

Knowledge-Based Question Answering

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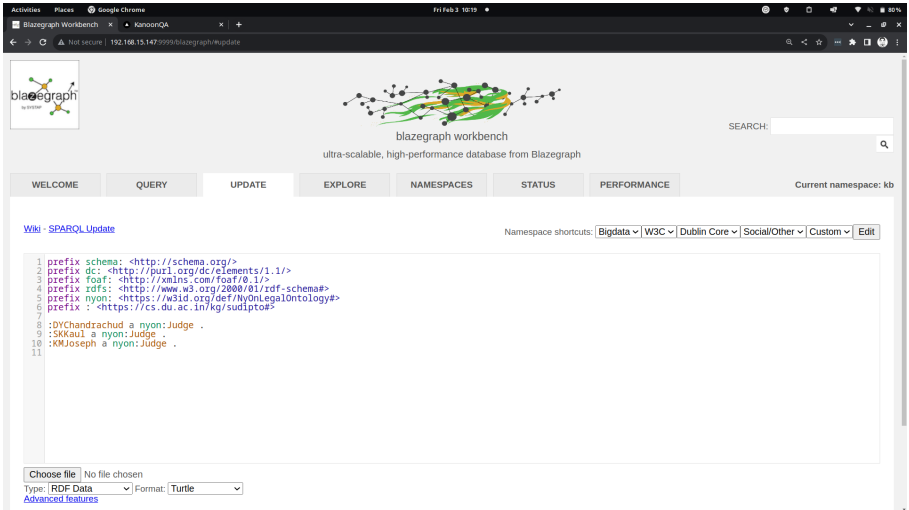
February 3, 2023

Overview

1 Initial Tasks

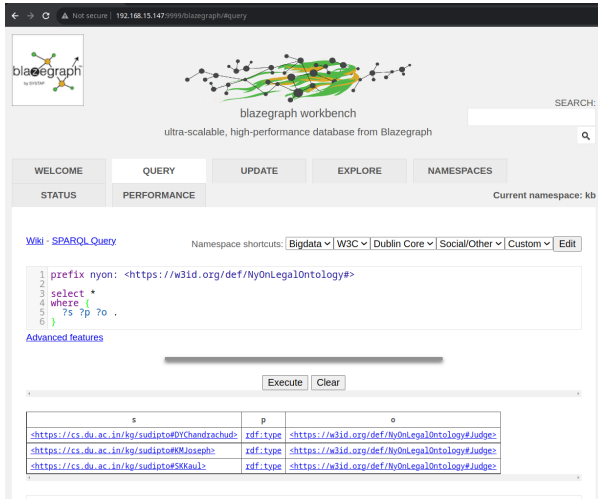
2 Basic Prototype

Initial Tasks



loading handpicked triples into triple store

Initial Tasks



blazegraph workbench
ultra-scalable, high-performance database from Blazegraph

SEARCH:

WELCOME QUERY UPDATE EXPLORE NAMESPACES

STATUS PERFORMANCE Current namespace: kb

[Wiki - SPARQL Query](#) Namespace shortcuts: Bigdata W3C Dublin Core Social/Other Custom Edit

```

1 prefix nyon: <https://w3id.org/def/NyOnLegalOntology#>
2
3 select *
4 where {
5   ?s ?p ?o .
6 }

```

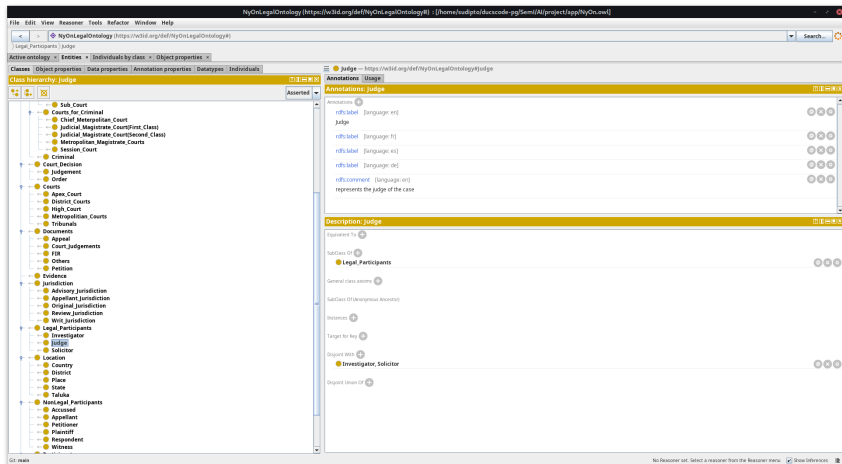
[Advanced features](#)

