



```
*** Settings ***
```

```
Documentation      Robot Framework / Playwright Workshop
```

```
Resource          Rein van der Vegt
```

```
Resource          Tim Lolkema
```

```
*** Variables ***
```

```
${GITHUB}         https://github.com/tlolkema/robot-playwright-workshop
```



*** Keywords ***

Robot Framework Presentation

Introduction

Robot Framework basics 1. Settings 2. Variables 3. Test Cases
... 4. Keywords 5. Libraries 6. Setup & Teardown

Running Tests

Browser Library

Extending Browser Library

Custom Python Library & JSON schema

Robot Framework Workshop

Exercises



```
+-----+
|           Robot Framework (python)           |
+-----+
+-----+
|           Test Cases  (.robot files)          |
+-----+
+-----+
|           Keywords & Variables  (.resource files)  |
+-----+
+-----+
|           Libraries (.py files)               |
| +-----+ +-----+ +-----+ +-----+ |
| | Selenium | REST | Browser | Custom Python | |
| +-----+ +-----+ +-----+ +-----+ |
+-----+
\
 \
  \
   \
```



```
*** Settings ***
```

```
*** Variables ***
```

```
*** Keywords ***
```

```
*** Test Cases ***
```



*** Settings ***

Documentation Under Settings you can:

... - Import Libraries

... - Import Resource Files

... - Configure Setup & Teardown Keywords

Library Browser

Resource resources.resource

Test Setup Do Something

Test Teardown Do Something Else



*** Variables ***

`${HOST}` localhost:7272

`${LOGIN URL}` http://`${HOST}`/

`${WELCOME URL}` http://`${HOST}`/welcome.html

`${BROWSER}` Firefox



```
*** Test Cases ***
```

```
Go To Homepage And Login  #<-- Test Case
```

```
    Go To Homepage          #<-- Keyword
```

```
    Login With Admin        #<-- Keyword
```

```
    Homepage Should Be Loaded  #<-- Keyword
```



*** Variables ***

`${LOGIN_URL}` `http://localhost:5000`

*** Keywords ***

Go To Homepage

Open Browser

Navigate to `${LOGIN_URL}`



```
*** Keywords ***
```

```
Documentation    What can keywords do:  
...             - Executing low-level keywords  
...             - Receive and return variables  
...             - BuiltIn keywords  
...             - Install libraries for more keywords  
...             - Making custom keywords
```



```
*** Keywords ***
```

```
Keyword Which Sets Test Variable
```

```
    ${RESPONSE} =      Keyword With Return Value      Workshop  
    Set Test Variable    ${RESPONSE}
```

```
Keyword With Return Value
```

```
    [Arguments]    ${ARG1}  
    Log To Console    ${ARG1}  
    [Return]        ${ARG1}
```

```
Validation Keyword
```

```
    Should Be Equal    ${RESPONSE}    Workshop
```



*** Test Cases ***

Testcase Gherkin Syntax

Given Step 1 ### Starting situation

When Step 2 ### Actions

Then Step 3 ### Validations



```
*** Settings ***
```

```
Resource    Variables.resource
```

```
Resource    Keywords.resource
```

```
*** Test Cases ***
```

```
Test Case
```

```
Keyword From Resource File
```

```
Log         ${VAR_FROM_RESOURCE}
```



```
robot@workshop:~$ robot Testscript.robot
```

```
robot@workshop:~$ robot Tests
```



```
*** Settings ***
```

```
Test Setup      KeywordBeforeEveryTest
Test Teardown   KeywordAfterEveryTest
Suite Setup     KeywordBeforeEverySuite
Suite Teardown  KeywordAfterEverySuite
```



*** Settings ***

Documentation Browser Library (Playwright) Features

- ... - No browser driver needed
- ... - Standard headless
- ... - Browser support (Chromium + Webkit + Firefox)
- ... - Stub or force error responses
- ... - Auto-waiting
- ... - robotframework-browser.org



```
async function returnPageTitle(page, args) {  
  url = args[0]  
  await page.goto(url);  
  return await page.title();  
}
```

```
exports.__esModule = true;  
exports.returnPageTitle = returnPageTitle;
```




*** Settings ***

Library Browser jsexextension=\${CURDIR}/module.js

*** Test Cases ***

Example Test Case

 New Page

 \${title} returnPageTitle https://playwright.dev

 Should be equal \${title} Playwright



```
import requests
```

```
class ExampleLibrary:
```

```
    def example_keyword(self, arg):
```

```
        url = 'localhost:9999/workshop'
```

```
        params = {
```

```
            'param': arg,
```

```
        }
```

```
        response = requests.get(url=url, params=params)
```

```
        return json.loads(response.text)
```



```
*** Settings ***
```

```
Library    ExampleLibrary.py    # Import Your Own Keywords
```

```
*** Keywords ***
```

```
Easily Use Your Own Keywords
```

```
    ${RESPONSE}    Example Keyword    Argument
```



*** Settings ***

Documentation JSON Schema Validation

... jsonschema.net



```
{  
  "age": 2,  
  "name": "playwright"  
}
```



```
{  
  "type": "object",  
  "required": [ "age", "name" ],  
  "properties": {  
    "age": {  
      "type": "integer"  
    },  
    "name": {  
      "type": "string"  
    }  
  }  
}
```



*** Settings ***

Library ExampleLibrary.py

Library JSONSchemaLibrary ./exercises/schemas

*** Keywords ***

Easily Use Your Own Keywords

 \${RESPONSE} Example Keyword Argument

 Validate Json example-schema.json \${RESPONSE}



```
# Create python env
```

```
robot@workshop:~$ python -m venv env
```

```
# Activate env Linux / Mac
```

```
robot@workshop:~$ source env/bin/activate
```

```
# Activate env Windows
```

```
robot@workshop:~$ env\Scripts\activate
```

```
# Install Requirements
```

```
robot@workshop:~$ pip install -r requirements.txt
```

```
# Run Workshop Application
```

```
robot@workshop:~$ python app/app.py
```




Test if you installed python and robot framework correctly:

```
robot@workshop:~$ robot --version
```

You should see output:

Robot Framework x (Python x)

Test if the demo application is running:

Go to <http://localhost:5000/>



*** Settings ***

Documentation Workshop Application Demo!!!



```
*** Settings ***
```

```
Documentation      Break & Workshop Time!!!! :)
```

```
...
```

```
...
```

```
...
```

```
...
```

```
...
```

```
...
```

```
...
```

```
( (
) )
```

```
.....
|       |]
\       /
'-----'
```



*** Variables ***

`${GITHUB}` <https://github.com/tloolkema/robot-playwright-workshop>

*** Keywords ***

Robot Framework & Playwright Workshop

19:00 - 19:15	Break
19:15 - 20:00	Exercise Time
20:00 - 20:15	Explanation exercise 1 - 3
20:15 - 21:00	Exercise Time
21:00 - 21:15	Explanation exercise 4 - 7
21:15 - 21:30	Closing ceremony
21:30 - ?	BEER!!