Acceptance Test
and
Acceptance-Test
Driven Development

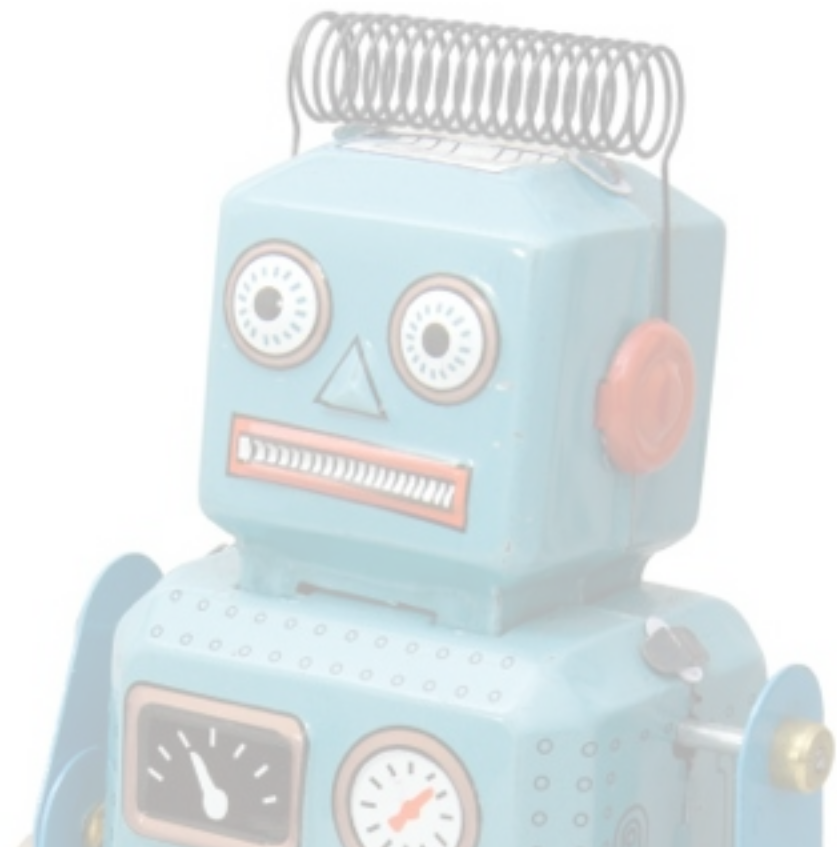### with Robot Framework

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Login Demo

https://github.com/rtomac/robotframework-selenium2library

Run server with python in folder demo app

$python server.py start

Demo application starting on port 7272

Demo

Go to http://localhost:7272/html
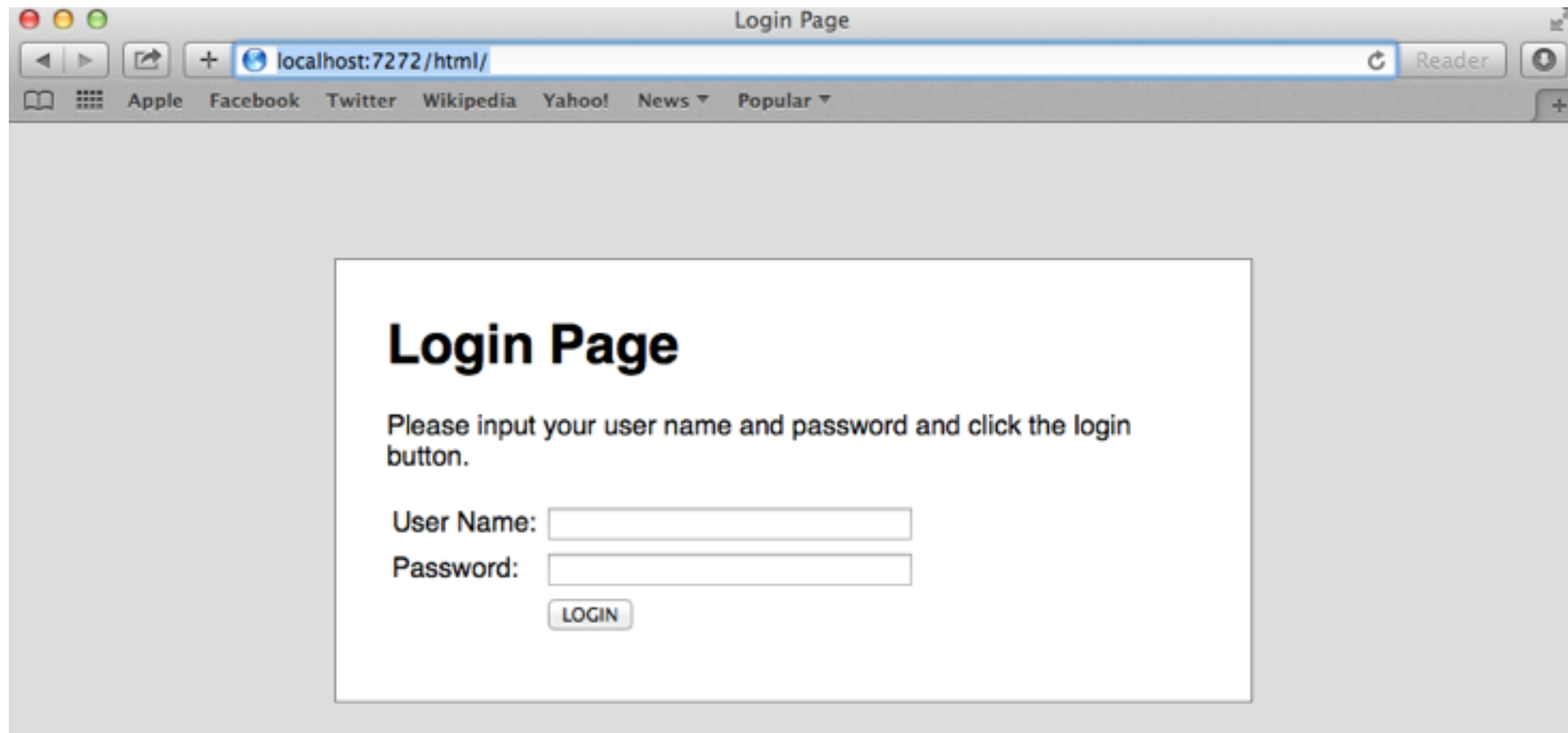
username = demo

