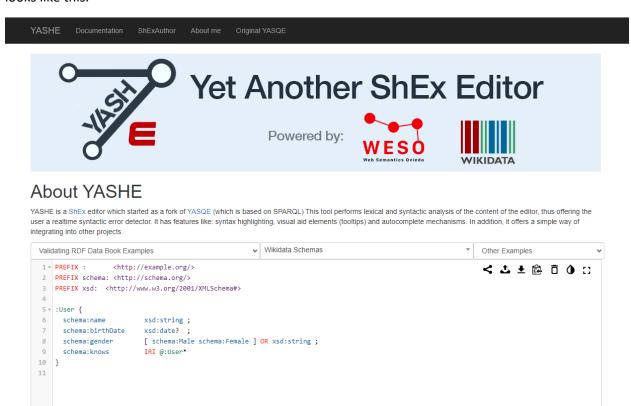
YASHF Manual

YASHE(https://www.weso.es/YASHE/) is a text editor for Shape Expressions that offers features such as: colored syntax, grammatical error detector, auto-completion mechanisms, etc. It has a web site that looks like this:



var yashe = YASHE(document.getElementById("showcase"));
(or, if you would like to instantiate YASHE from an existing text area, use var yashe = YASHE.fromTextArea(document.getElementById('textAreaItem'));

In it we can use YASHE in the size offered to us or we can enlarge the editor to full screen by F11 or by clicking on the last integrated button of the editor.



Syntax error detection

YASHE detects and displays grammatical errors on the left side of the editor with a symbol that is an exclamation mark inside a red circle. If we pass our cursor over it, it will show us an error message.

```
<http://example.org/>
      PREFIX schema: <a href="http://schema.org/">http://schema.org/>
 Prefix 'xsd:' is not
 defined
① 7
        schema:name
                                xsd:string ;
  8
        schema:birthDate
                                xsd:date? ;
  9
        schema:gender
                                [ schema:Male schema:Female ] OR xsd:string ;
 10
        schema:knows
                                IRI @:User*
 11
```

Autocompleters

YASHE has the following auto-completion mechanisms:

Prefix definition

If we want to define a prefix, we can take advantage of the prefix suggestion mechanism offered by YASHE. All we have to do is type the reserved word prefix followed by a blank space and as soon as we type the letter our prefix starts with, a list of suggestions will be displayed.

```
PREFIX W

w3cgeo: <http://www.w3.org/2003/01/geo/wgs84_pos#>
w3con: <http://www.w3.org/2000/10/swap/pim/contact#>
w3geo: <http://www.w3.org/2000/10/swap/pim/contact#>
w3geo: <http://www.w3.org/2003/01/geo/wgs84_pos#>
w3id: <https://w3id.org/>
w3p: <http://prov4j.org/w3p/>
w3po: <http://purl.org/provenance/w3p/w3po#>
waa: <http://purl.oclc.org/NET/WebApiAuthentication#>
waarde: <https://lod.milieuinfo.be/ns/waarde#>
```

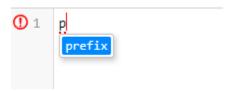
We can search the list or continue typing characters to be more specific in the search.

```
PREFIX wiki

wiki: <a href="http://en.wikipedia.org/wiki/">wikibase: <a href="http://en.wikipedia.org/wiki/">wikibase: <a href="http://wikiba.se/ontology#">wikidata: <a href="http://www.wikidata.org/entity/">wikidata: <a href="http://www.wikidata.org/entity/">wikim: <a href="http://www.wikidata.org/entity/">wikim: <a href="http://spi-fm.uca.es/spdef/models/genericTools">http://spi-fm.uca.es/spdef/models/genericTools</a>, wikimedia: <a href="http://upload.wikimedia.org/wikipedia/commwikipedia">http://wikipedia.org/wikipedia/commwikipedia: <a href="http://wikipedia.no/rdf/">http://wikipedia.no/rdf/</a>
```

Keywords

We can autocomplete reserved words of the language. In the previous example, we saw that it was necessary to type the reserved word prefix. In this case it would only be necessary to type the letter p and press Ctr-Space to display the available options.



This mechanism works for all reserved words in the language.

Alías

It is also possible to autocomplete any alias of the prefixes we have defined in the same way as in the previous section.

Shapes

Whenever we want to refer to another Shape we can let YASHE suggest the ones defined in the editor. To activate the mechanism we have to type @ and press Ctrl-space.

```
1 ▼ PREFIX :
                            <http://example.org/>
       PREFIX schema: <a href="http://schema.org/">http://schema.org/>
   2
       PREFIX xsd: <a href="http://www.w3.org/2001/XMLSchema#">http://www.w3.org/2001/XMLSchema#</a>>
   3
   4
   5 → :User1 {
          schema:name xsd:string
   6
   7
   8
   9
       :User2 {
  10
          schema:knows @
\Omega_{11}
                              @:User1
                              @:User2
  12
13
```

Wikidata Items

We can search for Wikidata entities and properties by name and let YASHE write their associated identifier. To do this:

1. We must have defined the Wikidata prefix we are going to use, either for properties or entities.

```
1  PREFIX : <http://example.org/>
2  PREFIX wd: <http://www.wikidata.org/entity/>
  PREFIX wdt: <http://www.wikidata.org/prop/direct/>
4  
5  :User {
6  
7  }
8
```

2. We place the cursor where we want to write the property or entity. We write the alias of the defined prefix and press Ctr-Space.

3. We write the name of the property or entity that we want to look for. (It is not possible to write blank spaces in the search, if we want to look for a property with more than one word we will have to write the one that we believe more relevant and search among those that it offers us).

```
<http://example.org/>
       PREFIX wd: <a href="http://www.wikidata.org/entity/">PREFIX wd: <a href="http://www.wikidata.org/entity/">http://www.wikidata.org/entity/</a>
   2
       PREFIX wdt: <a href="http://www.wikidata.org/prop/direct/">http://www.wikidata.org/prop/direct/</a>
   3
   4
   5 v :User {
          wdt:instan
   6
① 7
                 instance of (P31)
                  that class of which this subject is a particular exam
   8
                 has part(s) of the class (P2670)
                  the subject instance (the subject is not a class) has
                 is an individual of taxon (P10241)
                  the taxon of an individual named organism (animal, pla
                  subproperty of (P1647)
                   all resources related by this property are also relate
```

4. Once we find it, we make Enter or click on it and we will see how the identifier is autocompleted.

Wikidata Tooltips

Just as we can autocomplete Wikidata entities and properties, we can visualize them by hovering our mouse over them:

```
1 PREFIX wd: <a href="http://www.wikidata.org/entity/">http://www.wikidata.org/entity/>
    PREFIX wdt: <http://www.wikidata.org/prop/direct/>
 2
 3
 4 ▼ <human> {
       wdt:P31
                   [ wd.os ] . # instance of - human
 5
       wdt:P1 instance of (P31)
 6
 7
                                             e of birth
       wdt:P19
                that class of which this
 8
       wdt:P20
                                             e of death
                subject is a particular
                                              of birth
       wdt:P56
 9
                example and member
       wdt:P5
                                              of death
10
       wdt:P735
11
                                     # given name
```

Formating

We can format our Shapes using the keyboard shortcut "Ctrl-Shift-F". The editor cannot contain errors.