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# **pyquery Documentation**

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pyquery allows you to make jquery queries on xml documents. The API is as much as possible the similar to jquery. pyquery uses lxml for fast xml and html manipulation.

This is not (or at least not yet) a library to produce or interact with javascript code. I just liked the jquery API and I missed it in python so I told myself “Hey let’s make jquery in python”. This is the result.

The [project](#) is being actively developed on a git repository on Github. I have the policy of giving push access to anyone who wants it and then to review what they do. So if you want to contribute just email me.

Please report bugs on the [github](#) issue tracker.

I’ve spent hours maintaining this software, with love. Please consider tipping if you like it:

BTC: 1PruQAwByDndFZ7vTeJhyWefAghaZx9RZg

ETH: 0xb6418036d8E06c60C4D91c17d72Df6e1e5b15CE6

LTC: LY6CdZcDbxnBX9GFBj45TqVj8NyKBBqsmT



# CHAPTER 1

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## Quickstart

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You can use the PyQuery class to load an xml document from a string, a lxml document, from a file or from an url:

```
>>> from pyquery import PyQuery as pq
>>> from lxml import etree
>>> import urllib
>>> d = pq("<html></html>")
>>> d = pq(etree.fromstring("<html></html>"))
>>> d = pq(url=your_url)
>>> d = pq(url=your_url,
...       opener=lambda url, **kw: urlopen(url).read())
>>> d = pq(filename=path_to_html_file)
```

Now d is like the \$ in jquery:

```
>>> d("#hello")
[<p#hello.hello>]
>>> p = d("#hello")
>>> print(p.html())
Hello world !
>>> p.html("you know <a href='http://python.org/'>Python</a> rocks")
[<p#hello.hello>]
>>> print(p.html())
you know <a href="http://python.org/">Python</a> rocks
>>> print(p.text())
you know Python rocks
```

You can use some of the pseudo classes that are available in jQuery but that are not standard in css such as :first :last :even :odd :eq :lt :gt :checked :selected :file:

```
>>> d('p:first')
[<p#hello.hello>]
```





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[Full documentation](#)

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## 2.1 Attributes

Using attribute to select specific tag In attribute selectors, the value should be a valid CSS identifier or quoted as string:

```
>>> d = pq("<option value='1'><option value='2'>")
>>> d('option[value="1"]')
[<option>]
```

You can play with the attributes with the jquery API:

```
>>> p = pq('<p id="hello" class="hello"></p>') ('p')
>>> p.attr("id")
'hello'
>>> p.attr("id", "plop")
[<p#plop.hello>]
>>> p.attr("id", "hello")
[<p#hello.hello>]
```

Or in a more pythonic way:

```
>>> p.attr.id = "plop"
>>> p.attr.id
'plop'
>>> p.attr["id"] = "ola"
>>> p.attr["id"]
'ola'
>>> p.attr(id='hello', class_='hello2')
[<p#hello.hello2>]
>>> p.attr.class_
'hello2'
>>> p.attr.class_ = 'hello'
```

## 2.2 CSS

You can play with css classes:

```
>>> p.addClass("toto")
[<p#hello.hello.toto>]
>>> p.toggleClass("titi toto")
[<p#hello.hello.titi>]
>>> p.removeClass("titi")
[<p#hello.hello>]
```

Or the css style:

```
>>> p.css("font-size", "15px")
[<p#hello.hello>]
>>> p.attr("style")
'font-size: 15px'
>>> p.css({"font-size": "17px"})
[<p#hello.hello>]
>>> p.attr("style")
'font-size: 17px'
```

Same thing the pythonic way (‘\_’ characters are translated to ‘-’):

```
>>> p.css.font_size = "16px"
>>> p.attr.style
'font-size: 16px'
>>> p.css['font-size'] = "15px"
>>> p.attr.style
'font-size: 15px'
>>> p.css(font_size="16px")
[<p#hello.hello>]
>>> p.attr.style
'font-size: 16px'
>>> p.css = {"font-size": "17px"}
>>> p.attr.style
'font-size: 17px'
```

## 2.3 Using pseudo classes

### 2.3.1 :button

Matches all button input elements and the button element:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input type="button"/>'
...           '<button></button></div>')
>>> d(':button')
[<input>, <button>]
```

### 2.3.2 :checkbox

Matches all checkbox input elements:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input type="checkbox"/></div>')
>>> d('input:checkbox')
[<input>]
```