password = mode

Workshop

- Create test case with Robot Framework

  - **Valid test case**
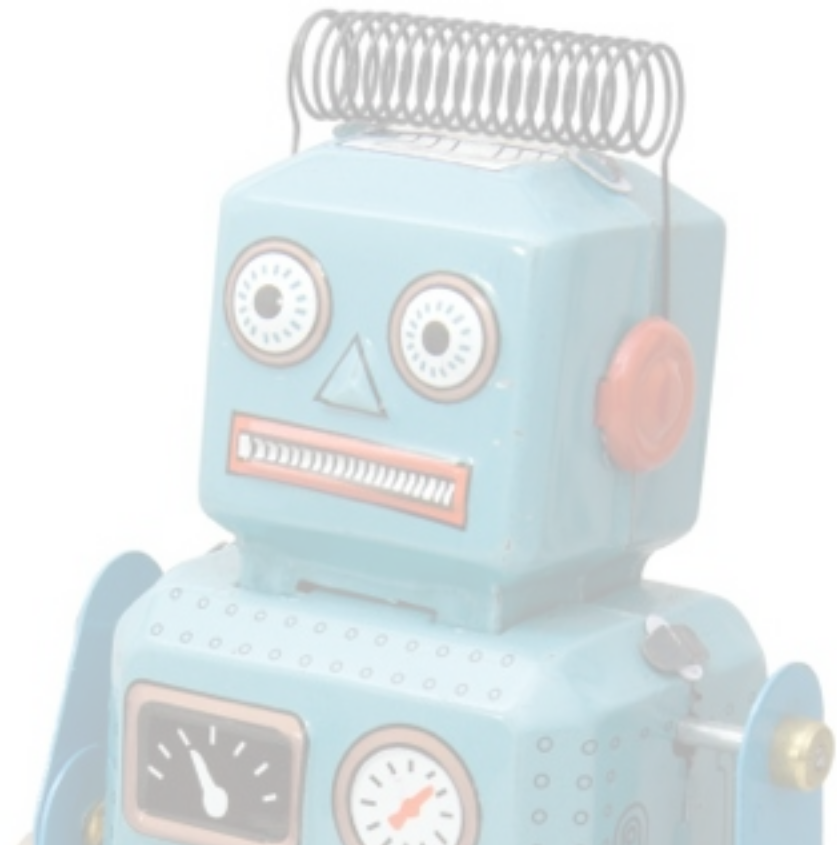
Example of Valid login

```
1  *** Settings ***
2  Library        Selenium2Library
3
4  *** Testcases ***
5  Valid Login
6      Open Browser     http://localhost:7272/html
7
8      Input Text      username_field    demo
9      Input Text      password_field    mode
10     Click Button    login_button
11
12     Location Should Be     http://localhost:7272/html/welcome.html
13     Title Should Be        Welcome Page
14     Page Should Contain    Login succeeded
15
16     Close Browser
```
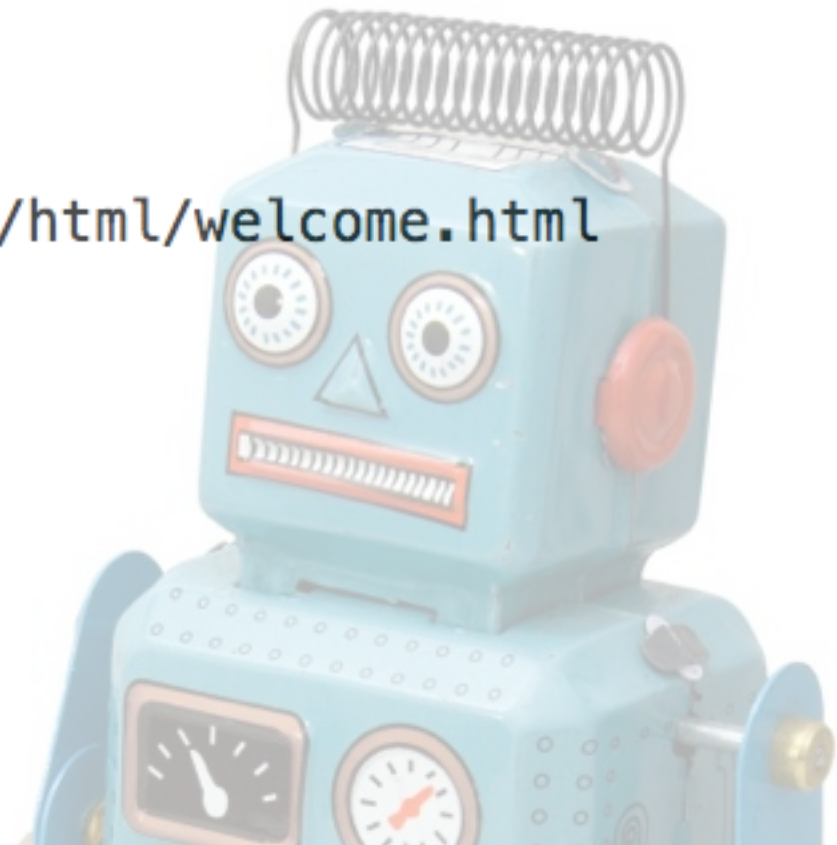
Duplication

```
 1  *** Settings ***
 2  Library        Selenium2Library
 3
 4  *** Testcases ***
 5  Valid Login
 6      Open Browser      http://localhost:7272/html
 7
 8      Input Text        username_field    demo
 9      Input Text        password_field    mode
