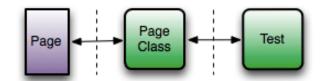


# Page-Object Quick Reference



### **Getting Started**

Load the Page-Object library require 'page-object'

Create a page-object page = MyWebPage.new(@browser)

Create a page-object and navigate to its' url page\_url 'http://www.google.com' page = MyWebPage.new(@browser, true)

Go to a specific URL page.navigate to 'http://www.google.com'

Page creation hook def initialize\_page

## **Page Level Functionality**

Return the html of the page or any element page.html

Return the text of any page page.text

Return the title of a document page.title

Wait for a page level event -> until block returns true page.wait\_until(timeout, message, block)

Attach to another window page.attach to window(:title => 'other title')

Page Navigation page.forward, page.back

### **Handling Frames and iFrames**

The page-object gem provides a way to declare items are within frames or iframes.

```
class RegistrationPage
include PageObject

in_frame(:id => 'left-frame') do |frame|
  text_field(:address, :id => 'address_id', :frame => frame)
  end
end
```

This example shows how you might declare a text field that resides inside of a frame. You can also nest frames within frames.

```
class RegistrationPage
include PageObject

in_frame(:id => 'left-frame') do |frame|
in_frame({:id => 'left-top-frame'}, frame) do |frame|
    text_field(:address, :id => 'address_id', :frame => frame)
    end
end
end
```

Here you see a text field that is inside a frame with an id of left-top-frame which is itself inside a frame with an id of left-frame.

Notice how in both examples we had to pass the frame that is passed into the block to the elements that are inside the block. Also notice how we had to place {} around the in\_frame identifier when it is nested.

After the declaration of the frames you can use the element like any other declared on the page.

### **Javascript Popups**

The page-object gem handles javascript popups by intercepting the call to the popup and cause it to not happen at all.

#### **Alert**

```
message = @page.alert do
    @page.button_that_causes_the_alert
end
message.should == "My alert text"
```

#### Confirm

```
message = @page.confirm(true) do # reply with a true confirmation @page.button_causing_the_confirm end
```

#### **Prompt**

```
results = @page.prompt("Cheese") do # enter "Cheese" in the prompt @page.what_do_you_like_button end results[:message].should == "What do you like?"
```

## **Ajax**

The page-object gem supports waiting at a page level and at an element level for different triggers to occur.

### Page level waiting

```
def wait_until(timeout = 30, message = nil, &block)
def wait_for_ajax(timeout = 30, message = nil)
Element level waiting
def when_present(timeout = 5)
def when_visible(timeout = 5)
def when_not_visible(timeout = 5)
def wait until(timeout = 5, message = nil, &block)
```

# **Generated Accessor Methods**

Element method	HTML Element	Generated methods	How to identify an element
<pre>button(:name, :value =&gt; 'Save')</pre>	 <input type="button"/> <input type="image"/> <input type="reset"/> <input type="submit"/>	name # presses button name_element # element	<ul> <li>:alt (input type=image only)</li> <li>:class</li> <li>:id</li> <li>:index</li> <li>:name</li> <li>:src (input type=image only)</li> <li>:text</li> <li>:value</li> <li>:xpath</li> </ul>
cell(:name, :id => 'cellid')		name # returns text name_element # element	<ul><li>:class</li><li>:id</li><li>:index</li><li>:name</li><li>:text</li><li>:xpath</li></ul>
<pre>checkbox(:name, :id =&gt; 'cbname')</pre>	<input type="checkbox"/>	check_name # checks uncheck_name # unchecks name_checked? # is checked name_element # element	<ul><li>class</li><li>:id</li><li>:index</li><li>:name</li><li>:value</li><li>:xpath</li></ul>

Element method	HTML Element	Generated methods	How to identify an element
div(:name, :id => 'divname')	<div></div>	name # returns text name_element # element	<ul><li>:class</li><li>:id</li><li>:index</li><li>:name</li><li>:text</li><li>:xpath</li></ul>
<pre>file_field(:name, :id =&gt; 'ffieldid')</pre>	<input type="file"/>	name= # sets value in field name_element # element	<ul><li>:class</li><li>:id</li><li>:index</li><li>:name</li><li>:title</li><li>:xpath</li></ul>
<pre>form(:name, :id =&gt; 'formid')</pre>	<form></form>	name_element # element	<ul><li>:action</li><li>:class</li><li>:id</li><li>:index</li><li>:xpath</li></ul>
h1(:name, :id => 'headingid') h2(:name, :id => 'headingid') h3(:name, :id => 'headingid') h4(:name, :id => 'headingid') h5(:name, :id => 'headingid') h6(:name, :id => 'headingid')	<h1><h2><h3><h4><h4><h5><h4><h4><h6><h6><h6><h6><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><h6><hb></hb><hb></hb><h6><hb></hb><hb></hb><h6><hb></hb><hb></hb><hb></hb><h6><hb></hb><hb></hb><hb></hb><hb></hb><hb></hb><hb></hb><hb></hb><hb <="" td=""><td>name # returns text name_element # element</td><td><ul><li>class</li><li>:id</li><li>:index</li><li>:name</li><li>:text</li><li>:xpath</li></ul></td></hb></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h6></h4></h4></h5></h4></h4></h3></h2></h1>	name # returns text name_element # element	<ul><li>class</li><li>:id</li><li>:index</li><li>:name</li><li>:text</li><li>:xpath</li></ul>