### 2.3.3 :checked

Matches odd elements, zero-indexed:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input checked="checked"/></div>')
>>> d('input:checked')
[<input>]
```

### 2.3.4 :child

right is an immediate child of left

### 2.3.5 :contains()

Matches all elements that contain the given text

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><h1/><h1 class="title">title</h1></div>')
>>> d('h1:contains("title")')
[<h1.title>]
```

### 2.3.6 :descendant

right is a child, grand-child or further descendant of left

### 2.3.7 :disabled

Matches all elements that are disabled:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input disabled="disabled"/></div>')
>>> d('input:disabled')
[<input>]
```

### 2.3.8 :empty

Match all elements that do not contain other elements:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><h1><span>title</span></h1><h2/></div>')
>>> d(':empty')
[<h2>]
```

### 2.3.9 :enabled

Matches all elements that are enabled:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input value="foo" /></div>')
>>> d('input:enabled')
[<input>]
```

### 2.3.10 :eq()

Matches a single element by its index:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><h1 class="first"/><h1 class="last"/></div>')
>>> d('h1:eq(0)')
[<h1.first>]
>>> d('h1:eq(1)')
[<h1.last>]
```

### 2.3.11 :even

Matches even elements, zero-indexed:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><p></p><p class="last"></p></div>')
>>> d('p:even')
[<p>]
```

### 2.3.12 :file

Matches all input elements of type file:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input type="file"/></div>')
>>> d('input:file')
[<input>]
```

### 2.3.13 :first

Matches the first selected element:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><p class="first"></p><p></p></div>')
>>> d('p:first')
[<p.first>]
```

### 2.3.14 :gt()

Matches all elements with an index over the given one:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><h1 class="first"/><h1 class="last"/></div>')
>>> d('h1:gt(0)')
[<h1.last>]
```

### 2.3.15 :has()

Matches elements which contain at least one element that matches the specified selector. <https://api.jquery.com/has-selector/>

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div class="foo"><div class="bar"></div></div>')
>>> d('.foo:has(".baz")')
[]
>>> d('.foo:has(".foo")')
[]
>>> d('.foo:has(".bar")')
[<div.foo>]
>>> d('.foo:has(div)')
[<div.foo>]
```

### 2.3.16 :header

Matches all header elements (h1, ..., h6):

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><h1>title</h1></div>')
>>> d(':header')
[<h1>]
```

### 2.3.17 :hidden

Matches all hidden input elements:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input type="hidden"/></div>')
>>> d('input:hidden')
[<input>]
```

### 2.3.18 :image

Matches all image input elements:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input type="image"/></div>')
>>> d('input:image')
[<input>]
```

### 2.3.19 :input

Matches all input elements:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input type="file"/>'
...           '<textarea></textarea></div>')
>>> d(':input')
[<input>, <textarea>]
```

### 2.3.20 :last

Matches the last selected element:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><p></p><p class="last"></p></div>')
>>> d('p:last')
[<p.last>]
```

### 2.3.21 :lt()

Matches all elements with an index below the given one:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><h1 class="first"/><h1 class="last"/></div>')
>>> d('h1:lt(1)')
[<h1.first>]
```

### 2.3.22 :odd

Matches odd elements, zero-indexed:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><p></p><p class="last"></p></div>')
>>> d('p:odd')
[<p.last>]
```

### 2.3.23 :parent

Match all elements that contain other elements:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><h1><span>title</span></h1><h1/></div>')
>>> d('h1:parent')
[<h1>]
```

### 2.3.24 :password

Matches all password input elements:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input type="password"/></div>')
>>> d('input:password')
[<input>]
```

### 2.3.25 :pseudo

Translate a pseudo-element.

Defaults to not supporting pseudo-elements at all, but can be overridden by sub-classes

### 2.3.26 :radio

Matches all radio input elements:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input type="radio"/></div>')
>>> d('input:radio')
[<input>]
```

### 2.3.27 :reset

Matches all reset input elements:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input type="reset"/></div>')
>>> d('input:reset')
[<input>]
```

### 2.3.28 :selected

Matches all elements that are selected:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<select><option selected="selected"/></select>')
>>> d('option:selected')
[<option>]
```

### 2.3.29 :submit

Matches all submit input elements:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input type="submit"/></div>')
>>> d('input:submit')
[<input>]
```

### 2.3.30 :text

Matches all text input elements:

```
>>> from pyquery import PyQuery
>>> d = PyQuery('<div><input type="text"/></div>')
>>> d('input:text')
[<input>]
```

