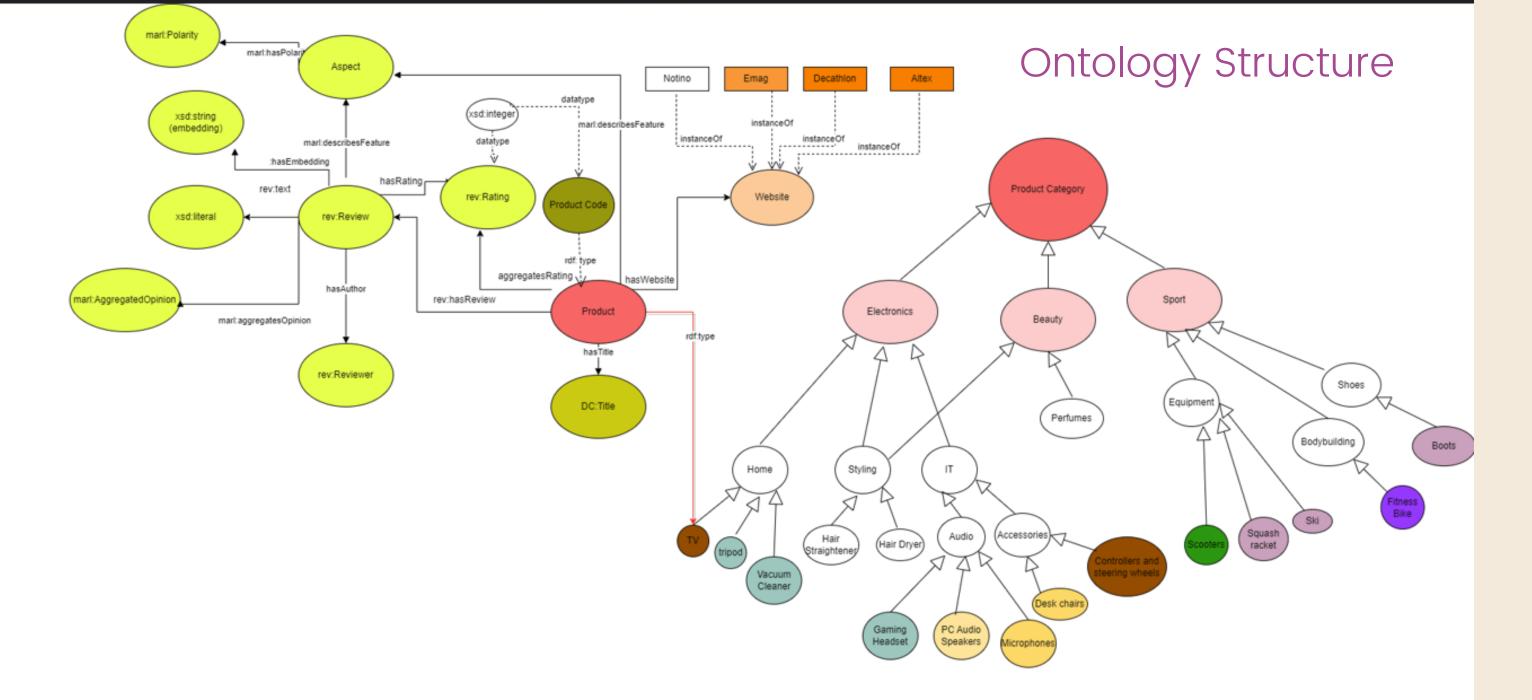
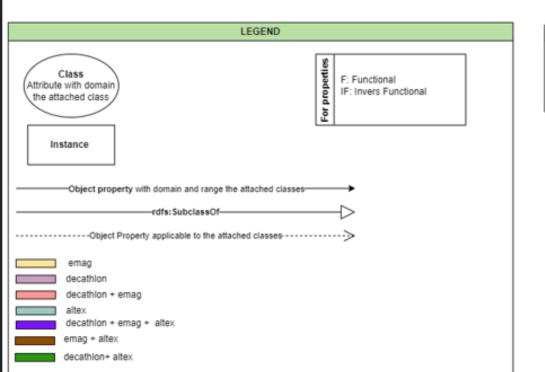
Ontology Based Approach for Online Customers Reviews Analysis

Presented By Gheorghe Alina

http://www.semanticweb.org/alina/ontologies/2023/4/reviews_ontology_final#





VOCABULARY

Vocabulary:

Imported vocabularies: https://vocab.org/review/ (rev) / http://purl.org/spar/fabio

. https://www.gsi.upm.es/ontologies/marl (marl)

Namespaces referenced: rev, rdfs, xsd

Improvements

Adding More individuals to ontology including triplets from Emag data



Crawling of the characteristics of each product



Finalizing the ontology structure to be fully queryable



Adding characteristics to the ontology as aspects of products





Solve Bugs and Make complex queries



Statistics

36,874

Triplets
A Showing results from 1 to 1,000 of 36,874.