Element method	HTML Element	Generated methods	How to identify an element
hidden_field(:name, :id => 'hfid')	<input type="hidden"/>	name # returns value name_element # element	<ul> <li>:class</li> <li>:css</li> <li>:id</li> <li>:index</li> <li>:name</li> <li>:text</li> <li>:value</li> <li>:xpath</li> </ul>
<pre>image(:name, :id =&gt; 'imgname')</pre>	<img/>	name_element # element	<ul> <li>:alt</li> <li>:class</li> <li>:id</li> <li>:index</li> <li>:name</li> <li>:src</li> <li>:xpath</li> </ul>
link(:name, :text => 'linktext')	<a></a>	name # clicks link name_element # element	<ul> <li>:class</li> <li>:href</li> <li>:id</li> <li>:index</li> <li>:link</li> <li>:link_text</li> <li>:name</li> <li>:text</li> <li>:xpath</li> </ul>

Element method	HTML Element	Generated methods	How to identify an element
list_item(:name, :id => 'liid')	< i>	name # returns text name_element # element	<ul><li>class</li><li>:id</li><li>:index</li><li>:name</li><li>:xpath</li></ul>
<pre>ordered_list(:name, :id =&gt; 'olid')</pre>	<0 >	name_element # element	<ul><li>:class</li><li>:id</li><li>:index</li><li>:name</li><li>:xpath</li></ul>
<pre>paragraph(:name, :id =&gt; 'paraid')</pre>		name # returns text name_element # element	<ul><li>:class</li><li>:id</li><li>:index</li><li>:name</li><li>:xpath</li></ul>
<pre>radio_button(:name, :id =&gt; 'rbid')</pre>	<input type="radio"/>	select_name # checks clear_name # clears name_selected? # status name_element # element	<ul><li>:class</li><li>:id</li><li>:index</li><li>:name</li><li>:xpath</li></ul>

Element method	HTML Element	Generated methods	How to identify an element
<pre>select_list(:name, :id =&gt; 'slid')</pre>	<select></select>	name # returns value name= # set the value name_element # element	<ul> <li>class</li> <li>:id</li> <li>:index</li> <li>:name</li> <li>:text (Watir only)</li> <li>:value (Watir only)</li> <li>:xpath</li> </ul>
<pre>span(:name, :id =&gt; 'spanid')</pre>	<span></span>	name # returns text name_element # element	<ul><li>:class</li><li>:id</li><li>:index</li><li>:name</li><li>:xpath</li></ul>
table(:name, :id => 'table_id')		name_element # element	<ul><li>:class</li><li>:id</li><li>:index</li><li>:name</li><li>:xpath</li></ul>
text_area(:name, :id => 'area_id')	<textarea>&lt;/td&gt;&lt;td&gt;name # returns value&lt;br&gt;name= # set the value&lt;br&gt;name_element # element&lt;/td&gt;&lt;td&gt;&lt;ul&gt;&lt;li&gt;:class&lt;/li&gt;&lt;li&gt;:css&lt;/li&gt;&lt;li&gt;:id&lt;/li&gt;&lt;li&gt;:index&lt;/li&gt;&lt;li&gt;:name&lt;/li&gt;&lt;li&gt;:xpath&lt;/li&gt;&lt;/ul&gt;&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</textarea>		

Element method	HTML Element	Generated methods	How to identify an element
text_field(:name, :id => 'field_id')	<input type="text"/> <input type="password"/>	name # returns value name= # set the value name_element # element	<ul> <li>:class</li> <li>:css</li> <li>:id</li> <li>:index</li> <li>:name</li> <li>:text (Watir only)</li> <li>:title (Watir only)</li> <li>:value (Watir only)</li> <li>:xpath</li> </ul>
<pre>unordered_list(:name, :id =&gt; 'ulid')</pre>	<ul><li><ul></ul></li></ul>	name_element # element	<ul><li>:class</li><li>:id</li><li>:index</li><li>:name</li><li>:xpath</li></ul>

### **Nested Elements**

It is possible to find elements nested within other elements. All elements have a complete set of \*\_element methods which look for the named element within its' own context. For example, if I want to find an unordered\_list nested within a div I can do the following:

```
div(:errors, :id => 'error_explanation')

def error_messages
  errors_element.unordered_list_element.text
end
```

This method is getting the div element and then calling the method on it to retrieve the unordered\_list.

### **Page Factory**

It is a good idea to keep you step definitions clean and not define instance variables for each page object. page-object has a module named PageFactory with two methods you can use to declare your intent to use a page-object:

```
def visit_page(page_class, &block)
def on page(page class, &block)
```

Here is how you can use these methods in your step definitions:

```
visit page RegistrationPage
```

This will cause the browser to open the page specified by the call to page url in your page object.

```
page url "http://mysite.com/registration"
```

If you wish to perform some activity on the page after navigating to it you can pass a block to the method.

```
visit_page RegistrationPage do |page|
page.register_user
page.do_something_else
end
```

If you are already on a page and wish to interact with it you can use the on\_page method.

```
on_page CheckoutPage do |page|
page.cancel_order
page.do_something_else
end
```

Both methods also support a shortened version to do only one item on the page. on page(CheckoutPage).cancel order