Execute Clear

s	p	o
https://cs.du.ac.in/kg/sudipto#DYChandrachud	rdf:type	https://w3id.org/def/NyOnLegalOntology#Judge
https://cs.du.ac.in/kg/sudipto#KMJoseph	rdf:type	https://w3id.org/def/NyOnLegalOntology#Judge
https://cs.du.ac.in/kg/sudipto#SRKaul	rdf:type	https://w3id.org/def/NyOnLegalOntology#Judge

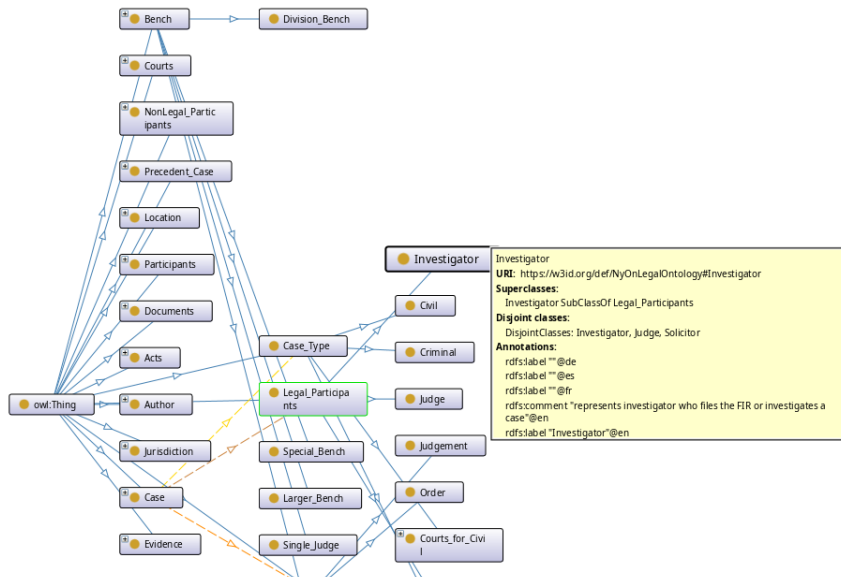
querying the triple store

Initial Tasks



inspecting nyon ontology with protege

Initial Tasks



Basic Prototype

KanoonQA

```

Q: hi
A: Good day! What can I do for you today?
Q: get all data in kg
[{"s":{"type":"uri","value":"https://cs.du.ac.in/kg/sudipto#DYChandrachud"},"p":
{"type":"uri","value":"http://www.w3.org/1999/02/22-rdf-syntax-ns#type"},"o":
{"type":"uri","value":"https://w3id.org/def/NyOnLegalOntology#Judge"}},{s":
{"type":"uri","value":"https://cs.du.ac.in/kg/sudipto#KMJoseph"},"p":
{"type":"uri","value":"http://www.w3.org/1999/02/22-rdf-syntax-ns#type"},"o":
{"type":"uri","value":"https://w3id.org/def/NyOnLegalOntology#Judge"}},{s":
{"type":"uri","value":"https://cs.du.ac.in/kg/sudipto#SKKaul"},"p":
{"type":"uri","value":"http://www.w3.org/1999/02/22-rdf-syntax-ns#type"},"o":
{"type":"uri","value":"https://w3id.org/def/NyOnLegalOntology#Judge"}}]
Q: which lawyer represented kumar?
A: sparql: select * where { ?s is_a :#lawyer; represented :#kumar . }
```

What is the meaning of life?

Send

user interface and basic output
tech stack: next.js, google cloud platform