10      Click Button      login_button
11
12      Location Should Be    http://localhost:7272/html/welcome.html
13      Title Should Be       Welcome Page
14      Page Should Contain   Login succeeded
15
16      Close Browser
```
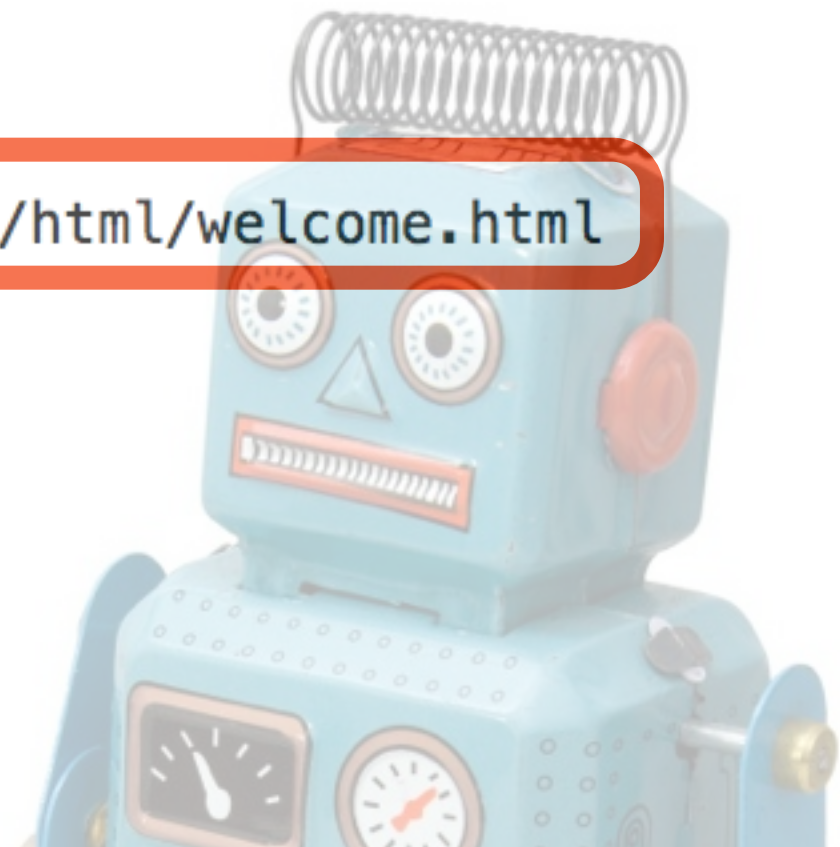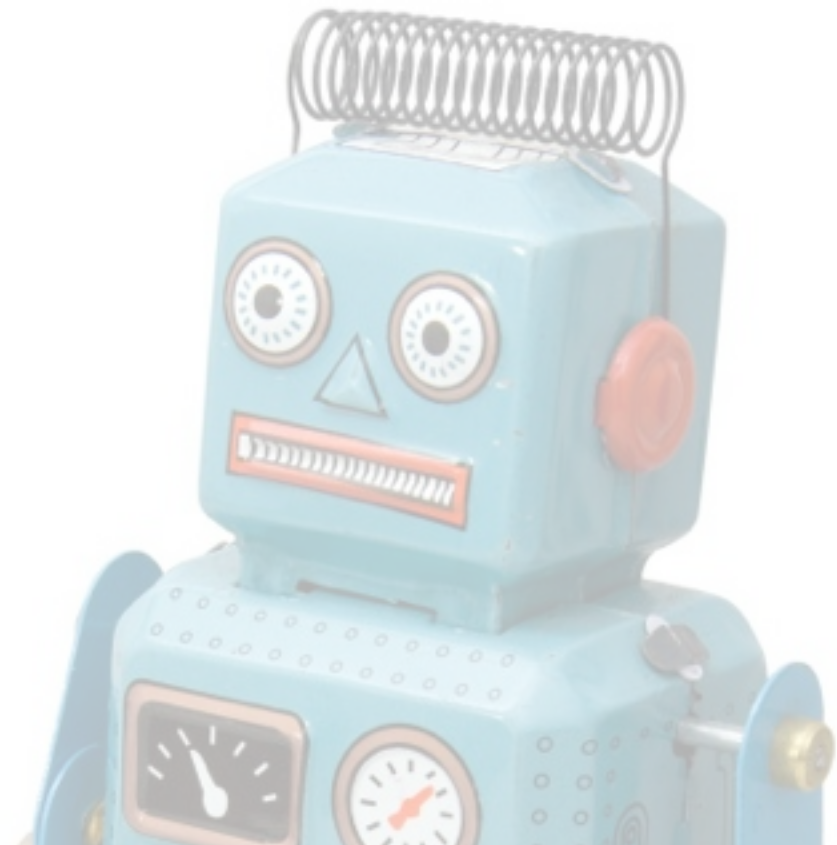
Remove Duplication to Constants

```
 1  *** Settings ***
 2  Library      Selenium2Library
 3
 4  *** Variables ***
 5  ${LOGIN_URL}        http://localhost:7272/html
 6  ${WELCOME_URL}      ${LOGIN_URL}/welcome.html
 7
 8
 9  *** Testcases ***
10  Valid Login
11      Open Browser     ${LOGIN_URL}
12
13      Input Text       username_field    demo
14      Input Text       password_field    mode
15      Click Button     login_button
16
17      Location Should Be    ${WELCOME_URL}
18      Title Should Be       Welcome Page
19      Page Should Contain   Login succeeded
20
21      Close Browser
```

