Table of Contents

Files	3
C:\Users\lauri\OneDrive\Työpöytä\Learn_RF	3
Links	3
Unique Locators Section 4	3
CSS & XPath Checker – Chrome	3
Selenium IDE – Firefox	3
Attributes:	3
Use of Plugins:	3
CSS locators	4
With classes .class and with attributes type	5
Xpath	5
Xpath with *	6
Use Xpath with innertext	6
Use Xpath with partial innertext	6
Use Xpath with partial attribute value	6
Locate element through its parent	6
Opposite way – from Child to Parent	6
Locate element through its siblings	7
Locate element through parent child siblings	7
FOR loop in with ROBOT	7
Run IF	7
Set Selenium Speed / sleep	7
Set Selenium Implicit Wait	7
Capture Snapshot	8
Scroll Down – javascript	8
Mouse with RF	8
Keyboard Operations	8
Wait commands with RF	8
Section 14	9
String Handling	9
Fetch Substring	9
Common String Functions	9
List	9

Tuple	9
Dictionary (key, value)	10
Functions	10
Section 16: User Defined Keys Using Python Scripting	10
Section17: Classes in Python	10
Constructors	10
Why and where we use constructors	10
Modules	10
Create Project Structure	11
Difference between import and from-import	11
Exception Handling in Python	11
Section18: Read Excel Data (OpenPyXL -package)	11
Section19: Work with JSON Data	11
Json Path Basics	11
Work with JSON	11
Fetch and validate JSON response	12
Section20: Advance Robot Skills	12
Element Locators	12
BDD format test cases (Gergin)	12
Record Test Cases	12
Section21 Data Driven Testing	12
Section22 Code Management using GitHub	12
Git	12
Configure Git	13
Undo file from Staged to Untrack	13
Work with Remote Repo	13

Files

C:\Users\lauri\OneDrive\Työpöytä\Learn_RF

Links

Unique Locators Section 4

CSS & XPath Checker – Chrome Selenium IDE – Firefox

- https://thetestingworld.com/testings/

Attributes:

<input class="field" name="fld_username" required="" type="text" placeholder="myusername" value="" >Hello</input>

Tags, Attributes, Inner Text

Use of Plugins:

- https://www.facebook.com/reg/
- https://fi-fi.facebook.com/

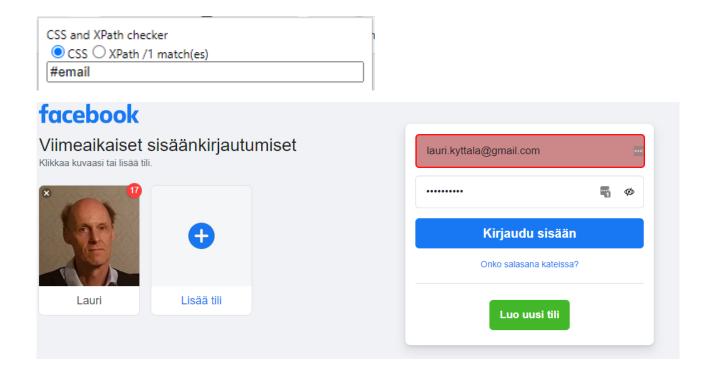
name=email, pass

id=email,

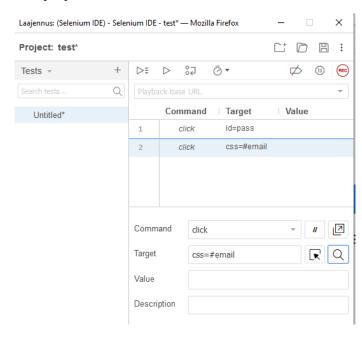
link=Onko sinulla jo tili?

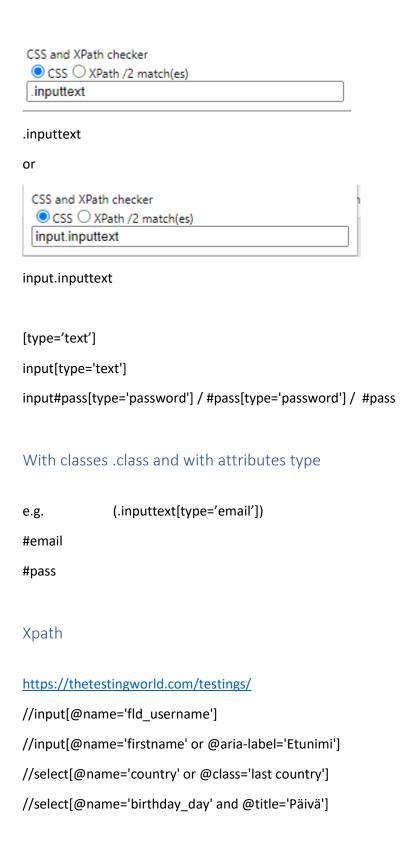
CSS locators

https://fi-fi.facebook.com/



with firefox:





```
Xpath with *
//*[@*='birthday_day' and @*='Päivä']
//input[@type='text'] or //*[@type='text']
Use Xpath with innertext
https://www.facebook.com/reg/
//div[text()='Luo uusi käyttäjätili']
//a[@aria-label='Onko sinulla jo tili?']
Use Xpath with partial innertext
https://www.facebook.com/reg/
//div[contains(text(),'uusi käyttäjätili')]
Use Xpath with partial attribute value
https://www.facebook.com/reg/
//input[contains(@type,'pass')]
Locate element through its parent
https://www.amazon.com/
//table[@class='navFooterMoreOnAmazon']/tbody/tr[1]/td[1]
https://thetestingworld.com/testings/
//ul[@class='tabs blue']/li[2]/label
```

