

Test Automation

Lecture 11 –

Getting Started with Selenium IDE



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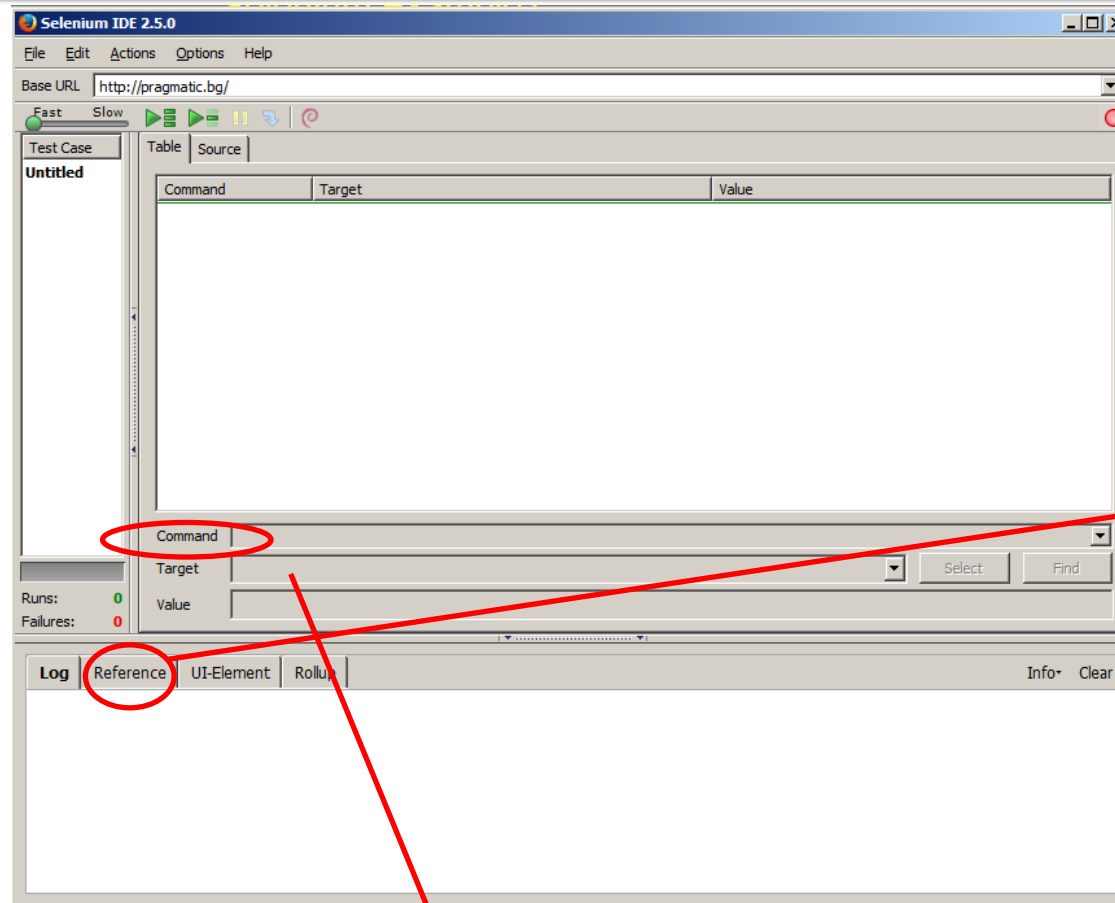


Summary - overall

- What is Selenium IDE
- Recording our first test
- Updating tests to work with AJAX sites
- Using variables in our tests
- Debugging tests
- Saving tests to be used later
- Creating and saving test suites
- Working with multiple windows
- Using one of the most famous extensions



Selenium IDE



подсказки за
Command

- <http://release.seleniumhq.org/selenium-core/1.0/reference.html>

от reference -->>> Selenium action - са всички
Command



Sizzle Locators

- Selenium IDE uses Sizzle locators -
<http://sizzlejs.com/> CSS locators
- How to inject and use the library in your code:
- <https://techblog.polteq.com/en/injecting-the-sizzle-css-selector-library/> how to use Sizzle locators in Java