More Technical Detail
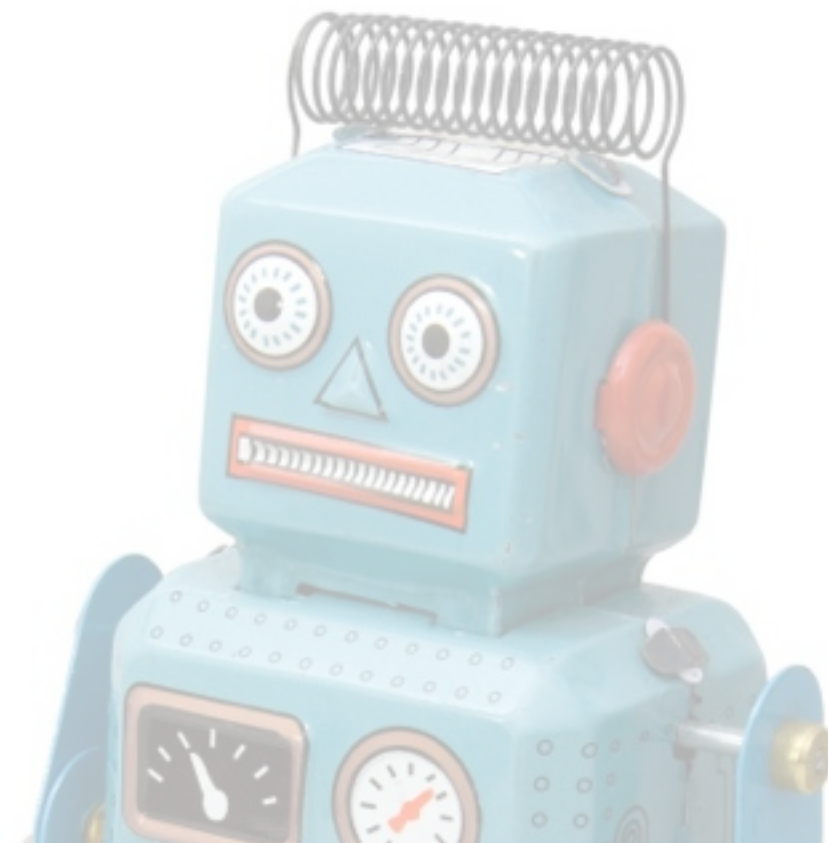
```
1   *** Settings ***
2   Library      Selenium2Library
3
4   *** Variables ***
5   ${LOGIN_URL}          http://localhost:7272/html
6   ${WELCOME_URL}        ${LOGIN_URL}/welcome.html
7
8
9   *** Testcases ***
10  Valid Login
11      Open Browser       ${LOGIN_URL}
12
13      Input Text         username_field    demo
14      Input Text         password_field    mode
15      Click Button       login_button
16
17      Location Should Be     ${WELCOME_URL}
18      Title Should Be        Welcome Page
19      Page Should Contain    Login succeeded
20
21      Close Browser
```

