Acceptance Test and

Acceptance-Test Driven Development

with Robot Framework



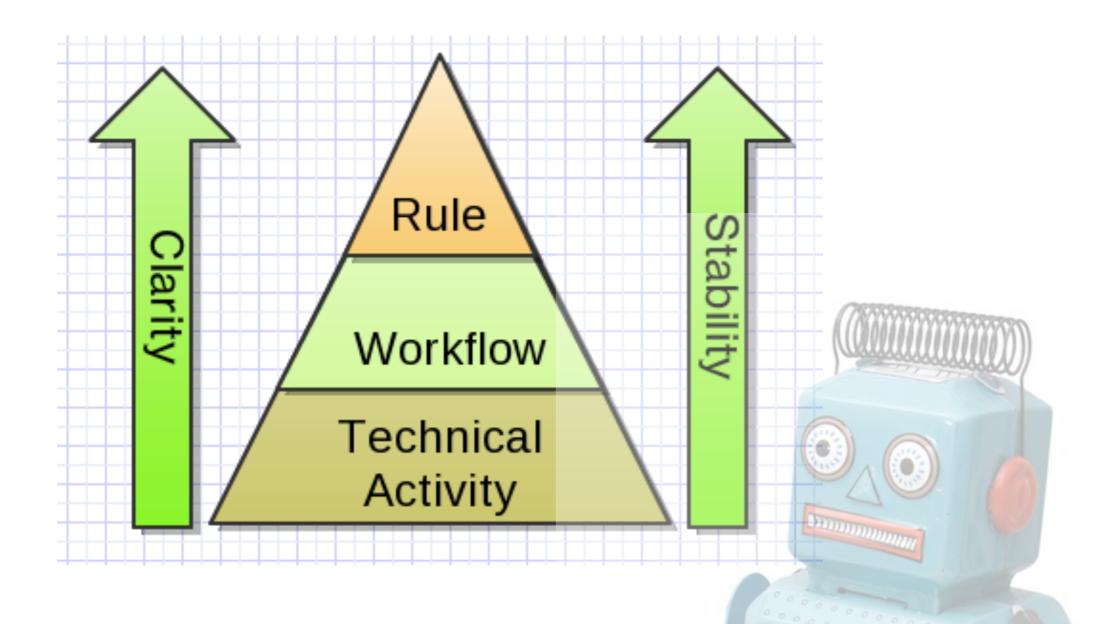
Create Keyword

```
*** Settings ***
   Library Selenium2Library
   *** Testcases ****
   Valid login
       Goto login page
   *** Keywords ***
   Goto login page
       Open Browser
10
                       http://localhost:7272/html
11
12
```

Send parameters to Keyword

```
*** Settings ***
                Selenium2Library
   Library
 3
   *** Testcases ****
   Valid login
 6
        Fill in username
                             demo
 8
        ricc in password
                             IIIDUE
10
   *** Keywords ***
   Goto login page
11
                         http://localhost:7272/html
12
        Open Browser
13
    Fill in username
                        ${username}
15
        [Arguments]
                                          ${username}
16
                       username_field
        Input lext
17
18
   Fill in password
19
                        ${password}
        [Arguments]
20
                                          ${password}
        Input Text
                       password_field
21
```

Level of UI Test Automation



Demo

- Grade system
 - http://demo-jenkins-web.herokuapp.com/



Workshop

- Try to rewrite test case
 - Readability and Maintainability
 - Demo login
 - Valid case
 - Invalid case



Advance Feature

- Using Variables
- Setups and Teardown
- Resource file
- Tagging test cases

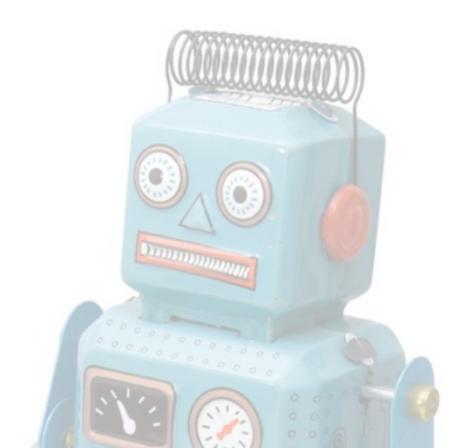


Variable

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

Setup and Teardown

- Setup
 - Executed before a test case
- Teardown
 - Executed after a test case



Setup and Teardown

Before

```
*** Settings ***
   Library Selenium2Library
 3
   *** Testcases ****
   Valid login
 6
       Goto login page
       Fill in username
                            demo
8
       Fill in password
                            mode
9
       Close Browser
10
11
   Invalid login with wrong password
12
       Goto login page
13
       Fill in username
                            demo
14
       Fill in password
                            XXXX
15
       Close Browser
16
```



