

ABSTAT User Survey

Why this survey?

This survey intends to reflect the usefulness of the web browser tool ABSTAT, which is used to inspect and provide summarization for Linked Datasets. It supports users to better understand unfamiliar and big datasets. By this survey we aim to measure the informativeness of ABSTAT" summaries by evaluating the correctness of query completion. Query completion is also tested by only looking at the ontology.

Who are we?

We are a research group at the Department of Informatics, Systems and Communications at the University of Milano - Bicocca working in the areas of Semantic Web, Linked Data and Semantic Technologies.

Why should I participate?

All data and the results of this survey will be made public. Your participation is a valuable contribution to users, developers and researchers in order to evaluate the usefulness of ABSTAT and for further improvements in the future.

How to complete the survey?

This survey is designed in three parts and it will take around **30 minutes** to be completed. In the first part you are asked some background questions in the form of choosing the best answer which describes you. The second part is about query completion. Here you can choose between completing queries by using ABSTAT or by looking at the ontology in Protégé. You will be asked to complete 3 queries. For each query we will provide a "template" of the corresponding SPARQL query, with spaces intentionally left blank for properties and/or concepts. You can use <http://abstat.disco.unimib.it/experiment/query> (<http://abstat.disco.unimib.it/experiment/query>) to execute SPARQL queries. While in the third part, feedback questions will be asked for each query and general comments about the survey.

As we will be measuring the time needed to answer each query, it is very important NOT to get distracted until you submit the answer for each of them. You can have a break during the background questions or feedback section. If for any reason you do not want to complete a query, you can skip it by writing a random letter in the empty spaces. (<http://abstat.disco.unimib.it/experiment/search>)
(<http://abstat.disco.unimib.it/experiment/search>)

Acknowledgment (<http://abstat.disco.unimib.it/experiment/search>)

On behalf of all members of the group we would like to thank you for taking the time to complete this survey! (<http://abstat.disco.unimib.it/experiment/search>)

THANK YOU! (<http://abstat.disco.unimib.it/experiment/search>)
(<http://abstat.disco.unimib.it/experiment/search>)

There are 67 questions in this survey.

ID

Please provide your e-mail address below:

(Note that we will not spam you but we will use your e-mail address for notifications about the survey results and further notifications about other improvements or releases of ABSTAT)

Please write your answer here:

Which role describes you best? *

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ Data broker / publisher
- ☐ Data consumer
- ☐ Researcher
- ☐ Software engineer / IT architect
- ☐ Project manager
- ☐ Phd student
- ☐ Master student
- ☐ Other

In which industry do you work? *

Only answer this question if the following conditions are met:

Answer was 'Data consumer' or 'Data broker / publisher' or 'Researcher' or 'Software engineer / IT architect' or 'Project manager' or 'Other' at question '2 [B1]' (Which role describes you best?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ Professional, Scientific, and Technical Services
- ☐ Health Care and Social Assistance
- ☐ Educational Services
- ☐ Information and Communication
- ☐ Software
- ☐ Public Administration
- ☐ Data Mining
- ☐ Other

How many years have you been involved with Linked Data *

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ I haven't been involved yet
- ☐ Less than 1 year
- ☐ 1 - 3 years
- ☐ 3 - 5 years
- ☐ 5+ years

How do you consider your expertise in formulating query with SPARQL? *

❶ Choose one of the following answers

Please choose **only one** of the following:

- ☐ No knowledge at all
(I am not able to write a SPARQL query, I don't even know the syntax).
- ☐ Basic
(I know the syntax and I know how to write very simple queries)
- ☐ Good Knowledge
(I know SPARQL syntax quite well, and I have difficulties writing complex queries)
- ☐ Very good knowledge
(I know SPARQL syntax very well, and I can write complex queries with some effort)
- ☐ Expert
(I perfectly know SPARQL syntax and I often write complex queries easily)

How do you consider your expertise about data modelling? *

❶ Choose one of the following answers

Please choose **only one** of the following:

- ☐ No knowledge at all
(I do not know what data modelling is about)
- ☐ Basic
(I know what data modelling is but I never experienced it)
- ☐ Good Knowledge
(I know what data modelling is but I have difficulties understanding and modelling complex datasets)
- ☐ Very good knowledge
(I know data modelling very well, and I can understand and model complex datasets with some effort)
- ☐ Expert
(I perfectly know data modelling and I can easily understand and model difficult datasets)

How well do you know DBpedia dataset and ontology? *

❶ Choose one of the following answers

Please choose **only one** of the following:

- ☐ No knowledge at all
(I do not know DBpedia dataset and ontology at all).
- ☐ Basic
(I know what DBpedia is but I never used it)
- ☐ Good Knowledge
(I know what DBpedia dataset and ontology is but I have difficulties in understand some parts of it)
- ☐ Very good knowledge
(I know DBpedia dataset and ontology very well, and I can understand some parts with some effort)
- ☐ Expert
(I perfectly know DBpedia dataset and ontology and I can easily understand and use it)

Survey

Which survey would you like to take? *

❶ Choose one of the following answers

Please choose **only one** of the following:

- ☐ I would like to answer queries using ABSTAT
- ☐ I would like to answer queries using the ontology in Protégé

Which is the second highest mountain on Earth?