Try to use high level language
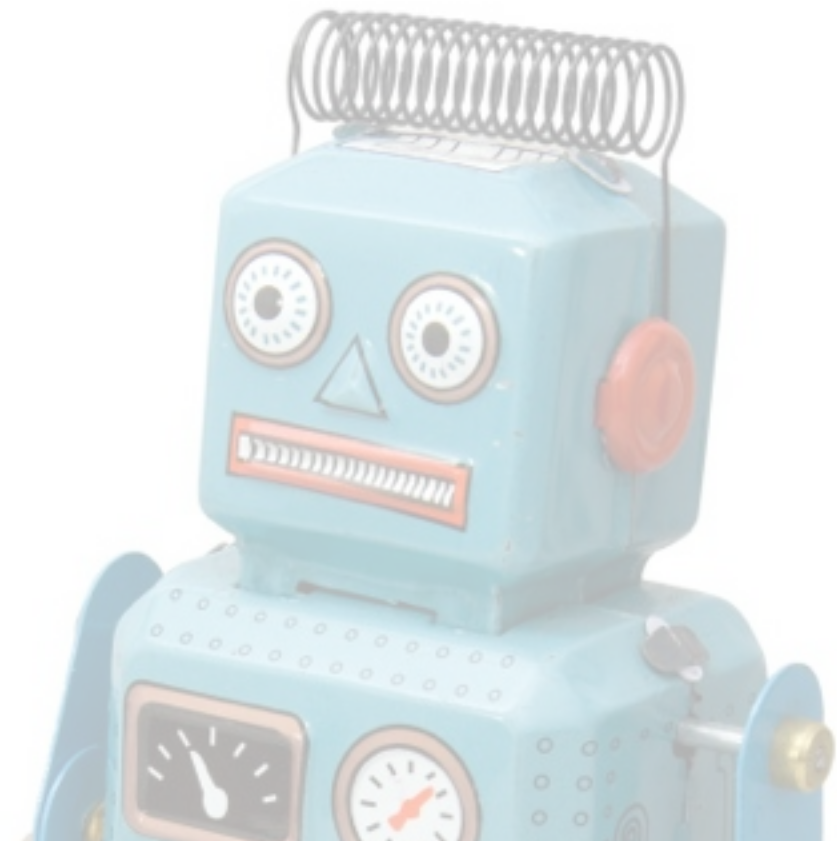
```
 1  *** Settings ***
 2  Library      Selenium2Library
 3
 4  *** Variables ***
 5  ${LOGIN_URL}         http://localhost:7272/html
 6  ${WELCOME_URL}       ${LOGIN_URL}/welcome.html
 7
 8
 9  *** Testcases ***
10  Valid Login
11      Open the login page
12      Fill in username    demo
13      Fill in password    mode
14      Submit data to system
15      Welcome page should be open
16      Close Browser
17
```