4,804

#Individuals

Showing results from 1 to 1,000 of 4,804.

84,934

Triplets
A Showing results from 1 to 1,000 of 36,874.

10,992

#Individuals

A Showing results from 1 to 1,000 of 4,804.

33

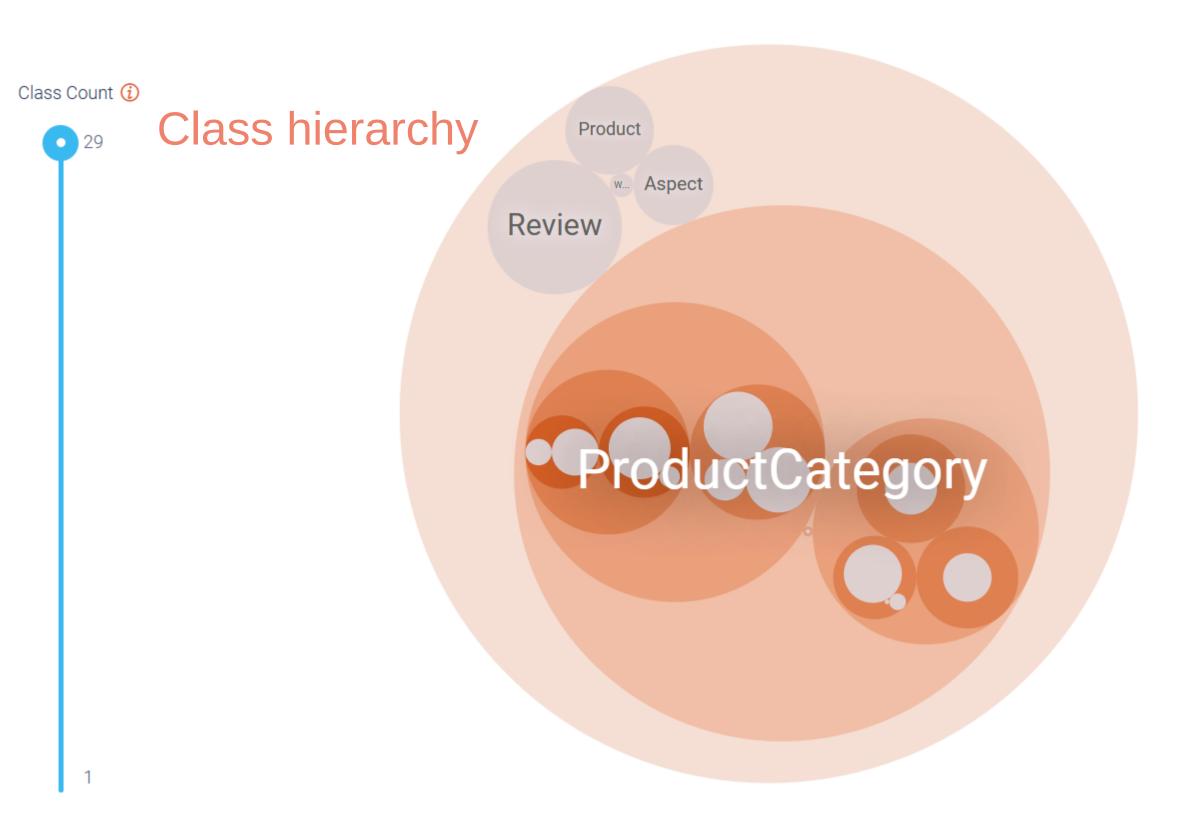
#Classes
⚠ Showing results from 1 to 33 of 33.

33

Classes

\!\ Showing results from 1 to 33 of 33.