## 2.4 Manipulating

You can also add content to the end of tags:

```
>>> d = pq('<p class="hello" id="hello">you know Python rocks</p>')
>>> d('p').append(' check out <a href="http://reddit.com/r/python"><span>reddit</span>
↳ </a>')
[<p#hello.hello>]
>>> print(d)
<p class="hello" id="hello">you know Python rocks check out <a href="http://reddit.
↳ com/r/python"><span>reddit</span></a></p>
```

Or to the beginning:

```
>>> p = d('p')
>>> p.prepend('check out <a href="http://reddit.com/r/python">reddit</a>')
[<p#hello.hello>]
>>> print(p.html())
check out <a href="http://reddit.com/r/python">reddit</a>you know ...
```

Prepend or append an element into an other:

```
>>> d = pq('<html><body><div id="test"><a href="http://python.org">python</a> !</div>
↳ </body></html>')
>>> p.prependTo(d('#test'))
[<p#hello.hello>]
>>> print(d('#test').html())
<p class="hello" ...
```

Insert an element after another:

```
>>> p.insertAfter(d('#test'))
[<p#hello.hello>]
>>> print(d('#test').html())
<a href="http://python.org">python</a> !
```

Or before:

```
>>> p.insertBefore(d('#test'))
[<p#hello.hello>]
>>> print(d('body').html())
<p class="hello" id="hello">...
```

Doing something for each elements:

```
>>> p.each(lambda i, e: pq(e).addClass('hello2'))
[<p#hello.hello.hello2>]
```



Remove an element:

```
>>> d = pq('<html><body><p id="id">Yeah!</p><p>python rocks !</p></div></html>')
>>> d.remove('p#id')
[<html>]
>>> d('p#id')
[]
```

Remove what's inside the selection:

```
>>> d('p').empty()
[<p>]
```

And you can get back the modified html:

```
>>> print(d)
<html><body><p/></body></html>
```

You can generate html stuff:

```
>>> from pyquery import PyQuery as pq
>>> print(pq('<div>Yeah !</div>').addClass('myclass') + pq('<b>cool</b>'))
<div class="myclass">Yeah !</div><b>cool</b>
```

Remove all namespaces:

```
>>> d = pq('<foo xmlns="http://example.com/foo"></foo>')
>>> d
[<{http://example.com/foo}foo>]
>>> d.remove_namespaces()
[<foo>]
```

## 2.5 Traversing

Some jQuery traversal methods are supported. Here are a few examples.

You can filter the selection list using a string selector:

```
>>> d = pq('<p id="hello" class="hello"><a/></p><p id="test"><a/></p>')
>>> d('p').filter('.hello')
[<p#hello.hello>]
```

It is possible to select a single element with eq:

```
>>> d('p').eq(0)
[<p#hello.hello>]
```

You can find nested elements:

```
>>> d('p').find('a')
[<a>, <a>]
>>> d('p').eq(1).find('a')
[<a>]
```

Breaking out of a level of traversal is also supported using end:

```
>>> d('p').find('a').end()
[<p#hello.hello>, <p#test>]
>>> d('p').eq(0).end()
[<p#hello.hello>, <p#test>]
>>> d('p').filter(lambda i: i == 1).end()
[<p#hello.hello>, <p#test>]
```

If you want to select a dotted id you need to escape the dot:

```
>>> d = pq('<p id="hello.you"><a/></p><p id="test"><a/></p>')
>>> d('#hello\\.you')
[<p#hello.you>]
```

## 2.6 pyquery – PyQuery complete API

**class** pyquery.pyquery.**PyQuery** (\*args, \*\*kwargs)

The main class

**class** Fn

Hook for defining custom function (like the jQuery.fn):

```
>>> fn = lambda: this.map(lambda i, el: PyQuery(this).outerHtml())
>>> PyQuery.fn.listOuterHtml = fn
>>> S = PyQuery(
...     '<ol> <li>Coffee</li> <li>Tea</li> <li>Milk</li> </ol>')
>>> S('li').listOuterHtml()
['<li>Coffee</li>', '<li>Tea</li>', '<li>Milk</li>']
```

**addClass** (value)

Alias for `add_class()`

**add\_class** (value)

Add a css class to elements:

```
>>> d = PyQuery('<div></div>')
>>> d.add_class('myclass')
[<div.myclass>]
>>> d.addClass('myclass')
[<div.myclass>]
```

**after** (value)

add value after nodes

**append** (value)

append value to each nodes

**appendTo** (value)

Alias for `append_to()`

**append\_to** (value)

append nodes to value

**base\_url**

Return the url of current html document or None if not available.