(Note that the variables O1 and P1 are different from each other)

(Please do not worry about the formatting of the answer in the box below)

PREFIX dbo: <<http://dbpedia.org/ontology/>>

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

SELECT DISTINCT ?uri

WHERE {

 ?uri rdf:type O1 .

 ?uri P1 ?elevation .

}

ORDER BY DESC(?elevation)

OFFSET 1 LIMIT 1 *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Hints: To answer this query you can use the following links:

<http://webprotege.stanford.edu/#Edit:projectId=7899c363-3e17-471c-adba-fee50dfe6d60>

(<http://webprotege.stanford.edu/#Edit:projectId=7899c363-3e17-471c-adba-fee50dfe6d60>) ---> DBpedia Ontology

<http://abstat.disco.unimib.it/experiment/query> (<http://abstat.disco.unimib.it/experiment/query>) ---> DBpedia 2014 SPARQL Endpoint to execute the query

Please add the answer you got after executing the query *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please write your answer here:

User Feedback for Query 1

How difficult was to complete the query? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ Trivial
- ☐ Easy
- ☐ Not easy but also not difficult
- ☐ Difficult
- ☐ Very difficult

How many attempts did you try until you answer the query? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ I found both variables with the first try
- ☐ I found the property with the first try while i made more than one attempt for the object
- ☐ I found the object with the first try while i made more than one attempt for the property
- ☐ I made several attempts for both variables
- ☐ Other

Are you a domain expert for this question? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ I have no knowledge at all about this domain
- ☐ I have some knowledge about this domain
- ☐ I have much knowledge about this domain
- ☐ I am an expert in this domain knowledge
- ☐ Other

(With expert we mean that you have knowledge about how this specific domain might be modeled in DBpedia)

Did you use only DBpedia Ontology in web Protégé to answer the query? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please choose **only one** of the following:

- ☐ Yes
- ☐ No

What kind of sources did you use? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?) and Answer was 'No' at question '45 [I12341]' (Did you use only DBpedia Ontology in web Protégé to answer the query?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ DBpedia Ontology
- ☐ DBpedia web page describing the resource in the query
- ☐ A research in Google
- ☐ LOV (Linked Open Vocabulary)
- ☐ Other

Can you please describe the steps you took to answer the query?

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please write your answer here:

Other comments or suggestions

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please write your answer here:

Query 2

Which German cities have more than 250000 inhabitants?

(Note that the variables P1, P2, O1 and O2 are different from each other)

(Please do not worry about the formatting of the answer in the box below)

```
PREFIX dbo: <http://dbpedia.org/ontology/>
PREFIX res: <http://dbpedia.org/resource/>
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
SELECT DISTINCT ?uri
WHERE {
    ?uri P1 res:Germany .
    ?uri P2 ?population .
    { ?uri rdf:type O1 . }
UNION
    { ?uri rdf:type O2 . }

FILTER ( ?population > 250000 )
}
```

*

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Hints: To answer this query you can use the following links:

<http://webprotege.stanford.edu/#Edit:projectId=7899c363-3e17-471c-adba-fee50dfe6d60>

(<http://webprotege.stanford.edu/#Edit:projectId=7899c363-3e17-471c-adba-fee50dfe6d60>) ---> DBpedia Ontology

<http://abstat.disco.unimib.it/experiment/query> (<http://abstat.disco.unimib.it/experiment/query>) ---> DBpedia 2014 SPARQL Endpoint to execute the query

Please add in the box below the answer of the query. *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please write your answer here:

User Feedback for Query 2

How difficult was to complete the query? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ Trivial
- ☐ Easy
- ☐ Not easy but also not difficult
- ☐ Difficult
- ☐ Very difficult

How many attempts did you try until you answer the query? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ I found both variables with the first try
- ☐ I found the property with the first try while i made more than one attempt for the object
- ☐ I found the object with the first try while i made more than one attempt for the property
- ☐ I made several attempts for both variables
- ☐ Other

