

Semantic Web - Lab 4

-> For exercises a and b you can use <http://www.w3.org/RDF/Validator/> and in order to view your RDF graph you must select "Graph Only" and click on "Parse RDF":

Display Result Options:

Triples and/or Graph:

Graph format:

If everything it's ok you should have something like this:

Validation Results

Your RDF document validated successfully.

The original RDF/XML document

```
1: <?xml version="1.0"?>
2: <rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
3:   xmlns:dc="http://purl.org/dc/elements/1.1/">
4:   <rdf:Description rdf:about="http://www.w3.org/">
5:     <dc:title>World Wide Web Consortium</dc:title>
6:   </rdf:Description>
7: </rdf:RDF>
8:
```

Graph of the data model



-> To run a SPARQL query you can go to:

<https://atomgraph.github.io/SPARQL-Playground/>

You should have this configuration and copy paste your RDF/XML from the previous exercise:

SPARQL Playground

Query

RDF input

RDF/XML

```
<?xml version="1.0"?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:ex="http://example.org/">

  <ex:Person rdf:about="http://example.org/Alice">
    <ex:name>Alice</ex:name>
    <ex:age>30</ex:age>
  </ex:Person>

  <ex:Person rdf:about="http://example.org/Bob">
    <ex:name>Bob</ex:name>
    <ex:age>25</ex:age>
  </ex:Person>

</rdf:RDF>
```

Output

JSON

```
{
  "head": {
    "vars": [
      "person",
      "name",
      "age"
    ]
  },
  "results": {
    "bindings": [
      {
        "name": {
          "value": "Alice",
          "type": "literal"
        },
        "age": {
          "value": "30",
          "type": "literal"
        },
        "person": {
          "value": "http://example.org/Alice",
          "type": "uri"
        }
      },
      {
        "name": {
          "value": "Bob",
          "type": "literal"
        },
        "age": {
          "value": "25",
          "type": "literal"
        },
        "person": {
          "value": "http://example.org/Bob",
          "type": "uri"
        }
      }
    ]
  },
  "metadata": {
    "httpRequests": 0
  }
}
```

SPARQL query

```
PREFIX ex: <http://example.org/>

SELECT ?person ?name ?age WHERE {
  ?person a ex:Person ;
    ex:name ?name ;
    ex:age ?age .
}
```

Results

person	name	age
<http://example.org/Alice>	"Alice"	"30"
<http://example.org/Bob>	"Bob"	"25"

[AtomGraph](#)

[RDF 1.1 Primer](#)

[SPARQL 1.1 Overview](#)

[Comunica](#)

[Code](#)

To run your SPARQL query you have to click the “Query” button and the results will be shown below.