Rules for automation

- Tests should always have a known starting point. In the context of Selenium, this could mean opening a certain page to start a workflow.
- Tests should not have to rely on any other tests to run.
If a test is going to add something, do not have a separate test to delete it. This is to ensure that if something goes wrong in one test, it will not mean you have a lot of unnecessary failures to check.
- Tests should only test one thing at a time. !!!
- Tests should clean up after themselves. !!!

Recording our first test



- Click on the red circle and open

<http://pragmatic.bg/automation/example1.html>



Assert / Verify (part 1)

- VerifyElementPresent
- assertElementPresent
- VerifyElementNotPresent
- assertElementNotPresent
- VerifyText
- assertText
- VerifyAttribute
- assertAttribute
- VerifyChecked
- assertChecked
- VerifyAlert
- assertAlert
- VerifyTitle
- assertTitle

```
open /chapter1
```

```
verifyTextPresent Assert that this text is on the page
```

```
verifyValue
```

```
storeValue
```

```
verifyText divontheleft Assert that this text is on the page
```

```
verifyElementPresent divontheleft
```

```
waitForElementPresent divontheleft
```

```
Show All Available Commands
```



Assert / Verify (part 2)

work-with-multiple-popup-windows.html - Selenium IDE 2.5.0

File Edit Actions Options Help

Base URL

Fast Slow

Test Case

work-with-m...

Command	Target	Value
open	/automation	
clickAndWait	link=Example 1	
click	id=multiplewindow	
waitForPopUp	popupwindow	30000
selectWindow	name=popupwindow	
assertText	id=popuptext	Text within the pop up window
selectWindow	null	
click	css=div.multiplewindow2	
waitForPopUp	popupwindow2	30000
selectWindow	name=popupwindow2	
verifyTextPresent	Text within the pop up windowww	
selectWindow	name=popupwindow	
click	id=dosepopup	
selectWindow	name=popupwindow2	
click	id=dosepopup	

