

Texts Assessment Case Study

SPARQL request:

PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>

PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>

PREFIX xsd: <http://www.w3.org/2001/XMLSchema>

PREFIX foaf: <http://xmlns.com/foaf/0.1/>

PREFIX my: <http://127.0.0.1/bg/ont/test1#>

SELECT ?Domain_Template_label (COUNT(?term) as ?Terms_number) (SUM(?term_text_number) as ?Terms_freq)

#SELECT *

WHERE

{

 ?Domain_Template my:has_id ?Domain_Template_label .

 ?Domain_Template rdf:type "DomainTemplate" .

 ?Domain_Template my:TotalTerms ?Domain_Total_Terms .

 ?term foaf:member ?Domain_Template .

 ?term rdfs:label ?term_label .

 ?Text my:has_id **"texts\\10-The Rise of the Soviet Oil Industry.txt"** .

 ?Text my:TotalTerms ?Text_Total_Terms .

 ?term_text foaf:member ?Text .

 ?term_text rdfs:label ?term_text_label .

 ?term_text my:EntriesNumber ?term_text_number .

 FILTER (?term_label = ?term_text_label) .

}

GROUP BY ?Domain_Template_label

Experimental results are shown below:

Training text	Terms number	SPARQL Request answer			
1-OIL AND GAS.txt	198		Domain_Template_label	Terms_number	Terms_freq
			minimums\NGF.csv	3	4
			minimums\FFandGD_IT.csv	4	6
			minimums\GF.csv	1	1
			minimums\GRF.csv	3	5
2-Oil and Gas Composition.txt	218		Domain_Template_label	Terms_number	Terms_freq
			minimums\GF.csv	1	1
			minimums\FFandGD_IT.csv	1	1
			minimums\GRF.csv	2	4
			minimums\NGF.csv	2	3
3-Oil and Natural Gas Formation.txt	342		Domain_Template_label	Terms_number	Terms_freq
			minimums\GF.csv	1	1
			minimums\FFandGD_IT.csv	1	1
			minimums\EF.csv	2	5
			minimums\GRF.csv	2	3
			minimums\NGF.csv	1	2
4-Characteristics of Reservoir Rock.txt	399		Domain_Template_label	Terms_number	Terms_freq
			minimums\NGF.csv	4	16
			minimums\GRF.csv	2	3
			minimums\GF.csv	3	3
			minimums\FFandGD_IT.csv	2	2
			minimums\FPMS.csv	1	2

5-Types of Petroleum Traps.txt	167		Domain_Template_label	Terms_number	Terms_freq	
			minimums\GRF.csv	2	6	
			minimums\NGF.csv	2	9	
			minimums\GF.csv	1	5	
6-Finding the oil.txt	129		Domain_Template_label	Terms_number	Terms_freq	
			minimums\FFandGD_IT.csv	1	1	
			minimums\GF.csv	1	1	
7-Petroleum History.txt	653		Domain_Template_label	Terms_number	Terms_freq	
			minimums\EF.csv	3	4	
			minimums\NGF.csv	6	31	
			minimums\EMF.csv	2	6	
			minimums\FFandGD_IT.csv	3	5	
			minimums\GRF.csv	3	4	
			minimums\GF.csv	5	8	
			minimums\FPMS.csv	1	1	
8-From the History of Oil Production in Russia.txt	204		Domain_Template_label	Terms_number	Terms_freq	
			minimums\GF.csv	3	3	
			minimums\GRF.csv	1	1	
9-The Birth of the Industry.txt	178		Domain_Template_label	Terms_number	Terms_freq	
			minimums\NGF.csv	2	5	
			minimums\GF.csv	2	5	
			minimums\FFandGD_IT.csv	1	1	
10-The Rise of the Soviet Oil Industry.txt	528		Domain_Template_label	Terms_number	Terms_freq	
			minimums\EF.csv	5	6	
			minimums\NGF.csv	4	28	
			minimums\FFandGD_IT.csv	3	3	
			minimums\GF.csv	2	20	

11-Modern Development of Oil and Gas Industry in Russia.txt	241		Domain_Template_label	Terms_number	Terms_freq
			minimums\EMF.csv	3	7
			minimums\EF.csv	1	1
			minimums\FFandGD_IT.csv	2	2
			minimums\NGF.csv	1	1
12-The Role of Oil and Gas in Our Life.txt	281		Domain_Template_label	Terms_number	Terms_freq
			minimums\FFandGD_IT.csv	1	1
			minimums\EMF.csv	3	6
			minimums\NGF.csv	2	5
13-Oil and Gas Consumption.txt	499		Domain_Template_label	Terms_number	Terms_freq
			minimums\NGF.csv	1	5
			minimums\EMF.csv	1	2
			minimums\EF.csv	1	9
			minimums\GF.csv	1	5
			minimums\FFandGD_IT.csv	1	2
14-The Future of Oil.txt	384		Domain_Template_label	Terms_number	Terms_freq
			minimums\EF.csv	2	2
			minimums\GF.csv	3	15
			minimums\EMF.csv	2	4
			minimums\FFandGD_IT.csv	3	10
			minimums\NGF.csv	2	14
15-Jobs on the Rig.txt	273		Domain_Template_label	Terms_number	Terms_freq
			minimums\FFandGD_IT.csv	3	4
			minimums\GF.csv	3	3
			minimums\NGF.csv	4	8

16-How to Get a Job in the Oil Industry.txt	331		Domain_Template_label	Terms_number	Terms_freq	
			minimums\EF.csv	1	2	
			minimums\FFandGD_IT.csv	2	3	
17-The Petroleum Industry.txt	309		Domain_Template_label	Terms_number	Terms_freq	
			minimums\EF.csv	1	1	
			minimums\FFandGD_IT.csv	2	3	
18-Oil Industry has Lost its Luster.txt	307		Domain_Template_label	Terms_number	Terms_freq	
			minimums\FFandGD_IT.csv	1	1	
			minimums\EF.csv	1	1	