11. Selenium IDE

Automate the world



Astea Solutions QA Team

Questions

- What is Selenium
- What is Selenium Web Driver?
- Other automation tools?
- What is the most important reason to make automated tests?
- When is the appropriate time for automation?
- When we should do manual testing?



What is Selenium IDE



What is Selenium IDE?

- Integrated Development Environment
- Firefox Plugin
- The name comes from the mineral
- First version was over 10 years ago
- Runs directly in browser



What is Selenium IDE?(2)

- Records user actions as they are performed
- Exports them as a script in a chosen programming language
- The script can be later executed

Selenium can be used for:

- Acceptance testing
- Regression testing
- Smoke testing
- Integration testing



Building test cases

There are three primary methods for developing test cases:

- Recording
- Adding Verifications and Asserts
- Editing commands



Building test cases(2)

Recording test cases:

- Useful for beginner users
- Selenium-IDE automatically inserts commands* into your test case based on your actions

*Selenium commands, often called Selenese, are the set of commands that run your tests



Building test cases(3)

- Selenium commands are simple, they consist of the command and two parameters
- The parameters are not always required it depends on the command

Command	Target	Value
goBackandWait		
verifyTextPresent		FMI
type	id=facultynumber	123456



Building test cases(4)

Parameters are different, however they are typically:

- A locator for identifying a UI element in a page
- A text pattern for verifying or asserting expected page content
- A text pattern or a selenium variable for entering text in an input field or for selecting an option from an option list



Selenium commands

Selenium commands are three types:

- Actions
- Accessors
- Assertions



Selenium commands (2)

- Actions are commands that generally manipulate the state of the application.
- They do things like: open this page or click this button etc.
- If an Action fails the execution of the test is stopped



Selenium commands (3)

Accessors examine the state of the application and store the results in variables (e.g. "storeTitle")

They are also used to automatically generate Assertions

Command	Target	Value
store	Damyan	teacher

Accessing the stored value

 Done by enclosing the variable in curly brackets ({}) and preceded by a dollar sign - \${ ... }

Command	Target	Value
type	id=boss	\${teacher}



Selenium commands (4)

- Assertions are like Accessors, but they verify that the state of the application conforms to what is expected
- E.g., "make sure the page title is X" (assertTitle) and "verify that this checkbox is checked" (verifyText)
- With wrong assertion the test will stop and with wrong verification the test will continue anyway

Command	Target	Value
verifyTextPresent		Damyan



Demo...