Keywords

Create keywords

```
18  *** Keywords ***
19  Open the login page
20      Open Browser    ${LOGIN_URL}
21
22  Fill in username
23      [Arguments]     ${username}
24      Input Text      username_field    ${username}
25
26  Fill in password
27      [Arguments]     ${password}
28      Input Text      password_field    ${password}
29
30  Submit data to system
31      Click Button    login_button
32
33  Welcome page should be open
34      Location Should Be    ${WELCOME_URL}
35      Title Should Be       Welcome Page
36      Page Should Contain   Login succeeded
```

Split to Resource file
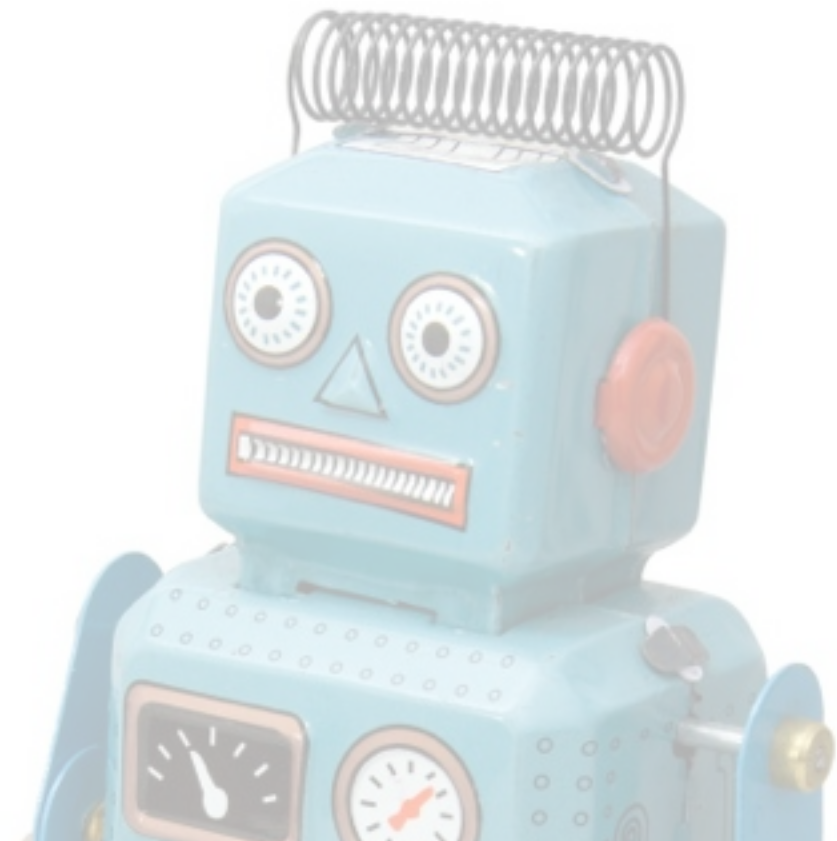
```
1    *** Settings ***
2    Library        Selenium2Library
3
4    *** Variables ***
5    ${LOGIN_URL}          http://localhost:7272/html
6    ${WELCOME_URL}        ${LOGIN_URL}/welcome.html
7
8    *** Keywords ***
9    Open the login page
10       Open Browser    ${LOGIN_URL}
11
12   Fill in username
13       [Arguments]     ${username}