Command

Target

Value

Runs: 1

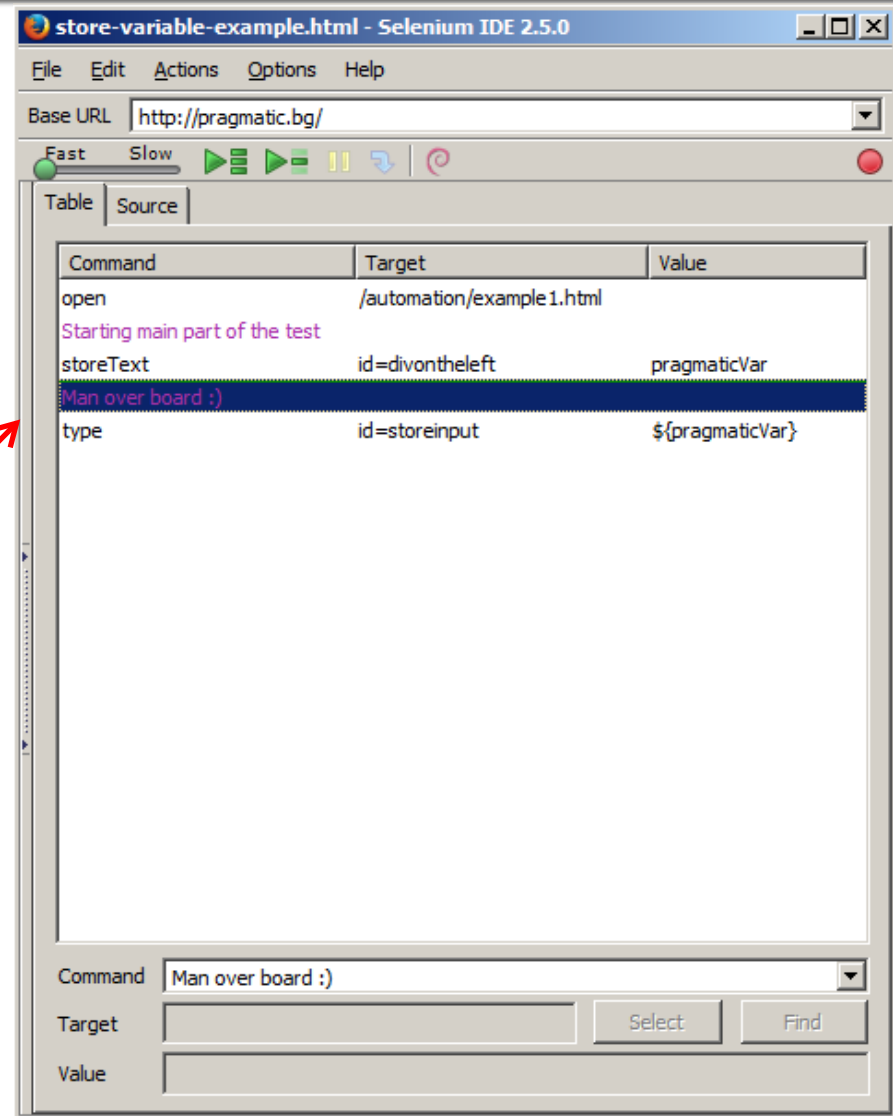
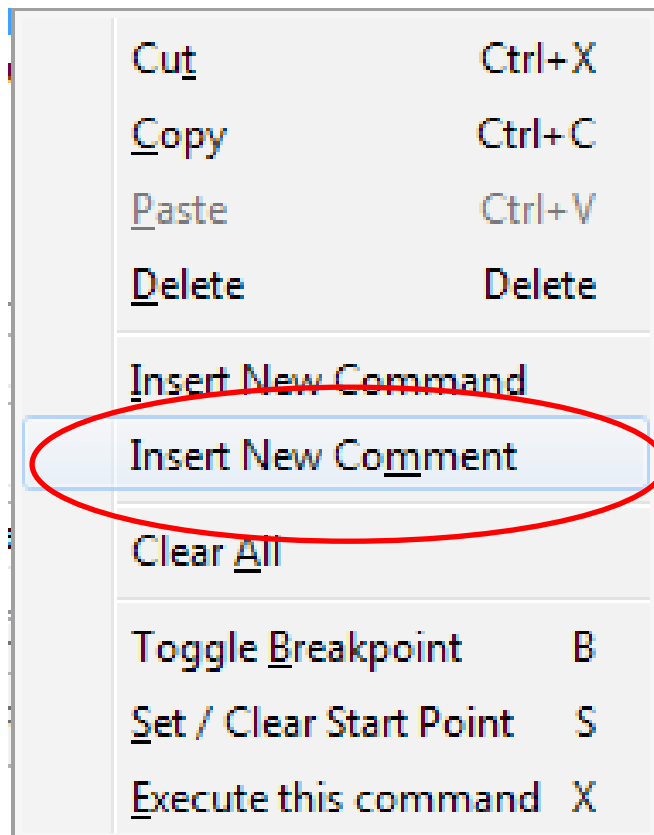
Failures: 1

ако
фейлне
след
assert
test-а не
продължа
ва

ако
фейлне
след
verify
теста
продълж
ава



Insert comments



Working with multiple windows (part 1)



- 1. Open up Selenium IDE in record mode and go to the **Example1** page on the site.
<http://pragmatic.bg/automation/example1.html>
- 2. Click on one of the elements on the page that has the text **Click this link to launch another window**. This will cause a small window to appear.
- 3. Verify the text in the popup by right-clicking and selecting VerifyText id=popup text within the popup window.
- 4. Once the window has loaded, click on the **Close the Window** text inside it.
- 5. Add a verify command for an element on the main page.

