n is number of users, n_j is number of users voting for item j
 - *As training data triples $(X_1, F_1, \Phi_1), \dots, (X_m, F_m, \Phi_m)$, where each X is set of objects to order; F is set of “feature” orderings f_1, \dots, f_n , and Φ is the desired ordering of X .*



Flowchart XML Datamapping...



SUMMARY & QUESTIONS

- Milestone I (mindset → ruleset → dataset)
- Technology & Mindset
- Possible Methods & Mapping
- Implementation
- Technology stack
- CF Ruleset

<https://maxbox4.wordpress.com/>