Overview

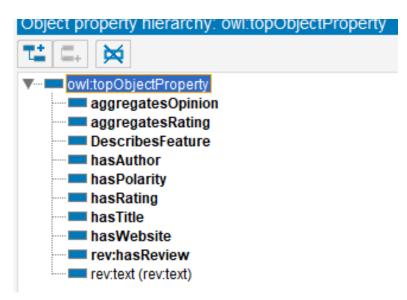


Imported Vocabularies

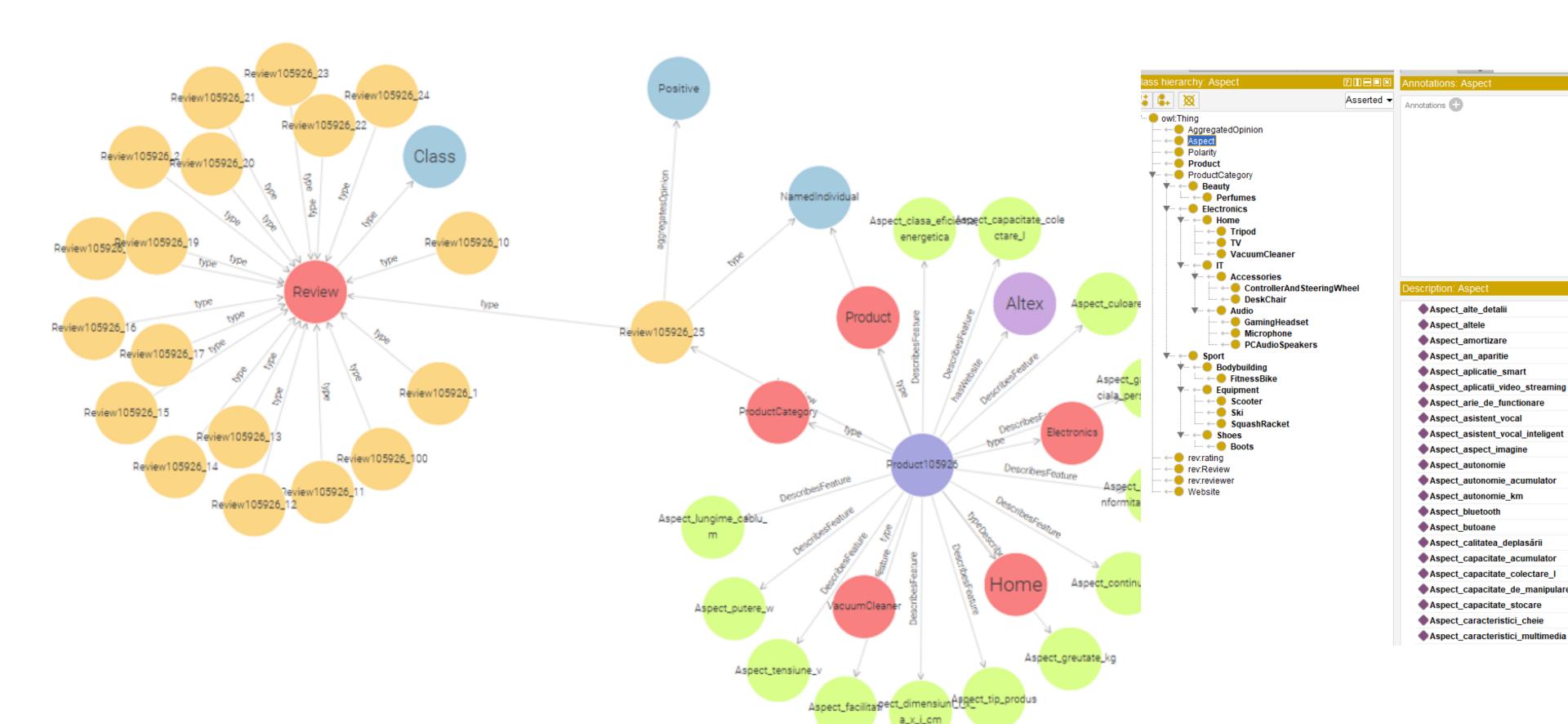
MARL: https://www.gsi.upm.es/ontologies/marl (marl)

REV: https://vocab.org/review/ (rev)

Object Properties used



Integration of Aspects



Sentence Embeddings

Model: SentenceTransformer('bert-base-nli-mean-tokens')