**before** (value)

insert value before nodes

**children** (*selector=None*)

Filter elements that are direct children of self using optional selector:

```
>>> d = PyQuery('<span><p class="hello">Hi</p><p>Bye</p></span>')
>>> d
[<span>]
>>> d.children()
[<p.hello>, <p>]
>>> d.children('.hello')
[<p.hello>]
```

**clone** ()

return a copy of nodes

**closest** (*selector=None*)

```
>>> d = PyQuery(
...   '<div class="hello"><p>This is a '
...   '<strong class="hello">test</strong></p></div>')
>>> d('strong').closest('div')
[<div.hello>]
>>> d('strong').closest('.hello')
[<strong.hello>]
>>> d('strong').closest('form')
[]
```

**contents** ()

Return contents (with text nodes):

```
>>> d = PyQuery('hello <b>bold</b>')
>>> d.contents()
['hello ', <Element b at ...>]
```

**each** (*func*)

apply func on each nodes

**empty** ()

remove nodes content

**encoding**

return the xml encoding of the root element

**end** ()

Break out of a level of traversal and return to the parent level.

```
>>> m = '<p><span><em>Whoah!</em></span></p><p><em> there</em></p>'
>>> d = PyQuery(m)
>>> d('p').eq(1).find('em').end().end()
[<p>, <p>]
```

**eq** (*index*)

Return PyQuery of only the element with the provided index:

```
>>> d = PyQuery('<p class="hello">Hi</p><p>Bye</p><div></div>')
>>> d('p').eq(0)
[<p.hello>]
>>> d('p').eq(1)
```

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```
[<p>]
>>> d('p').eq(2)
[]
```

**extend** (*other*)

Extend with another PyQuery object

**filter** (*selector*)

Filter elements in self using selector (string or function):

```
>>> d = PyQuery('<p class="hello">Hi</p><p>Bye</p>')
>>> d('p')
[<p.hello>, <p>]
>>> d('p').filter('.hello')
[<p.hello>]
>>> d('p').filter(lambda i: i == 1)
[<p>]
>>> d('p').filter(lambda i: PyQuery(this).text() == 'Hi')
[<p.hello>]
>>> d('p').filter(lambda i, this: PyQuery(this).text() == 'Hi')
[<p.hello>]
```

**find** (*selector*)

Find elements using selector traversing down from self:

```
>>> m = '<p><span><em>Whoah!</em></span></p><p><em> there</em></p>'
>>> d = PyQuery(m)
>>> d('p').find('em')
[<em>, <em>]
>>> d('p').eq(1).find('em')
[<em>]
```

**hasClass** (*name*)Alias for `has_class()`**has\_class** (*name*)

Return True if element has class:

```
>>> d = PyQuery('<div class="myclass"></div>')
>>> d.has_class('myclass')
True
>>> d.hasClass('myclass')
True
```

**height** (*value=<NoDefault>*)

set/get height of element

**hide** ()

Remove display:none to elements style:

```
>>> print(PyQuery('<div style="display:none;">').hide())
<div style="display: none;">
```

**html** (*value=<NoDefault>*, *\*\*kwargs*)

Get or set the html representation of sub nodes.

Get the text value:

```
>>> d = PyQuery('<div><span>toto</span></div>')
>>> print(d.html())
<span>toto</span>
```

Extra args are passed to `lxml.etree.tostring`:

```
>>> d = PyQuery('<div><span></span></div>')
>>> print(d.html())
<span/>
>>> print(d.html(method='html'))
<span></span>
```

Set the text value:

```
>>> d.html('<span>Youhou !</span>')
[<div>]
>>> print(d)
<div><span>Youhou !</span></div>
```

**insertAfter** (*value*)

Alias for `insert_after()`

**insertBefore** (*value*)

Alias for `insert_before()`

**insert\_after** (*value*)

insert nodes after value

**insert\_before** (*value*)

insert nodes before value

**is\_** (*selector*)

Returns True if selector matches at least one current element, else False:

```
>>> d = PyQuery('<p class="hello"><span>Hi</span></p><p>Bye</p>')
>>> d('p').eq(0).is_('.hello')
True
```

