Test Automation Lecture 11 –

Getting Started with Selenium IDE

IT Learning &
Outsourcing Center

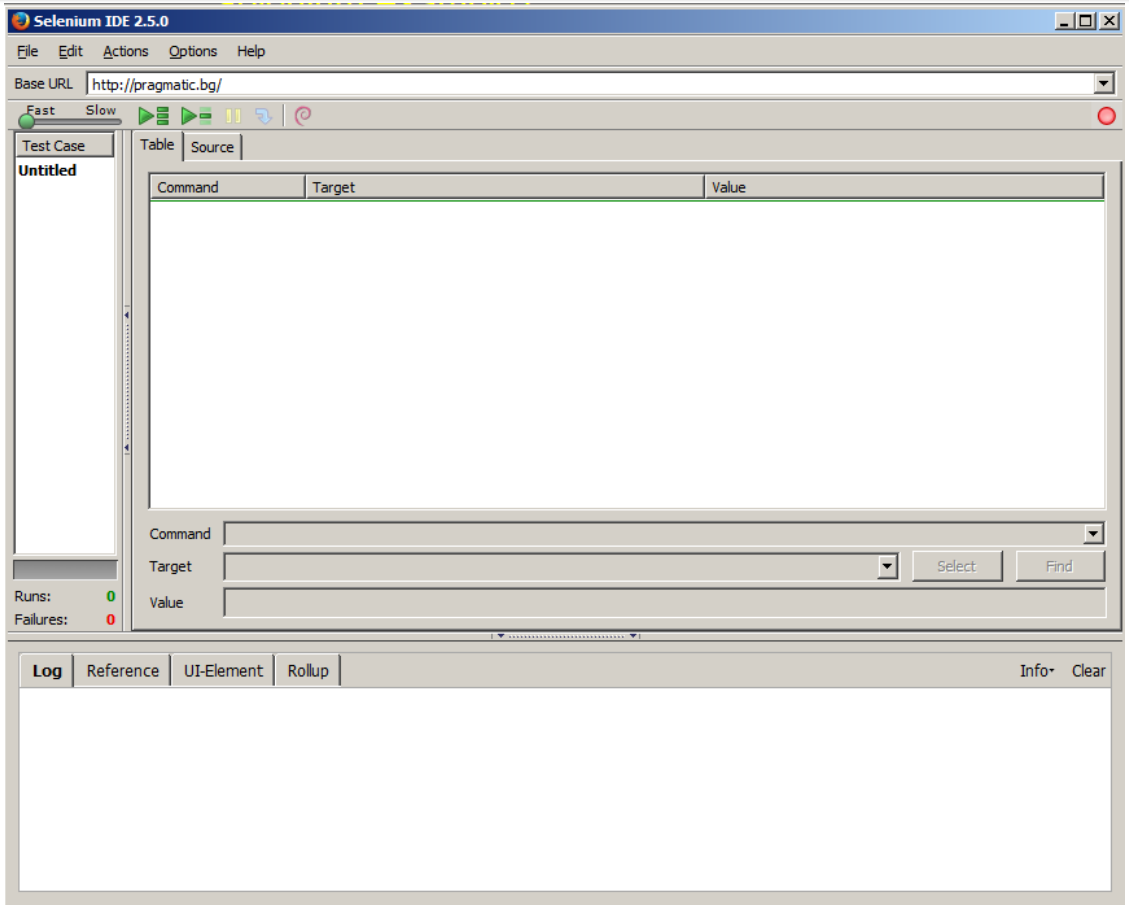
Lector: Milen Strahinski
Skype: strahinski
E-mail: milen.strahinski@pragmatic.bg
Facebook: http://www.facebook.com/LamerMan
LinkedIn: http://www.linkedin.com/pub/milen-strahinski/a/553/615

www.pragmatic.bg

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



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

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.

