



Similarity measures easily modelled

# myCBR

myCBR is an integrated Case-Based Reasoning tool. It extends the Protégé ontology editor.  
myCBR is intended for teaching CBR classes as well as for fast prototyping in all sorts of projects.

**SIMILARITY MEASURE FUNCTIONS**

Available functions:  ModelFunc

Buttons: New, Duplicate, Delete, Active

Similarity mode: Taxonomy

Symmetry:  symmetric  asymmetric

Inner nodes as values: query (yes/no), case (yes/no)

Semantic of inner nodes: query (any\_value/uncertain), case (any\_value/uncertain)

Semantic of uncertain: query (pessimistic/optimistic/average), case (pessimistic/optimistic/average)

**Taxonomies**

**SIMILARITY MEASURE FUNCTIONS**

Available functions: MilesFunc

Buttons: New, Duplicate, Delete, Active

Similarity mode: Advanced

Symmetry:  symmetric  asymmetric

Basic Similarity Points: Distance Similarity (Min: 0.0, 0, 1.0, Max: 0.9)

Additional Similarity Points: Distance Similarity (Add, Delete)

**Numerical Values**

used\_cars\_flat Protégé 3.1.1

Details and Query: Query From Case

Reset	Query	98_vw	392_vw	98_vw	392_vw
Body	station_wagon	station_wagon	station_wagon	100%	97%
CCM	1800	1800	1800	100%	100%
Color	violet	violet	violet	100%	100%
Doors	5	5	5	100%	100%
Cars	diesel	diesel	diesel	100%	100%
Manufacturer	vw	vw	vw	100%	100%
Model	golf	golf	golf	100%	100%
Speed	183	183	183	100%	100%
Power	110	110	110	100%	100%
Year	1997	1996	1997	100%	100%
Miles	9911	38567	38567	100%	100%
Price	30399.0	23899.0	23899.0	100%	100%
Car Code	101	98	98	100%	100%
ZIP	9	5	5	100%	100%

**Case Ranking**

Similarity mode: Table

Symmetry:  symmetric  asymmetric

Case Base Values

Reset	convertible	coupe	fastback	roadster	sedan	station
con...	7% 1.0	0% 0.0	0% 0.2	0% 0.7	0% 0.0	2% 0.0
coupe	5% 0.0	0% 1.0	0% 0.2	0% 0.0	0% 0.7	1% 0.5
fast...	12% 0.2	0% 0.2	0% 1.0	1% 0.5	0% 0.0	4% 0.0
road...	4% 0.7	0% 0.0	0% 0.5	0% 1.0	0% 0.0	1% 0.0
sedan	37% 0.7	2% 0.7	1% 0.0	4% 0.0	1% 1.0	13% 0.8
station	1% 0.8	12% 1.0				

**Symbol Tables**

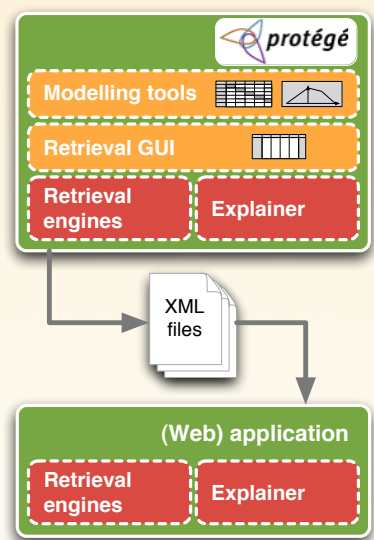
Import Case Instances

Select file to import (format must be CSV)

pace/mycbr/distribution/samples/autos/cars\_casebase.csv

Car	C	Manu	Model	Body	Price	Color	Year	Mile	Door	Pos
2	bmw	325td	sedan	286...	dar...	1995	664...	4	115	
3	bmw	320i	coupe	332...	dar...	1995	318...	2	110	
4	bmw	540i	stat...	874...	dar...	1997	9874...	5	285	
5	bmw	520i	stat...	435...	black	1996	322...	5	150	gas...
6	bmw	316i	fast...	255...	dar...	1995	537...	2	102	gas...
7	bmw	523i	stat...	555...	gray	1997	112...	5	170	gas...
8	bmw	318i	coupe	300...	light...	1996	124...	2	115	gas...
9	bmw	318i	sedan	303...	dar...	1995	439...	4	115	gas...
10	bmw	318i	sedan	164...	light...	1995	120...	4	115	gas...
11	mer...	e-280	stat...	586...	yellow	1997	772...	5	204	gas...
12	audi	a4...	stat...	318...	dar...	1994	363...	5	110	diesel
13	bmw	525...	stat...	348...	white	1995	650...	5	142	diesel
14	mer...	c-200	stat...	145...	violet	1995	148...	5	136	gas...
15	mer...	e-430	sedan	414...	blue	1994	105...	4	278	gas...

**CSV Importer**



### Feature list:

- **Object-oriented** domain modelling via open-source ontology editor Protégé
- Similarity measure editors for different value types: String, Symbol, Integer, Real, Classes, and custom types
- Scriptable similarity measures (Jython)
- Easy to use editors with **explanation** capabilities
- **Similarity-based retrieval** tab for quick testing
- **Fast prototyping** through closed modelling and test loop
- Flexible import of CSV files for easy start-up
- **Stand-alone retrieval** engine for easy integration into other applications
- Generic web interface via Java Server Pages (see also „Web Demo“ on the website)
- Implemented in Java 1.5
- Open source
- Extendable and adaptable for integrating state-of-the-art CBR functionality or for integrating with other CBR frameworks such as JColibri



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