```
>>> d('p').eq(0).is_('.span')
False
```

```
>>> d('p').eq(1).is_('.hello')
False
```

**items** (*selector=None*)

Iter over elements. Return PyQuery objects:

```
>>> d = PyQuery('<div><span>foo</span><span>bar</span></div>')
>>> [i.text() for i in d.items('span')]
['foo', 'bar']
>>> [i.text() for i in d('span').items()]
['foo', 'bar']
>>> list(d.items('a')) == list(d('a').items())
True
```

**make\_links\_absolute** (*base\_url=None*)

Make all links absolute.

**map** (*func*)

Returns a new PyQuery after transforming current items with *func*.

*func* should take two arguments - 'index' and 'element'. Elements can also be referred to as 'this' inside of *func*:

```
>>> d = PyQuery('<p class="hello">Hi there</p><p>Bye</p><br />')
>>> d('p').map(lambda i, e: PyQuery(e).text())
['Hi there', 'Bye']

>>> d('p').map(lambda i, e: len(PyQuery(this).text()))
[8, 3]

>>> d('p').map(lambda i, e: PyQuery(this).text().split())
['Hi', 'there', 'Bye']
```

**nextAll** (*selector=None*)

Alias for *next\_all()*

**next\_all** (*selector=None*)

```
>>> h = '<span><p class="hello">Hi</p><p>Bye</p><img scr="" /></span>'
>>> d = PyQuery(h)
>>> d('p:last').next_all()
[<img>]
>>> d('p:last').nextAll()
[<img>]
```

**not\_** (*selector*)

Return elements that don't match the given selector:

```
>>> d = PyQuery('<p class="hello">Hi</p><p>Bye</p><div></div>')
>>> d('p').not_('.hello')
[<p>]
```

**outerHtml** (*method='html'*)

Alias for *outer\_html()*

**outer\_html** (*method='html'*)

Get the html representation of the first selected element:

```
>>> d = PyQuery('<div><span class="red">toto</span> rocks</div>')
>>> print(d('span'))
<span class="red">toto</span> rocks
>>> print(d('span').outer_html())
<span class="red">toto</span>
>>> print(d('span').outerHtml())
<span class="red">toto</span>

>>> S = PyQuery('<p>Only <b>me</b> & myself</p>')
>>> print(S('b').outer_html())
<b>me</b>
```

**parents** (*selector=None*)

```

>>> d = PyQuery('<span><p class="hello">Hi</p><p>Bye</p></span>')
>>> d('p').parents()
[<span>]
>>> d('.hello').parents('span')
[<span>]
>>> d('.hello').parents('p')
[]

```

**prepend** (*value*)

prepend value to nodes

**prependTo** (*value*)Alias for `prepend_to()`**prepend\_to** (*value*)

prepend nodes to value

**prevAll** (*selector=None*)Alias for `prev_all()`**prev\_all** (*selector=None*)

```

>>> h = '<span><p class="hello">Hi</p><p>Bye</p><img scr=""/></span>'
>>> d = PyQuery(h)
>>> d('p:last').prev_all()
[<p.hello>]
>>> d('p:last').prevAll()
[<p.hello>]

```

**remove** (*expr=<NoDefault>*)

Remove nodes:

```

>>> h = (
...   '<div>Maybe <em>she</em> does <strong>NOT</strong> know</div>'
... )
>>> d = PyQuery(h)
>>> d('strong').remove()
[<strong>]
>>> print(d)
<div>Maybe <em>she</em> does   know</div>

```

**removeAttr** (*name*)Alias for `remove_attr()`**removeClass** (*value*)Alias for `remove_class()`**remove\_attr** (*name*)

Remove an attribute:

```

>>> d = PyQuery('<div id="myid"></div>')
>>> d.remove_attr('id')
[<div>]
>>> d.removeAttr('id')
[<div>]

```

**remove\_class** (*value*)

Remove a css class to elements:

```
>>> d = PyQuery('<div class="myclass"></div>')
>>> d.remove_class('myclass')
[<div>]
>>> d.removeClass('myclass')
[<div>]
```

**remove\_namespaces()**

Remove all namespaces:

```
>>> doc = PyQuery('<foo xmlns="http://example.com/foo"></foo>')
>>> doc
[<{http://example.com/foo}foo>]
>>> doc.remove_namespaces()
[<foo>]
```

**replaceAll(*expr*)**Alias for *replace\_all()***replaceWith(*value*)**Alias for *replace\_with()***replace\_all(*expr*)**replace nodes by *expr***replace\_with(*value*)**replace nodes by *value*:

```
>>> doc = PyQuery("<html><div /></html>")
>>> node = PyQuery("<span />")
>>> child = doc.find('div')
>>> child.replace_with(node)
[<div>]
>>> print(doc)
<html><span/></html>
```

**root**

return the xml root element

**serialize()**

Serialize form elements as a URL-encoded string.