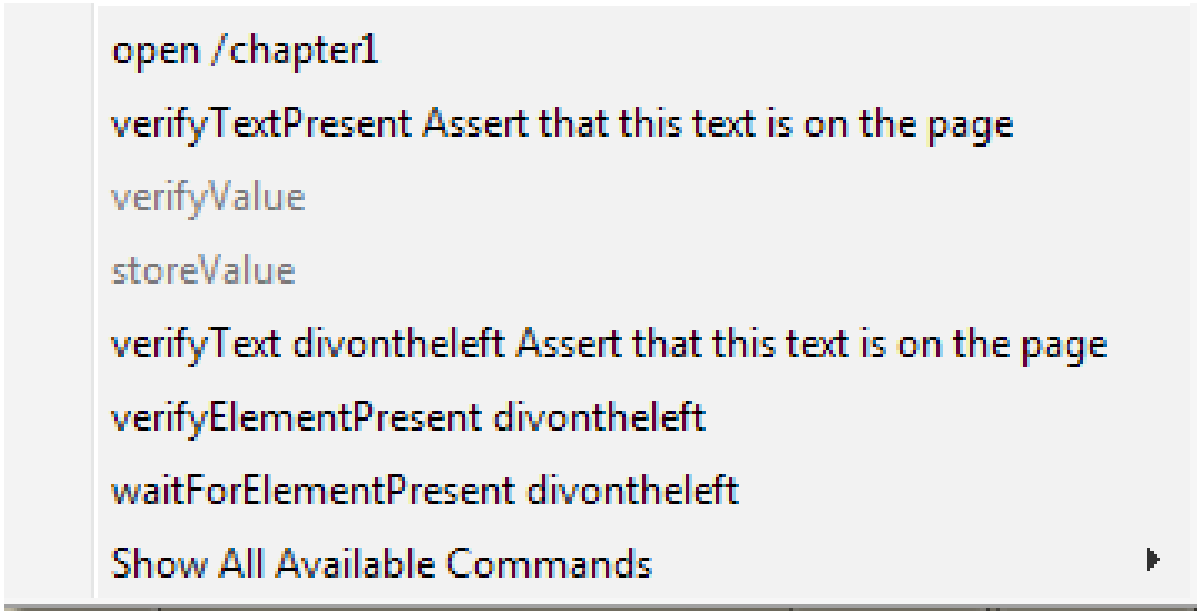
Recording our first test

- Click on the red circle and open

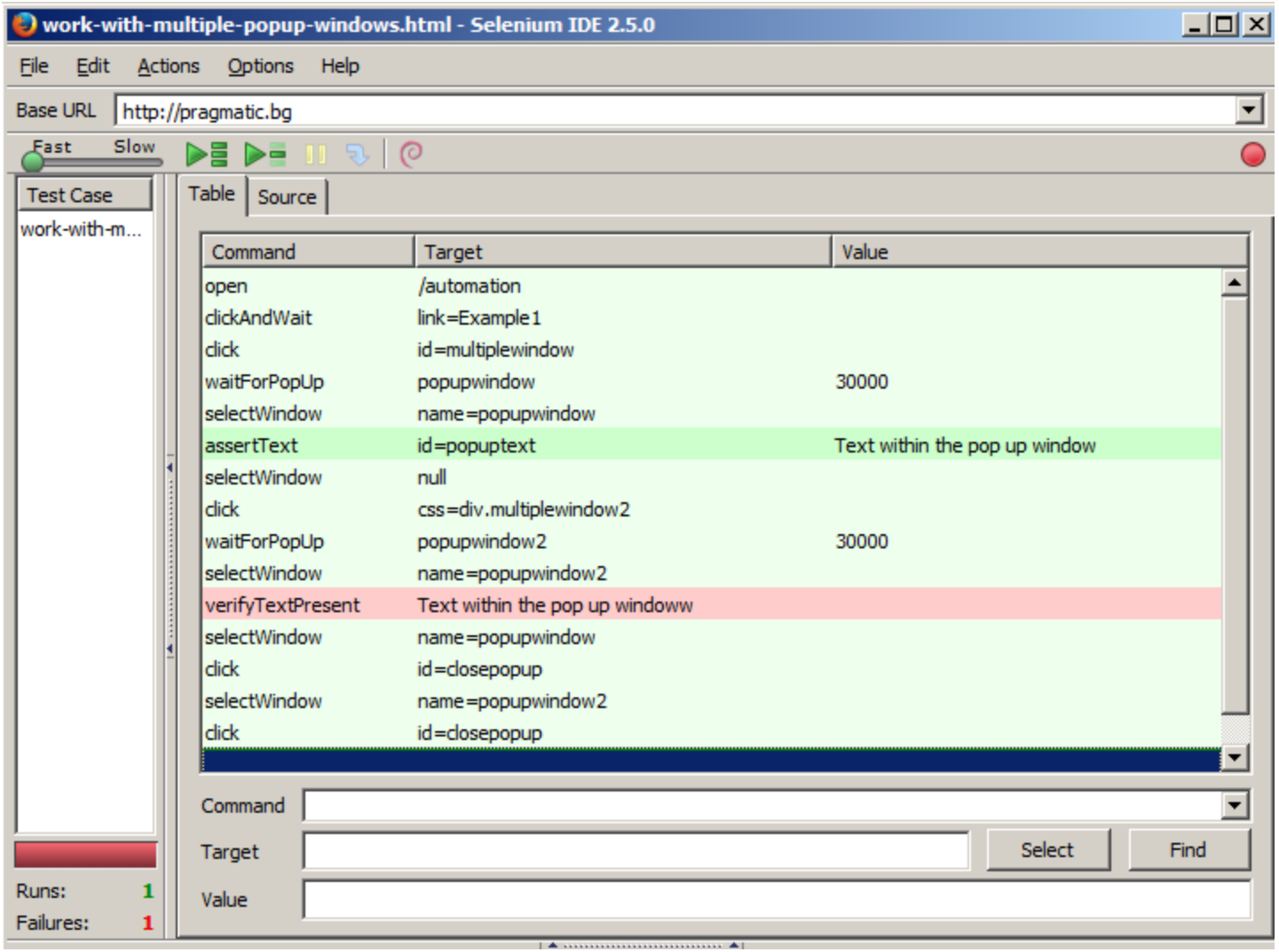
http://pragmatic.bg/automation/example1.html