Working with multiple windows (part 2)



- `<div id='multiplewindow' class='multiplewindow' onClick='window.open("windowpopup.html","popupwindow","width=300,height=200");'>Click this link to launch another window</div>`
- **selectWindow(windowID)**
 - **title=My Special Window:** Finds the window using the text that appears in the title bar. Be careful; two windows can share the same title. If that happens, this locator will just pick one.
 - **name=myWindow:** Finds the window using its internal JavaScript "name" property. This is the second parameter "windowName" passed to the JavaScript method `window.open(url, windowName, windowFeatures, replaceFlag)` (which Selenium intercepts).
 - **var=variableName:** Some pop-up windows are unnamed (anonymous), but are associated with a JavaScript variable name in the current application window, e.g. `"window.foo = window.open(url);"`. In those cases, you can open the window using `"var=foo"`.

Working with multiple windows (part 3)



- Demonstration of a more complex example with 2 popup windows and a main window. Refer to the code examples in the lecture:

work-with-multiple-popup-windows.html

Selenium IDE tests against AJAX applications (part 1)

- 1. Start up Selenium IDE and make sure that the Record button is pressed.
- 2. Navigate to <http://pragmatic.bg/automation/example1.html>
- 3. Click on the text that says ***Click this link to load a page with AJAX.***
- 4. Verify the text that appears on your screen.
- Refer to the code examples in the lecture:
[example-WITHOUT-fix-for-the-ajax.html](#)
[example-WITH-fix-for-the-ajax.html](#)

Selenium IDE tests against AJAX applications (part 2)



- ~~W~~aitForAlertNotPresent
- ~~W~~aitForAlertPresent
- ~~W~~aitForElementPresent
- ~~W~~aitForElementNotPresent
- ~~W~~aitForTextPresent
- ~~W~~aitForTextNotPresent
- ~~W~~aitForPageToLoad
- ~~W~~aitForFrameToLoad
- and much more waitFor* in Selenium IDE

Storing information from the page in the test

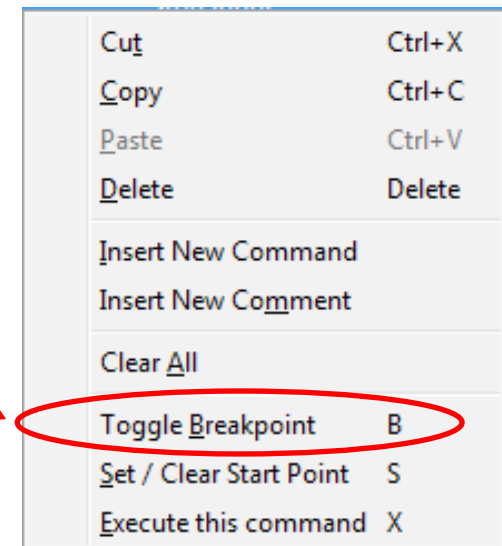


- Let's try to store something into some variables
- Using the saved vars is done the following way:
`storedVars['variableName']` **or** `${variableName}`
- Refer to the code examples in the lecture:
[store-variable-example.html](#)



Debugging tests

- Using the pause and next step buttons
- Using *echo* command, it's equivalent to *Console.log* in *JavaScript*. For example, *echo | \${variableName}*.
- Using breakpoints





Test Suites

- Creating new test suite
- Saving test suite
 - One thing to note is that saving a test suite does not save the test case. Make sure that you save the test case every time you make a change and not just the test suite.
- Play entire test suite



What you cannot record

- Silverlight and Flex/Flash applications
- HTML 5 - is not fully supported with Selenium IDE.
A good example of this is elements that have the *contentEditable=true* attribute.
- Selenium IDE cannot do file uploads.
-

Exporting Selenium IDE tests and results



- Exporting test cases
- Exporting test suites
- Exporting test case results...
- Exporting test suite results...
- <https://addons.mozilla.org/en-US/firefox/addon/test-results-selenium-ide/versions/>

goto, gotoIF, while loop in Selenium IDE (part 1)