```
>>> h = (
... '<form><input name="order" value="spam">'
... '<input name="order2" value="baked beans"></form>'
... )
>>> d = PyQuery(h)
>>> d.serialize()
'order=spam&order2=baked%20beans'
```

**serializeArray()**Alias for *serialize\_array()***serializeDict()**Alias for *serialize\_dict()***serializePairs()**Alias for *serialize\_pairs()*



**serialize\_array()**

Serialize form elements as an array of dictionaries, whose structure mirrors that produced by the jQuery API. Notably, it does not handle the deprecated *keygen* form element.

```
>>> d = PyQuery('<form><input name="order" value="spam"></form>')
>>> d.serialize_array() == [{'name': 'order', 'value': 'spam'}]
True
>>> d.serializeArray() == [{'name': 'order', 'value': 'spam'}]
True
```

**serialize\_dict()**

Serialize form elements as an ordered dictionary. Multiple values corresponding to the same input name are concatenated into one list.

```
>>> d = PyQuery(''<form>
...     <input name="order" value="spam">
...     <input name="order" value="eggs">
...     <input name="order2" value="ham">
...     </form>'')
>>> d.serialize_dict()
OrderedDict([('order', ['spam', 'eggs']), ('order2', 'ham')])
>>> d.serializeDict()
OrderedDict([('order', ['spam', 'eggs']), ('order2', 'ham')])
```

**serialize\_pairs()**

Serialize form elements as an array of 2-tuples conventional for typical URL-parsing operations in Python.

```
>>> d = PyQuery('<form><input name="order" value="spam"></form>')
>>> d.serialize_pairs()
[('order', 'spam')]
>>> d.serializePairs()
[('order', 'spam')]
```

**show()**

Add display:block to elements style:

```
>>> print(PyQuery('<div />').show())
<div style="display: block"/>
```

**siblings (selector=None)**

```
>>> h = '<span><p class="hello">Hi</p><p>Bye</p><img src="" /></span>'
>>> d = PyQuery(h)
>>> d('.hello').siblings()
[<p>, <img>]
>>> d('.hello').siblings('img')
[<img>]
```

**text (value=<NoDefault>, \*\*kwargs)**

Get or set the text representation of sub nodes.

Get the text value:

```
>>> doc = PyQuery('<div><span>toto</span><span>tata</span></div>')
>>> print(doc.text())
tototata
```

(continues on next page)

(continued from previous page)

```
>>> doc = PyQuery('<div><span>toto</span>
...               <span>tata</span></div>')
>>> print(doc.text())
toto tata
```

Get the text value, without squashing newlines:

```
>>> doc = PyQuery('<div><span>toto</span>
...               <span>tata</span></div>')
>>> print(doc.text(squash_space=False))
toto
tata
```

Set the text value:

```
>>> doc.text('Youhou !')
[<div>]
>>> print(doc)
<div>Youhou !</div>
```

**toggleClass** (*value*)

Alias for `toggle_class()`

**toggle\_class** (*value*)

Toggle a css class to elements

```
>>> d = PyQuery('<div></div>')
>>> d.toggle_class('myclass')
[<div.myclass>]
>>> d.toggleClass('myclass')
[<div>]
```

**val** (*value=<NoDefault>*)

Set the attribute value:

```
>>> d = PyQuery('<input />')
>>> d.val('Youhou')
[<input>]
```

Get the attribute value:

```
>>> d.val()
'Youhou'
```

Set the selected values for a *select* element with the *multiple* attribute:

```
>>> d = PyQuery('<
...             <select multiple>
...                 <option value="you"><option value="hou">
...             </select>
...             </div>')
>>> d.val(['you', 'hou'])
[<select>]
```

Get the selected values for a *select* element with the *multiple* attribute:

```
>>> d.val()
['you', 'hou']
```

**width** (*value*=<NoDefault>)  
set/get width of element

**wrap** (*value*)

A string of HTML that will be created on the fly and wrapped around each target:

```
>>> d = PyQuery('<span>youhou</span>')
>>> d.wrap('<div></div>')
[<div>]
>>> print(d)
<div><span>youhou</span></div>
```

**wrapAll** (*value*)

Alias for *wrap\_all()*

**wrap\_all** (*value*)

Wrap all the elements in the matched set into a single wrapper element:

```
>>> d = PyQuery('<div><span>Hey</span><span>you !</span></div>')
>>> print(d('span').wrap_all('<div id="wrapper"></div>'))
<div id="wrapper"><span>Hey</span><span>you !</span></div>

>>> d = PyQuery('<div><span>Hey</span><span>you !</span></div>')
>>> print(d('span').wrapAll('<div id="wrapper"></div>'))
<div id="wrapper"><span>Hey</span><span>you !</span></div>
```

**xhtml\_to\_html** ()

Remove xhtml namespace:

```
>>> doc = PyQuery(
...     '<html xmlns="http://www.w3.org/1999/xhtml"></html>')
>>> doc
[<{http://www.w3.org/1999/xhtml}html>]
>>> doc.xhtml_to_html()
[<html>]
```

## 2.7 Scraping

PyQuery is able to load an html document from a url:

```
>>> pq(your_url)
[<html>]
```

By default it uses python's urllib.

If `requests` is installed then it will use it. This allow you to use most of `requests` parameters:

```
>>> pq(your_url, headers={'user-agent': 'pyquery'})
[<html>]

>>> pq(your_url, {'q': 'foo'}, method='post', verify=True)
[<html>]
```

## 2.7.1 Timeout

The default timeout is 60 seconds, you can change it by setting the timeout parameter which is forwarded to the underlying urllib or requests library.

## 2.7.2 Session

When using the requests library you can instantiate a Session object which keeps state between http calls (for example - to keep cookies). You can set the session parameter to use this session object.

## 2.8 Tips

### 2.8.1 Making links absolute

You can make links absolute which can be usefull for screen scrapping:

```
>>> d = pq(url=your_url, parser='html')
>>> d('form').attr('action')
'/form-submit'
>>> d.make_links_absolute()
[<html>]
```

### 2.8.2 Using different parsers

By default pyquery uses the lxml xml parser and then if it doesn't work goes on to try the html parser from lxml.html. The xml parser can sometimes be problematic when parsing xhtml pages because the parser will not raise an error but give an unusable tree (on w3c.org for example).

You can also choose which parser to use explicitly:

```
>>> pq('<html><body><p>toto</p></body></html>', parser='xml')
[<html>]
>>> pq('<html><body><p>toto</p></body></html>', parser='html')
[<html>]
>>> pq('<html><body><p>toto</p></body></html>', parser='html_fragments')
[<p>]
```

The html and html\_fragments parser are the ones from lxml.html.

## 2.9 Testing

If you want to run the tests that you can see above you should do:

```
$ git clone git://github.com/gawel/pyquery.git
$ cd pyquery
$ python bootstrap.py
$ bin/buildout install tox
$ bin/tox
```

You can build the Sphinx documentation by doing:

```
$ cd docs
$ make html
```

## 2.10 Future

- SELECTORS: done
- ATTRIBUTES: done
- CSS: done
- HTML: done
- MANIPULATING: missing the wrapInner method
- TRAVERSING: about half done
- EVENTS: nothing to do with server side might be used later for automatic ajax
- CORE UI EFFECTS: did hide and show the rest doesn't really makes sense on server side
- AJAX: some with wsgi app

## 2.11 News

### 2.11.1 1.4.1 (unreleased)

- Remove py33 support

### 2.11.2 1.4.0 (2018-01-11)

- Refactoring of `.text()` to match firefox behavior.

### 2.11.3 1.3.0 (2017-10-21)

- Remove some unmaintained modules: `pyquery.ajax` and `pyquery.rules`
- Code cleanup. No longer use ugly hacks required by python2.6/python3.2.
- Run tests with python3.6 on CI
- Add a `method` argument to `.outer_html()`

### 2.11.4 1.2.17 (2016-10-14)

- `PyQuery('<input value="">').val()` is ''
- `PyQuery('<input>').val()` is ''

### 2.11.5 1.2.16 (2016-10-14)

- `.attr('value', '')` no longer removes the `value` attribute
- `<input type="checkbox">` without `value="..."` have a `.val()` of `'on'`
- `<input type="radio">` without `value="..."` have a `.val()` of `'on'`
- `<select>` without `<option selected>` have the value of their first `<option>` (or `None` if there are no options)

### 2.11.6 1.2.15 (2016-10-11)

- `.val()` should never raise
- drop py26 support
- improve `.extend()` by returning self

### 2.11.7 1.2.14 (2016-10-10)

- fix `val()` for `<textarea>` and `<select>`, to match jQuery behavior

### 2.11.8 1.2.13 (2016-04-12)

- Note explicit support for Python 3.5

### 2.11.9 1.2.12 (2016-04-12)

- `make_links_absolute` now take care of whitespaces
- added pseudo selector `:has()`
- add cookies arguments as allowed arguments for requests

### 2.11.10 1.2.11 (2016-02-02)

- Preserve namespaces attribute on PyQuery copies.
- Do not raise an error when the http response code is 2XX

### 2.11.11 1.2.10 (2016-01-05)

- Fixed #118: implemented usage `lxml.etree.tostring` within `outer_html` method
- Fixed #117: Raise HTTP Error if HTTP status code is not equal to 200
- Fixed #112: `make_links_absolute` does not apply to form actions
- Fixed #98: contains act like jQuery

### 2.11.12 1.2.9 (2014-08-22)

- Support for keyword arguments in PyQuery custom functions
- Fixed #78: items must take care of the parent
- Fixed #65 PyQuery.make\_links\_absolute() no longer creates 'href' attribute when it isn't there
- Fixed #19. is\_() was broken.
- Fixed #9. .replaceWith(PyQuery element) raises error
- Remove official python3.2 support (mostly because of 3rd party semi-deps)

### 2.11.13 1.2.8 (2013-12-21)

- Fixed #22: Open by filename fails when file contains invalid xml
- Bug fix in .remove\_class()

### 2.11.14 1.2.7 (2013-12-21)

- Use pep8 name for methods but keep an alias for camel case method. Eg: remove\_attr and removeAttr works  
Fix #57
- .text() now return an empty string instead of None if there is no text node. Fix #45
- Fixed #23: removeClass adds class attribute to elements which previously lacked one

### 2.11.15 1.2.6 (2013-10-11)

- README\_fixt.py was not include in the release. Fix #54.

### 2.11.16 1.2.5 (2013-10-10)

- cssselect compat. See <https://github.com/SimonSapin/cssselect/pull/22>
- tests improvements. no longer require a eth connection.
- fix #55

### 2.11.17 1.2.4

- Moved to github. So a few files are renamed from .txt to .rst
- Added .xhtml\_to\_html() and .remove\_namespaces()
- Use requests to fetch urls (if available)
- Use restkit's proxy instead of Paste (which will die with py3)
- Allow to open https urls
- python2.5 is no longer supported (may work, but tests are broken)

### 2.11.18 1.2.3

- Allow to pass this in `.filter()` callback
- Add `.contents()` `.items()`
- Add `tox.ini`
- Bug fixes: fix #35 #55 #64 #66

### 2.11.19 1.2.2

- Fix `cssselectpatch` to match the newer implementation of `cssselect`. Fixes issue #62, #52 and #59 (Haoyu Bai)
- Fix issue #37 (Caleb Burns)

### 2.11.20 1.2.1

- Allow to use a custom css translator.
- Fix issue 44: case problem with xml documents

### 2.11.21 1.2

- PyQuery now uses `cssselect`. See issue 43.
- Fix issue 40: forward `.html()` extra arguments to `lxml.etree.tostring`

### 2.11.22 1.1.1

- Minor release. Include test file so you can run tests from the tarball.

### 2.11.23 1.1

- fix issues 30, 31, 32 - py3 improvements / webob 1.2+ support

### 2.11.24 1.0

- fix issues 24

### 2.11.25 0.7

- Python 3 compatible
- Add `__unicode__` method
- Add root and encoding attribute
- fix issues 19, 20, 22, 23



### 2.11.26 0.6.1

- Move README.txt at package root
- Add CHANGES.txt and add it to long\_description

### 2.11.27 0.6

- Added PyQuery.outerHtml
- Added PyQuery.fn
- Added PyQuery.map
- Change PyQuery.each behavior to reflect jQuery api



## CHAPTER 3

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### More documentation

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First there is the Sphinx documentation [here](#). Then for more documentation about the API you can use the [jquery website](#). The reference I'm now using for the API is ... the [color cheat sheet](#). Then you can always look at the [code](#).



## CHAPTER 4

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