Assert / Verify (part 1)

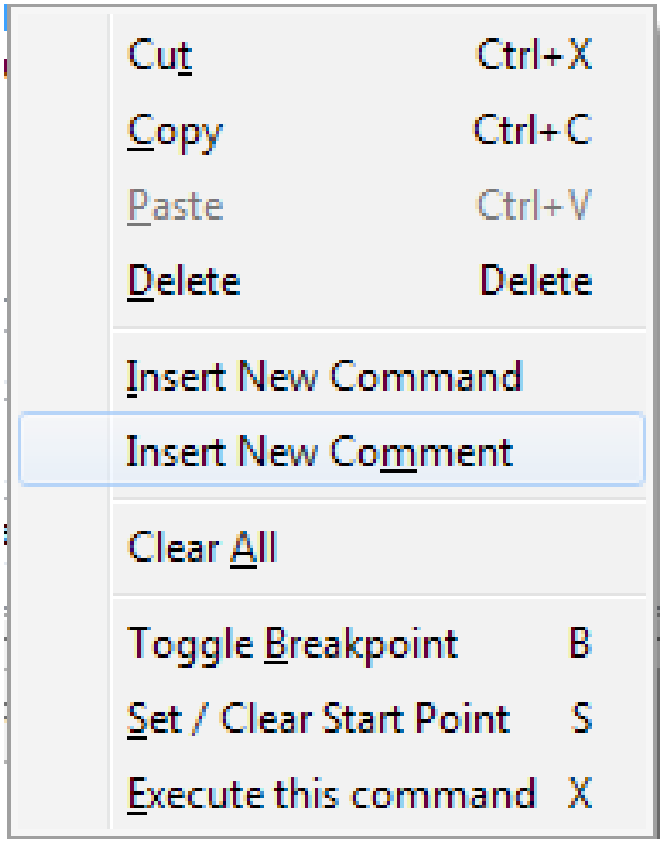
- VerifyElementPresent
- AssertElementPresent
- VerifyElementNotPresent
- AssertElementNotPresent
- VerifyText
- AssertText
- VerifyAttribute
- AssertAttribute
- VerifyChecked
- AssertChecked
- VerifyAlert
- AssertAlert
- VerifyTitle
- AssertTitle