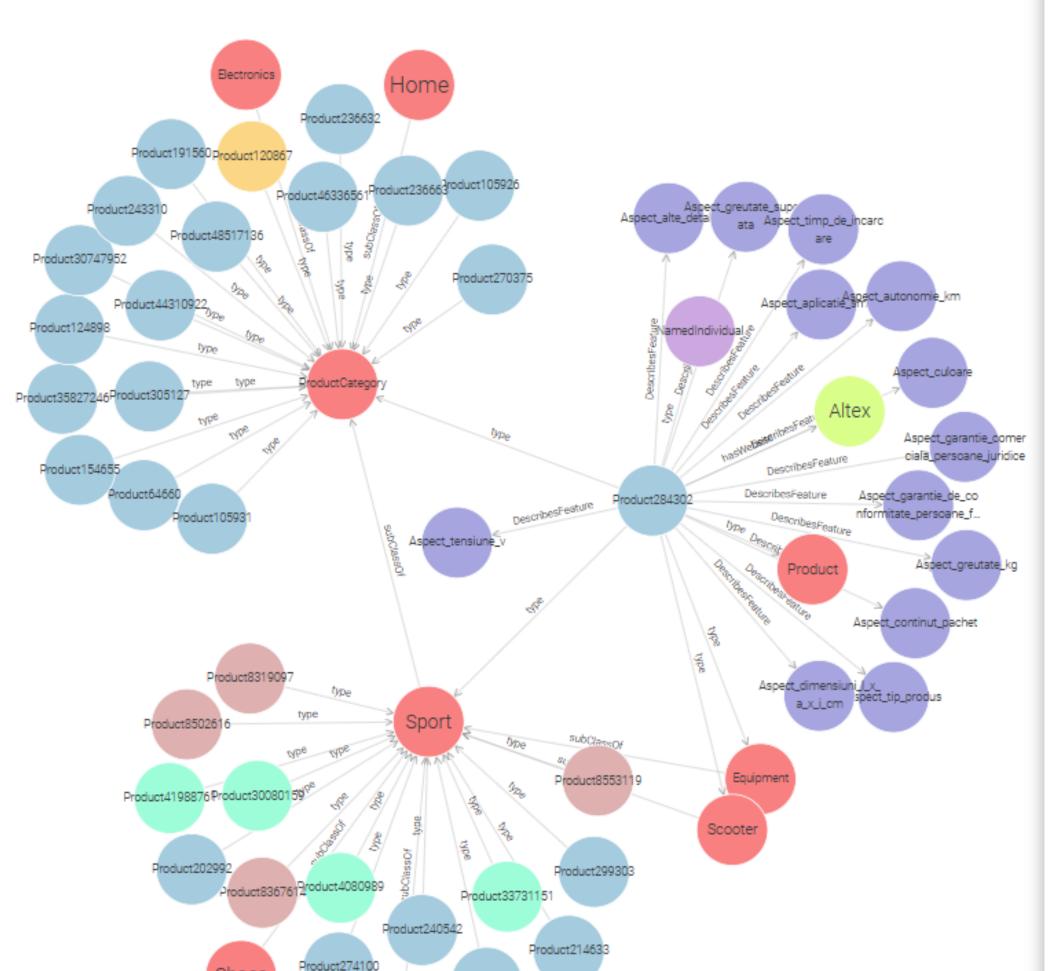
	Unnamed: 0	nod	text	embedding
0	0	:Review312747_1	Raport preț excelent , recomand cu incredere	[1.04942843e-02 2.40361124e-01 1.44135237e+
1	1	:Review267885_1	Bun, se conecteaza usor, materiale de calitate	[8.45400989e-02 7.53633678e-02 1.68057382e+
2	2	:Review267885_2	un volan decent pentru pretul lui. nu dezamage	[-1.22030608e-01 4.07803029e-01 1.32557976e+
3	3	:Review267885_3	L-am cumparat de nou stricat, cei de la magazi	[-1.11174367e-01 2.53098011e-01 9.75882590e
4	4	:Review267885_4	Sincer am fost incantat de el primele 2 zile,d	[-2.49983817e-01 9.29907441e-01 4.65281129e

Problem : import the triplets in GraphDB / Protege

Questions to be answered by ontology:

- 1. Care sunt produsele care au și review-uri și aspecte?
- 2. Care sunt review-urile autorului care a dat cele mai multe review-uri?
- 3. Care sunt categoriile de produse cu cele mai multe review-uri negative?
- 4. Care sunt cele mai frecvente aspect asociate produselor?
- 5. Dintre produsele care au și aspecte și review-uri, care sunt caracteristicile produsului cu cel mai mic rating și care sunt opiniile despre acesta?
- 6. Care este o ierarhie a site-urilor în funcție de numărul de review-uri negative?
- 7. Care sunt review-urile care conțin cuvinte din aspectele produsului?

Demo



Aspect_autonomie_km &

♦ Aspect_autonomie_km

Types:

:Aspect

owl:NamedIndividual

RDF Rank:

:isAbout autonomie_km