Are you a domain expert for this question? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ I have no knowledge at all about this domain
- ☐ I have some knowledge about this domain
- ☐ I have much knowledge about this domain
- ☐ I am an expert in this domain knowledge
- ☐ Other

(With expert we mean that you have knowledge about how this specific domain might be modeled in DBpedia)

Did you use only DBpedia Ontology in web Protégé to answer the query? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please choose **only one** of the following:

- ☐ Yes
- ☐ No

What kind of sources did you use? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?) *and*
Answer was 'No' at question '54 [I12342]' (Did you use only DBpedia Ontology in web Protégé to answer the query?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ DBpedia Ontology
- ☐ DBpedia web page describing the resource in the query
- ☐ A research in Google
- ☐ LOV (Linked Open Vocabulary)
- ☐ Other

Can you please describe the steps you took to answer the query?

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please write your answer here:

Other comments or suggestions

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please write your answer here:

QUERY 3

Who is the Formula 1 race driver with the most races?

(Note that the variables O1 and P1 are different from each other)

(Please do not worry about the formatting of the answer in the box below)

PREFIX dbo: <<http://dbpedia.org/ontology/>>

PREFIX res: <<http://dbpedia.org/resource/>>

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

SELECT DISTINCT ?uri

WHERE {

 ?uri rdf:type O1 .

 ?uri P1 ?x .

}

ORDER BY DESC(?x)

OFFSET 0 LIMIT 1 *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Hints: To answer this query you can use the following links:

<http://webprotege.stanford.edu/#Edit:projectId=7899c363-3e17-471c-adba-fee50dfe6d60> (<http://webprotege.stanford.edu/#Edit:projectId=7899c363-3e17-471c-adba-fee50dfe6d60>) ---> DBpedia Ontology

<http://abstat.disco.unimib.it/experiment/query> (<http://abstat.disco.unimib.it/experiment/query>) ---> DBpedia 2014 SPARQL Endpoint to execute the query

Please add in the box below the answer of the query. *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please write your answer here:

User Feedback for Query 3

How difficult was to complete the query? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ Trivial
- ☐ Easy
- ☐ Not easy but also not difficult
- ☐ Difficult
- ☐ Very difficult

How many attempts did you try until you answer the query? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ I found both variables with the first try
- ☐ I found the property with the first try while i made more than one attempt for the object
- ☐ I found the object with the first try while i made more than one attempt for the property
- ☐ I made several attempts for both variables
- ☐ Other

Are you a domain expert for this question? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ I have no knowledge at all about this domain
- ☐ I have some knowledge about this domain
- ☐ I have much knowledge about this domain
- ☐ I am an expert in this domain knowledge
- ☐ Other

(With expert we mean that you have knowledge about how this specific domain might be modeled in DBpedia)

Did you use only DBpedia Ontology in web Protégé to answer the query? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please choose **only one** of the following:

- ☐ Yes
- ☐ No

What kind of sources did you use? *

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?) and Answer was 'No' at question '63 [I12343]' (Did you use only DBpedia Ontology in web Protégé to answer the query?)

❗ Choose one of the following answers

Please choose **only one** of the following:

- ☐ DBpedia Ontology
- ☐ DBpedia web page describing the resource in the query
- ☐ A research in Google
- ☐ LOV (Linked Open Vocabulary)
- ☐ Other

Can you please describe the steps you took to answer the query?

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please write your answer here:

Other comments or suggestions

Only answer this question if the following conditions are met:

Answer was 'I would like to answer queries using the ontology in Protégé' at question '8 [S1]' (Which survey would you like to take?)

Please write your answer here:

Comments

Do you have other comments or suggestions for the whole survey?

Please write your answer here:

If you want to know more about ABSTAT, you can read two published papers:

Best Paper Award at SumPre 2016

Blerina Spahiu, Riccardo Porrini, Matteo Palmonari, Anisa Rula, Andrea Maurino: (http://link.springer.com/chapter/10.1007%2F978-3-319-47602-5_51)

ABSTAT: Ontology-Driven Linked Data Summaries with Pattern Minimalization (http://link.springer.com/chapter/10.1007%2F978-3-319-47602-5_51).

Matteo Palmonari, Anisa Rula, Riccardo Porrini, Andrea Maurino, Blerina Spahiu, Vincenzo Ferme: (http://link.springer.com/chapter/10.1007%2F978-3-319-25639-9_25)

ABSTAT: Linked Data Summaries with ABstraction and STATistics (http://link.springer.com/chapter/10.1007%2F978-3-319-25639-9_25)

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Submit your survey.

Thank you for completing this survey.