Setup and Teardown

After

```
*** Settings ***
   Library
                    Selenium2Library
   Test Setup
                 Goto login page
   Test Teardown
                  Close Browser
   *** Testcases ****
   Valid login
       Fill in username
                            demo
10
       Fill in password
                            mode
11
   Invalid login with wrong password
12
       Fill in username
13
                            demo
       Fill in password
14
                            XXXX
15
```



Resource file

- Use Resources file in settings section
 - For re-use
 - Settings
 - Variable
 - Keywords



Resource file

Selenium2Library

*** Settings ***

Library

Before

```
*** Variables ***
   ${LOGIN_URL}
                      http://localhost:7272/html
   ${WELCOME URL}
                      ${LOGIN_URL}/welcome.html
   *** Testcases ***
   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
       Close Browser
16
   *** Keywords ***
   Open the login page
20
       Open Browser
                       ${LOGIN_URL}
21
   Fill in username
23
                       ${username}
        [Arguments]
24
                       username_field
                                        ${username}
       Input Text
   Fill in password
27
                       ${password}
        [Arguments]
28
       Input Text
                       password_field
                                         ${password}
   Submit data to system
31
                       login_button
       Click Button
```

Resource file

After

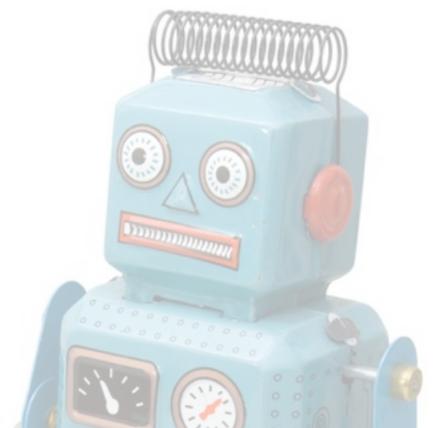
```
*** Settings ***
                09_resource.txt
   Resource
   *** Testcases ***
   Valid Login
 6
        Open the login page
        Fill in username
                           demo
8
        Fill in password
                           mode
 9
        Submit data to system
10
        Welcome page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

09_resource.txt

```
1 *** Settings ***
               Selenium2Library
   Library
   *** Variables ***
   ${LOGIN_URL}
                      http://localhost:7272/html
   ${WELCOME_URL}
                      ${LOGIN_URL}/welcome.html
   ${ERROR_URL}
                      ${LOGIN_URL}/error.html
   *** Keywords ***
   Open the login page
       Open Browser ${LOGIN_URL}
11
12
       Maximize Browser Window
13
       Set Selenium Speed 0
15 Go to login page
                ${LOGIN_URL}
17
   Fill in username
                       ${username}
19
        [Arguments]
20
       Input Text
                       username_field
21
   Fill in password
        [Arguments]
                       ${password}
                                        ${password}
24
       Input Text
                       password_field
25
26 Submit data to system
       Click Button
                      login button
28
```

Tagging

```
*** Settings ***
                Selenium2Library
   Library
   Force Tags
                    FunctionalTest
   Default Tags
                    ValidTest
 6
   *** Testcases ****
   Valid login
       Goto login page
       Fill in username
10
                            demo
       Fill in password
                            mode
11
12
   Invalid login with wrong password
14
                InvalidTest
       [Tags]
15
       Goto login page
16
        Fill in username
                            demo
17
       Fill in password
                            XXXX
18
```



Tagging

- Run test case with specified tags
- Run only ValidTest

Include with tag

- \$pybot -i ValidTest mytest.txt
- Run only InvalidTest
 - \$pybot -i ValidTest mytest.txt
- Run with FunctionalTest
 - \$pybot -i FunctionalTest mytest.txt



Tagging

- Run test case with specified tags
- Not run ValidTest tag
 - \$pybot -e ValidTest mytest.txt

Exclude with tag



Workshop

- Create test case with Robot Framework
 - TODO Application
 - http://up1todo.appspot.com/



Demo



Question?