Opposite way – from Child to Parent

- didn't find example

//input[@type='email']/parent::td/parent::tr/parent::tbody/parent::table

Locate element through its siblings

```
//input[@id='tab2']/following-sibling::label
(following or preceeding)
```

Locate element through parent | child | siblings

```
//input[@id='email']/parent::td/following-sibling::td[1]/input
//input[@id='pass']/parent::td/preceding-sibling::td/input
```

FOR loop in with ROBOT

```
FOR \{i\} IN RANGE 1 10 log to console \{i\} END
```

```
@{List1} create list Hello 22 23.23 World! Audio
FOR ${i} IN ${List1}
  log to console ${i}
END
```

Run IF

```
${var}= set variable NO
run keyword if '${var}'=='YES' log to console Value found
run keyword if '${var}'=='NO' log to console Value Not found
```

Set Selenium Speed / sleep

```
Set Selenium Speed 2s
```

sleep 5s

Set Selenium Implicit Wait

```
set selenium implicit wait 10s
```

Capture Snapshot

capture page screenshot ./Snapshots/TC1.png

Scroll Down – javascript

execute javascript window.scrollTo(0,1000)

Mouse with RF

```
# open context menu xpath://span[contains(text(),'VIDEOS')]
# double click element xpath://a[text()='Login']
# mouse down xpath://a[text()='Login']
# mouse up xpath://a[text()='Login']
mouse over xpath://span[contains(text(),'VIDEOS')]
```

Keyboard Operations

```
press key name:username lasse
press key xpath://button[@type='submit'] \\13
# ascii value ofenter key
```

Wait commands with RF

wait until page contains

wait until page contains element

wait until element contains

wait until element visible

wait until element enable

Section 14

- For loop with final range
- For loop with starting and final range
- For loop with increment
- For loop with decrement
- For loop with list
- Break Statement
- Continue Statement

String Handling

- Concatenation
- + and *

Fetch Substring

- Fetch substring by given index
- Start and end index both
- Only start index
- Only end index

Common String Functions

- Len
- Capitalize
- Upper
- Lower
- Lstrip
- Rstrip
- Strip
- Replace
- Find
- Split

List

- Len
- Cmp
- Concatenate

Tuple

- Cannot increase, or change values

Dictionary (key, value)

- Key and value pair
- Key must be unique

Functions

```
def takeInput3(a=100, b=10, e=7):
    c=a-b
    print("Subtraction of values: " + str(c))

takeInput3(15)
```

Section 16: User Defined Keys Using Python Scripting

- Without argument
- With argument but no return value
- Argument and return value

Section 17: Classes in Python

Constructors

- Special type of method
- Created with __init()__, first argument is always self
- Automatically called when object is created
- Can take arguments
- Can't return any value
- Constructors are used for initialization

Why and where we use constructors

- e.g. database usage (opening connection only once)

Modules

- can be define as python files
- can have executable code, module, functions, classes
- classes can also have functions, properties (variables) and constructors

Create Project Structure

- with modules
- with directories
- classes and executable code

Difference between import and from-import

- use import statement
- use from module import class

Exception Handling in Python

- try, except, finally

Section 18: Read Excel Data (OpenPyXL -package)

- pip install openpyxl

Section 19: Work with JSON Data

- JavaScript Object Notation a lightweight data interchange format
- JSON is a syntax for storing and exchanging data
- Data is placed in JSON in the format of Key and Value pair
- Value could be an array
- Value can have further key-value (Call it object)

```
- {
- "Name":"Testing world",
- "Age": 23,
- "PhoneNumber": "+358 644 231"
- }
```

Json Path Basics

- How to use simple Json path (https://jsonpath.com/) e.g. \$.Address.Number.Mobile
- How to write complex Json path with array
- How to write complex Json path with Object

Work with JSON

- Parse dictionary to JSON
- Parse JSON to dictionary

Fetch and validate JSON response

- Send request to API
- Parse response to JSON
- Validate by JSON Path
- https://reqres.in/api/users?page=2

Section 20: Advance Robot Skills

Element Locators

- Using element locators (in separate file)
- TC_002_Start_Close_Browser.robot is working

BDD format test cases (Gergin)

- Example

```
    *** Test Cases ***
    Test Case in BDD Format
    Given Start Browser and Maximize
    When Create Folder at Runtime robot12 test
    Then Concatenate Username and Password lasse 123456
```

Record Test Cases

- Install robotcorder to chrome
- Might be the case you have to update locators
- Save the recorded file, and sections and libraries are added copy saves file to new robot test file
- Scan scans whole page
- with settings (add sleep, check page contains)

Section 21 Data Driven Testing

- https://thetestingworld.com/testings/
- Read data from excel (openpyxml)
- Create user defined keywords
- Run loop and read data from keywords
- TC_003.robot, reading user credentials from excel sheet with **FOR loop** don't work
 - o DeniedByUserWill not be able to change radio power.

Section 22 Code Management using GitHub

- Setup Jenkins and Plugins
- Configure Jenkins
- Create a job on Jenkins
- Execute Job in Jenkins
- Integrate Allure plugin to generate reports

Git

- Track changes

- Manage source
- Versioning, branching
- Compare code
- Merge branch
- Compare branches

Configure Git

- Git config –global user.name "lasse"
- Git config –global user.email lasse@gmail.com
- Git config user.email
- git config –list
- untracked, staged, tracked

Undo file from Staged to Untrack

- git reset HEAD <file_name>
- git log (parameters)
- 10 examples git log: https://www.thegeekstuff.com/2014/04/git-log/
- Git diff <file_name>
- Discard changes done in a file: Git checkout -- <file_name>

Work with Remote Repo

- Git remote -v
- Git remote add origin "url of remote repo"
- Git remote -v (shows added remote repo)
- Git push origin master