- <https://github.com/darrenderidder/sideflow>

Selenium IDE 1.0.12 *

Base URL: <https://github.com/>

Fast Slow

Option --> Selenium Core extensions

Command	Target	Value
store	10	x
gotolabel	target1	
runScript	alert("This should not appear")	
label	target1	
store	14	y
gotoIf	\${y} > \${x}	target2
runScript	alert("This also should not appear");	
label	target2	
while	\${x} <= \${y}	
store	new Number(\${x} + 1)	x
endWhile		
runScript	alert("Finished with x="+\${x}+" and y="+\${y});	

Command:

Target: Find

Value:

Log	Reference	UI-Element	Rollup	Info	Clear
[info] Executing: endwhile					
[info] Executing: while \${x} <= \${y}					
[info] Executing: store new Number(\${x} + 1) x					
[info] Executing: endWhile					
[info] Executing: while \${x} <= \${y}					
[info] Executing: store new Number(\${x} + 1) x					
[info] Executing: endWhile					
[info] Executing: while \${x} <= \${y}					
[info] Executing: runScript alert("Finished with x="+\${x}+" and y="+\${y});					

goto, gotoF, while loop in Selenium IDE (part 2)



- **label | mylabel** - creates a label called "mylabel" (a goto target)
- **goto | mylabel** - goto "mylabel"
- **gotoLabel | mylabel** - synonym for goto
- **gotof | expression** - jump to specified label if expression is true
- **while | expression** - loop while expression is true
- **endWhile** - indicate the end of a while loop
- **push | value | arrayName** - push value onto an array, creating array if necessary

goto, gotoIF, while loop in Selenium IDE (part 3)



- Lets have a look on the following examples:

[goto-gotoIF-whileloop-example.html](#)

[foothill-college-example-data-driven-data.html](#)

Useful Selenium IDE plugins (part 1)



- Favorites
 - <https://addons.mozilla.org/en-US/firefox/addon/favorites-selenium-ide/versions/>
- File Logging
 - <https://addons.mozilla.org/en-US/firefox/addon/file-logging-selenium-ide/versions/>
- Highlight Elements
 - <https://addons.mozilla.org/en-US/firefox/addon/highlight-elements-selenium-id/versions/>
- Log Search Bar
 - <https://addons.mozilla.org/en-US/firefox/addon/log-search-bar-selenium-ide/versions/>
- Page Coverage
 - <https://addons.mozilla.org/en-US/firefox/addon/page-coverage-selenium-ide/versions/>
- Power Debugger
 - <https://addons.mozilla.org/en-US/firefox/addon/power-debugger-selenium-ide/versions/>

Useful Selenium IDE plugins (part 2)



- Screenshot on Fail
 - <https://addons.mozilla.org/en-US/firefox/addon/screenshot-on-fail-selenium/versions/>
- Selenium Expert
 - <https://addons.mozilla.org/en-US/firefox/addon/selenium-expert-selenium-ide/versions/>
- Stored Variables Viewer
 - <https://addons.mozilla.org/en-US/firefox/addon/stored-variables-viewer-seleni/versions/>
- Test Results
 - <https://addons.mozilla.org/en-US/firefox/addon/test-results-selenium-ide/versions/>
- Test Suite Batch Converter
 - <https://addons.mozilla.org/en-US/firefox/addon/test-suite-batch-converter-sel/versions/>



How to install Maven

- We will use Maven in the next lessons to build our dependencies and in order to achieve that we need to first install it on our computers. Learn how this is done(use one of the links):
- <https://www.youtube.com/watch?v=Jtj-0yhox5s>
- <https://www.youtube.com/watch?v=NZbQtFr5VG8>
- <https://www.youtube.com/watch?v=p6LAsta-iDw>
- <https://www.youtube.com/watch?v=Nn8cmBVdYDs>

Questions?



Questions?