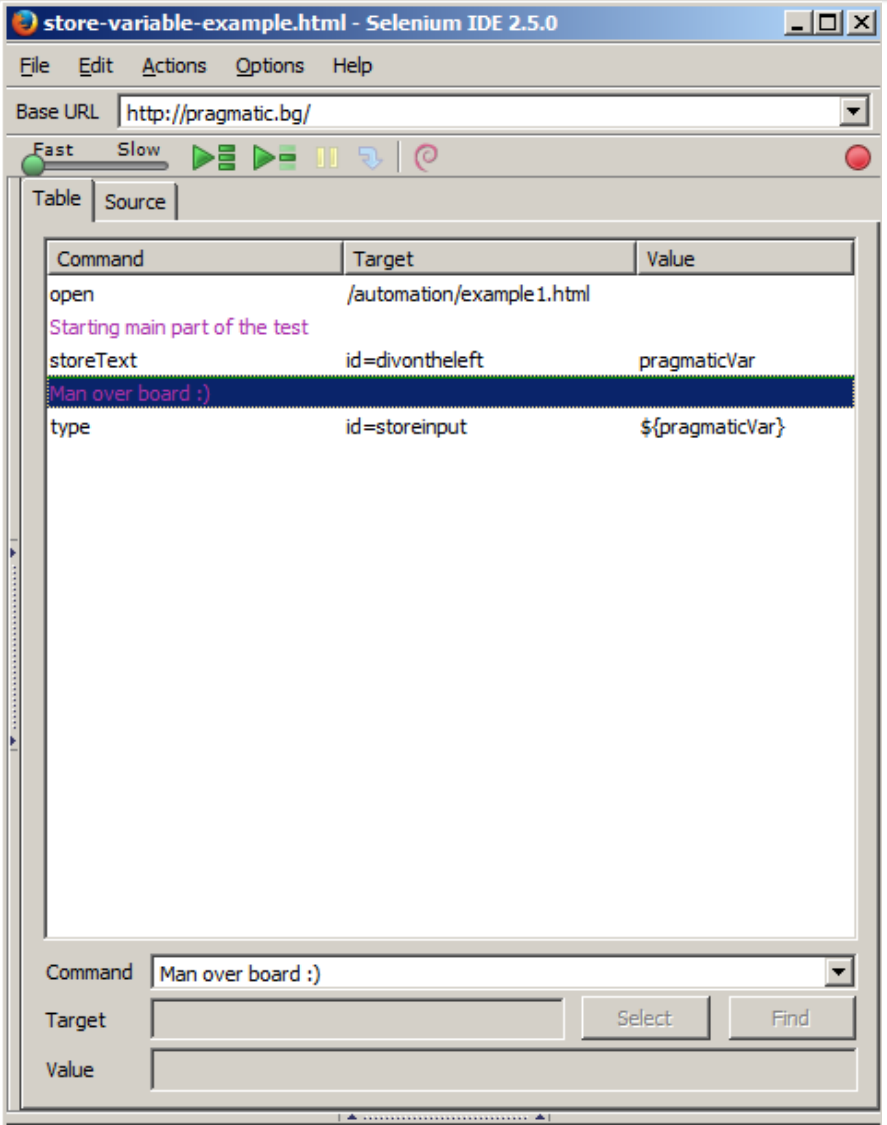


Assert / Verify (part 2)



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)

- Click this link to launch another window

- **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)

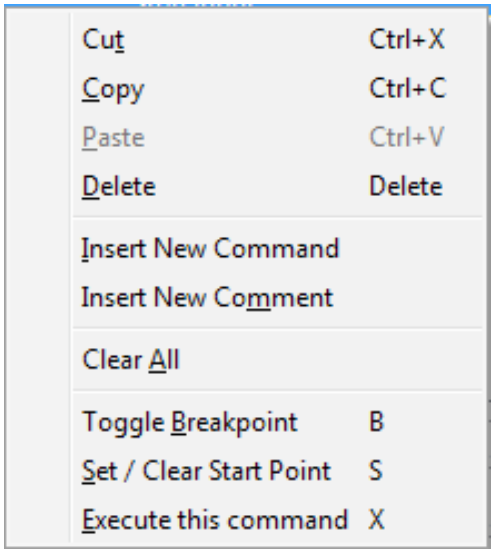
- waitForAlertNotPresent
- waitForAlertPresent
- waitForElementPresent
- waitForElementNotPresent
- waitForTextPresent
- waitForTextNotPresent
- waitForPageToLoad
- waitForFrameToLoad
- ….. and much more waitFor* in Selenium IDE

