Table of Contents

Files
C:\Users\lauri\OneDrive\Työpöytä\Learn_RF3
Links
Unique Locators Section 4
CSS & XPath Checker – Chrome
Selenium IDE – Firefox
Attributes:
Use of Plugins:
CSS locators4
With classes .class and with attributes type5
Xpath 5
Xpath with *6
Use Xpath with innertext6
Use Xpath with partial innertext
Use Xpath with partial attribute value6
Locate element through its parent6
Opposite way – from Child to Parent
Locate element through its siblings
Locate element through parent child siblings
FOR loop in with ROBOT
Run IF
Set Selenium Speed / sleep
Set Selenium Implicit Wait
Capture Snapshot
Scroll Down – javascript
Mouse with RF
Keyboard Operations 8
Wait commands with RF
Section 14
String Handling9
Fetch Substring9
Common String Functions9
List9

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	
Difference between import and from-import	
Exception Handling in Python	
Section18: Read Excel Data (OpenPyXL -package)	
Section19: Work with JSON Data	
Json Path Basics	
Work with JSON	
Fetch and validate JSON response	
Section20: Advance Robot Skills	
Section21 Data Driven Testing	
Section22 Code Management using GitHub	12

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/

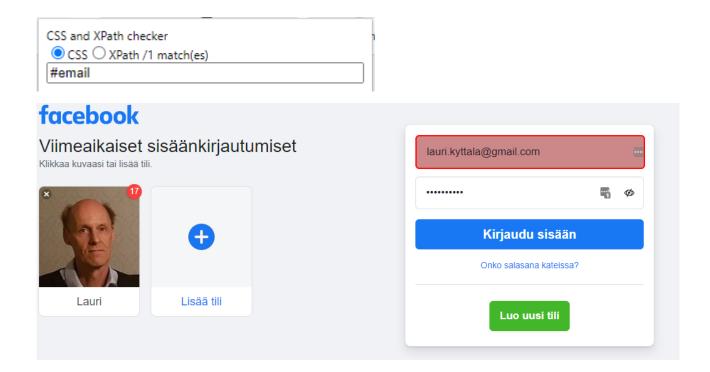
name=email, pass

id=email,

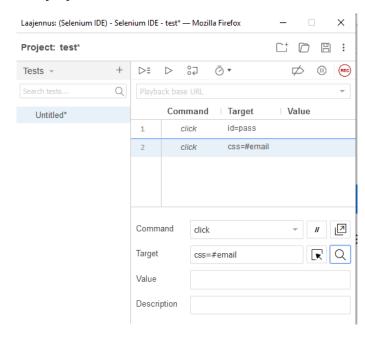
link=Onko sinulla jo tili?

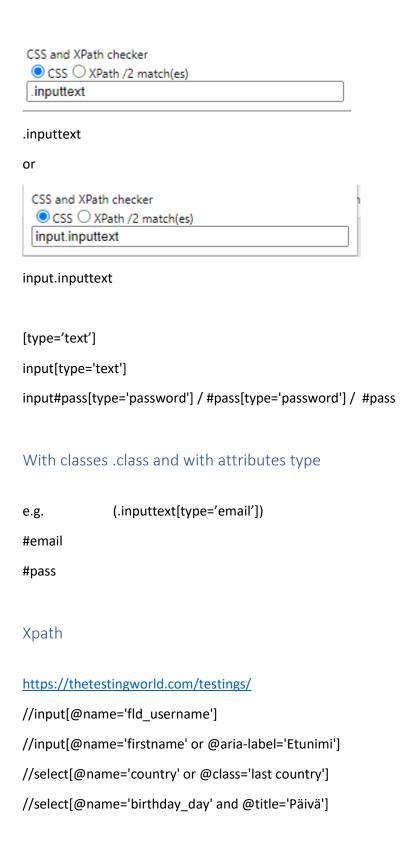
CSS locators

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

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
 - DeniedByUserWill not be able to change radio power.

Section22 Code Management using GitHub