14       Input Text      username_field    ${username}
15
16   Fill in password
17       [Arguments]     ${password}
18       Input Text      password_field    ${password}
19
20   Submit data to system
21       Click Button    login_button
22
23   Welcome page should be open
24       Location Should Be    ${WELCOME_URL}
25       Title Should Be       Welcome Page
26       Page Should Contain   Login succeeded
27
```
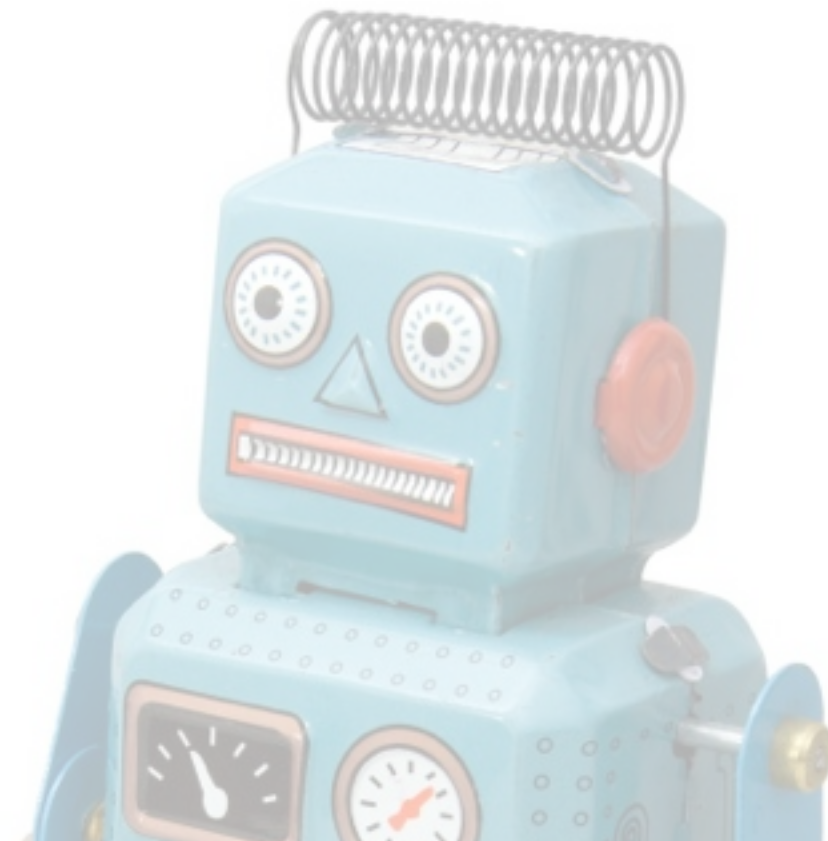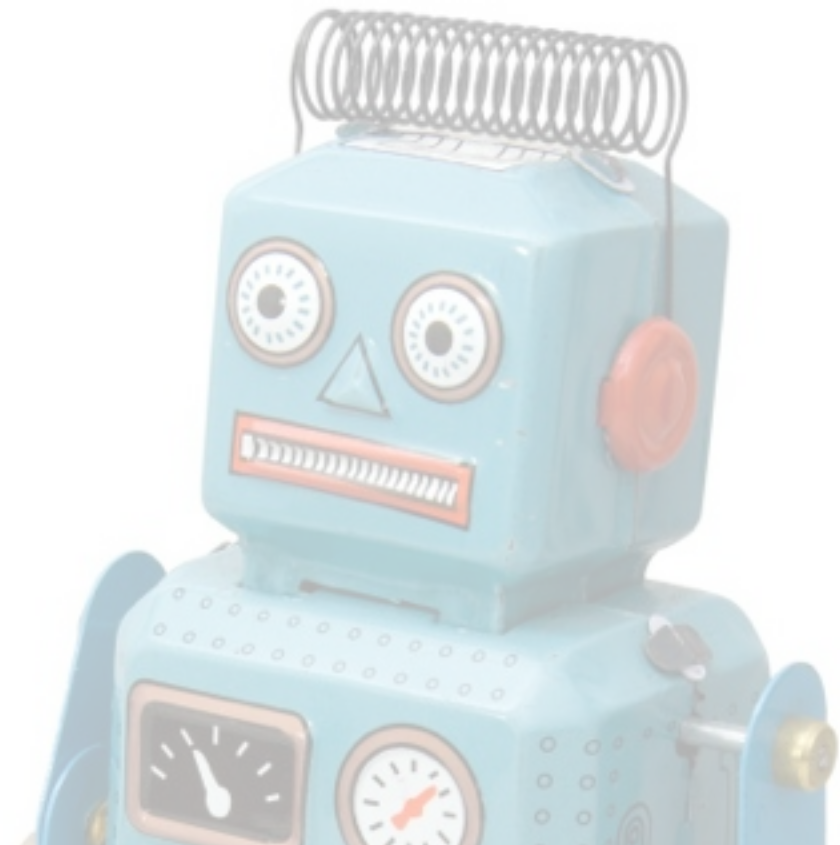
Test case look better !!!

```
 1   *** Settings ***
 2   Resource        09_resource.txt
 3
 4   *** Testcases ***
 5   Valid Login
 6       Open the login page
 7       Fill in username    demo
 8       Fill in password    mode
 9       Submit data to system
10       Welcome page should be open
11       Close Browser
```
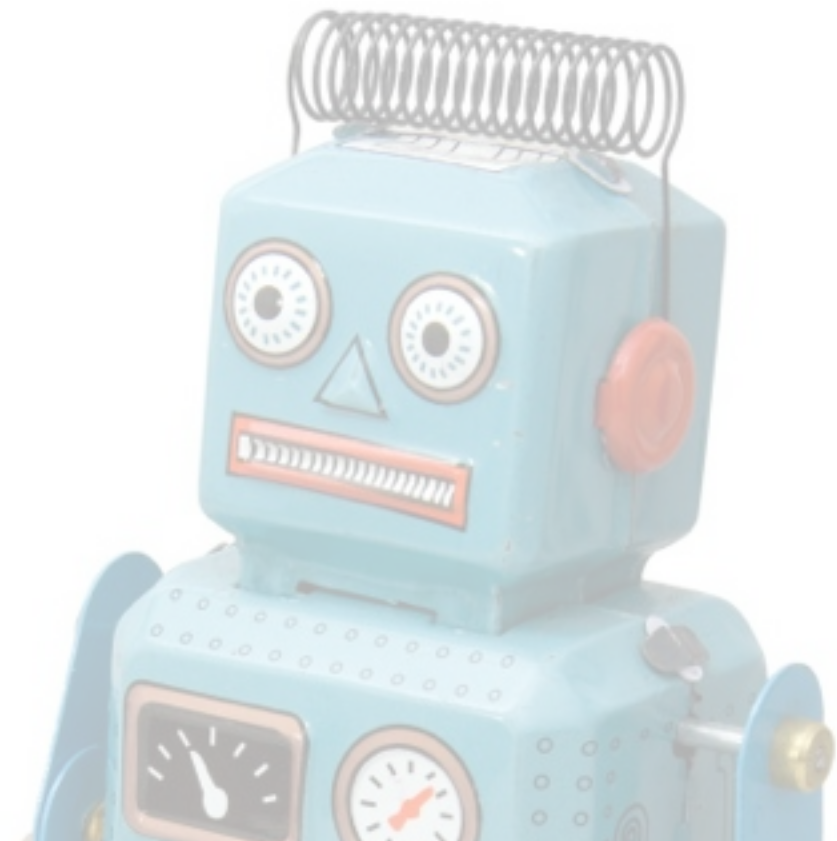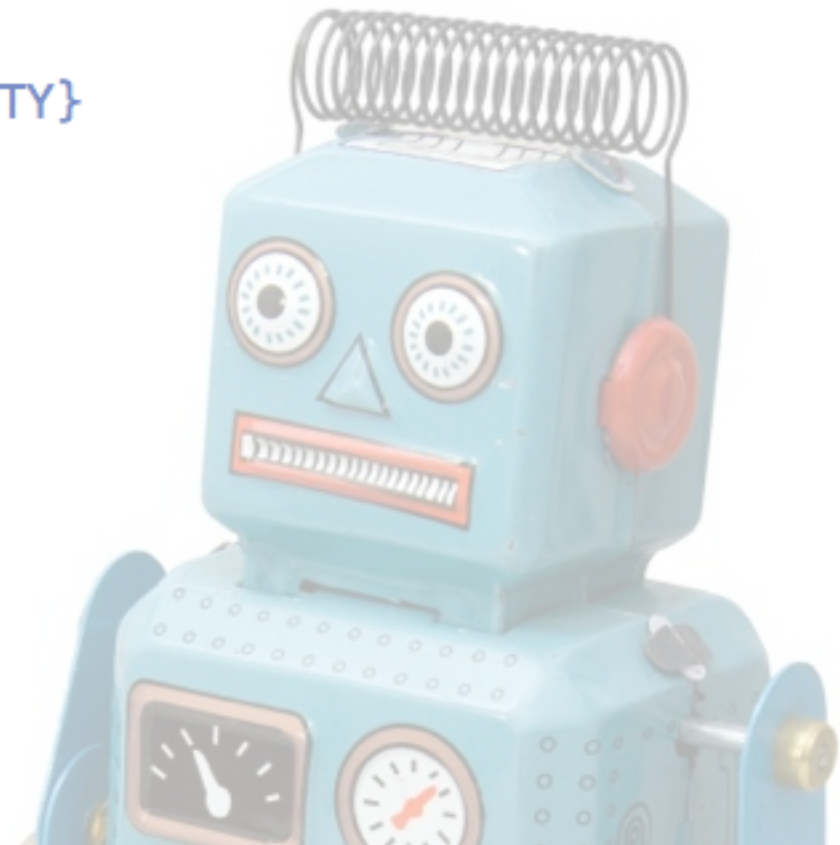
Workshop

- Create test case with Robot Framework

  - **Invalid test case**

Good Test Case

```
 1  *** Settings ***
 2  Suite Setup       Open the login page
 3  Test Setup        Go to login page|
 4  Test Template     Login With Invalid Credentials Should Fail
 5  Suite Teardown    Close Browser
 6  Resource          09_resource.txt
 7
 8  *** Test Cases ***                        User Name       Password
 9  Invalid Username                          invalid         mode
10  Invalid Password                          demo   invalid
11  Invalid Username And Password             invalid         whatever
12  Empty Username                            ${EMPTY}        xxx
13  Empty Password                            demo   ${EMPTY}
14  Empty Username And Password               ${EMPTY}        ${EMPTY}
15
16
17  *** Keywords ***
18  Login With Invalid Credentials Should Fail
19      [Arguments]  ${username}  ${password}
20      Fill in username  ${username}
21      Fill in password  ${password}
22      Submit data to system
23      Login Should Have Failed
```

Question ?