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

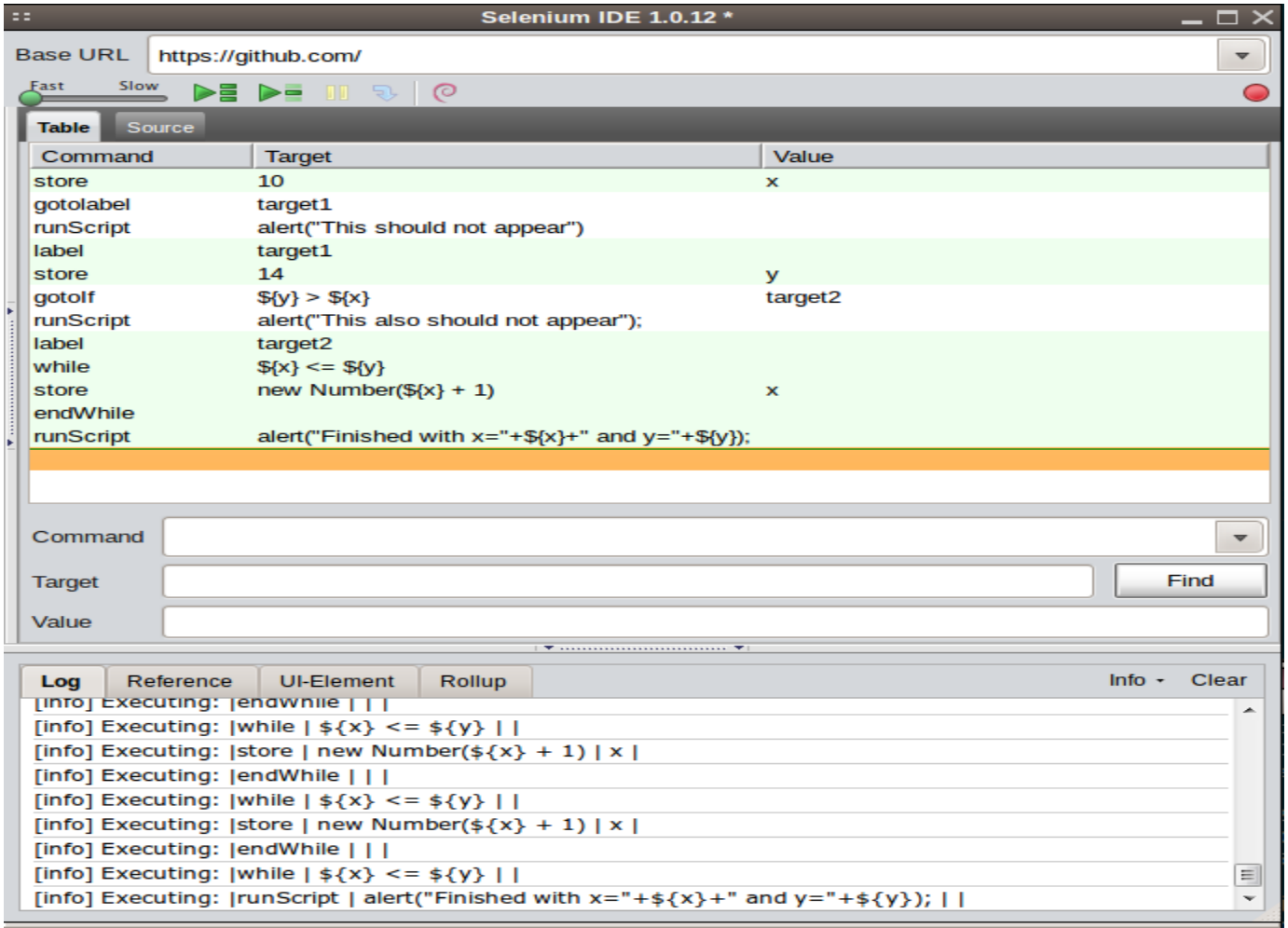
- Silverlight and Flex/Flash applications
- HTML 5 - is not fully supported with Selenium IDE. A good example of this is elements that have the *contentEditable=true* attribute.
- Selenium IDE cannot do file uploads.

Exporting Selenium IDE tests and results

- Exporting test cases
- Exporting test suites
- Exporting test case results…
- Exporting test suite results…

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

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



goto, gotoIF, 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
- gotoIf | 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/

Practice & Questions?

Practice exercises and Questions?