
Robots from Jupyter



the future of authoring Tests and Tasks in Robot Framework



Introducing

KERNELS  robots-from-jupyter/**robotkernel**

 gtri/**irobotframework**

LIBRARY  robots-from-jupyter/**robotframework-jupyterlibrary**

ENVIRONMENT  robots-from-jupyter/**robotlab**



Interactive RobotFramework

Inspector

WELCOME

```
[1]: *** testing ***  
Library RES
```

```
[ ]: *** Tasks ***  
Show the latest
```

Tasks are constructed in tasks tables from the file keywords. Keywords can be imported from test libraries or resource files, or created in the keyword table of the tasks file itself.

[Robot Framework User Guide](#)

TO THE

FUTURE

WHAT IS JUPYTER?



KERNELS

PROTOCOLS

CLIENTS

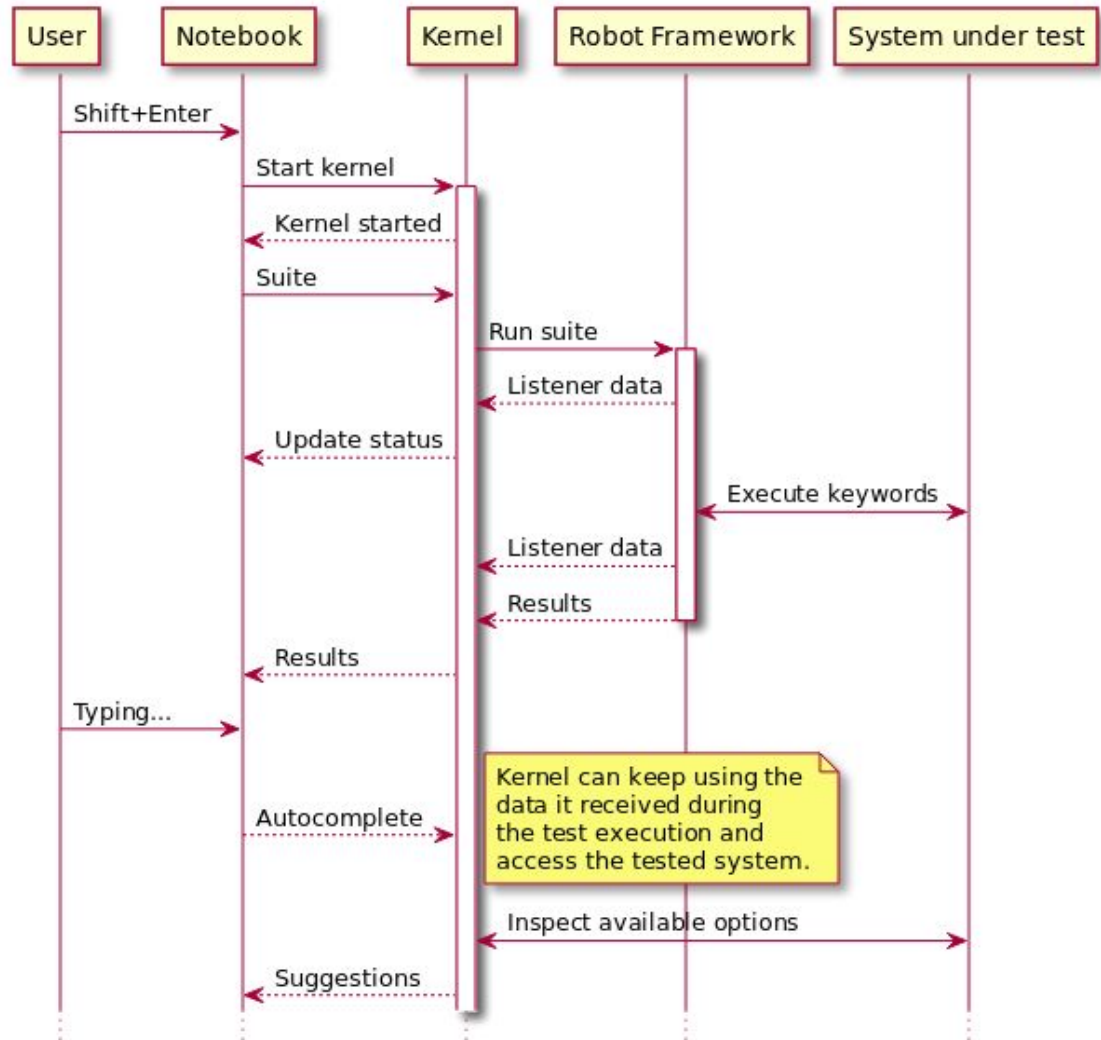
SERVICES

PEOPLE

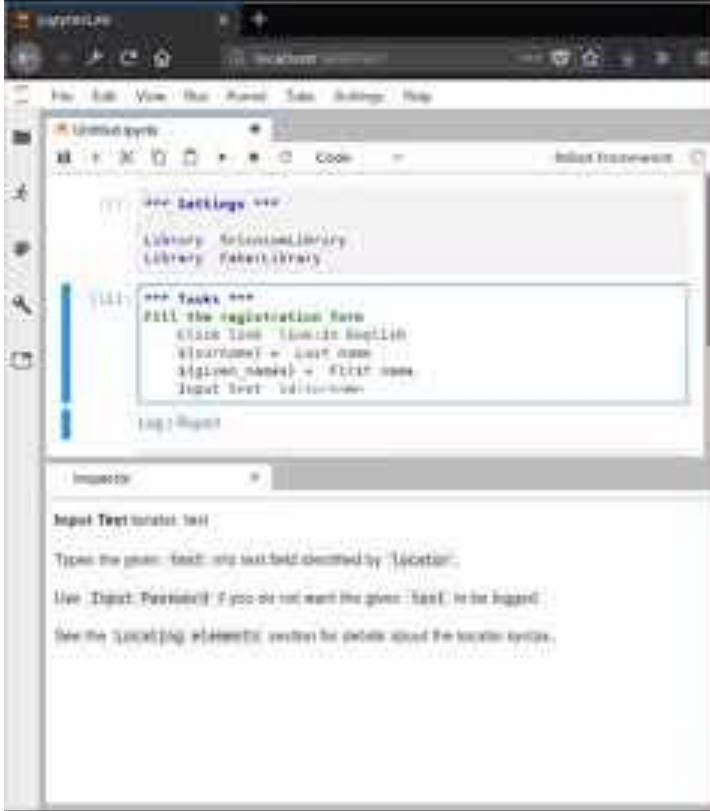
.IPYNB



KERNELS



Complete
selectors
directly
from the
system
under test



The screenshot shows a web browser window with a code editor and an input test tool. The code editor contains the following code:

```
+++ Settings +++  
Library: ScienceLibrary  
Library: FaberLibrary  
  
+++ Tasks +++  
Fill the registration form  
Click link "login English"  
$username = user name  
$password = first name  
Input text: username  
log() Report
```

The input test tool shows the following text:

Input Test tool: test
Types the given text into text field identified by "locator".
Use .Input: Password() if you do not want the given text to be logged.
See the "Locate [id] #Howto" section for details about the locator syntax.



The screenshot shows a registration form on the University of Jyväskylä website. The form is titled "Registration" and includes a "Personal info" section. The form fields are:

- Surname *
- Given names *
- Preferred name *
- Social security number *
- Gender *

The "Surname" field is currently empty and has a red border. The "Given names" field is also empty. The "Preferred name" field is empty. The "Social security number" field is empty. The "Gender" field is empty.



.IPYNB

EDIT

EXECUTE

SHARE

CONVERT

PUBLISH



JUPYTER USERS



SCIENTISTS

ANALYSTS

ARTISTS

TEACHERS

?

STUDENTS



SCIENTISTS

ANALYSTS

ARTISTS

TEACHERS

**POWER
USERS**

STUDENTS



**WHAT DID WE DO
BEFORE?**



RIDE

RED

ATOM

VSCODE

.ROBOT

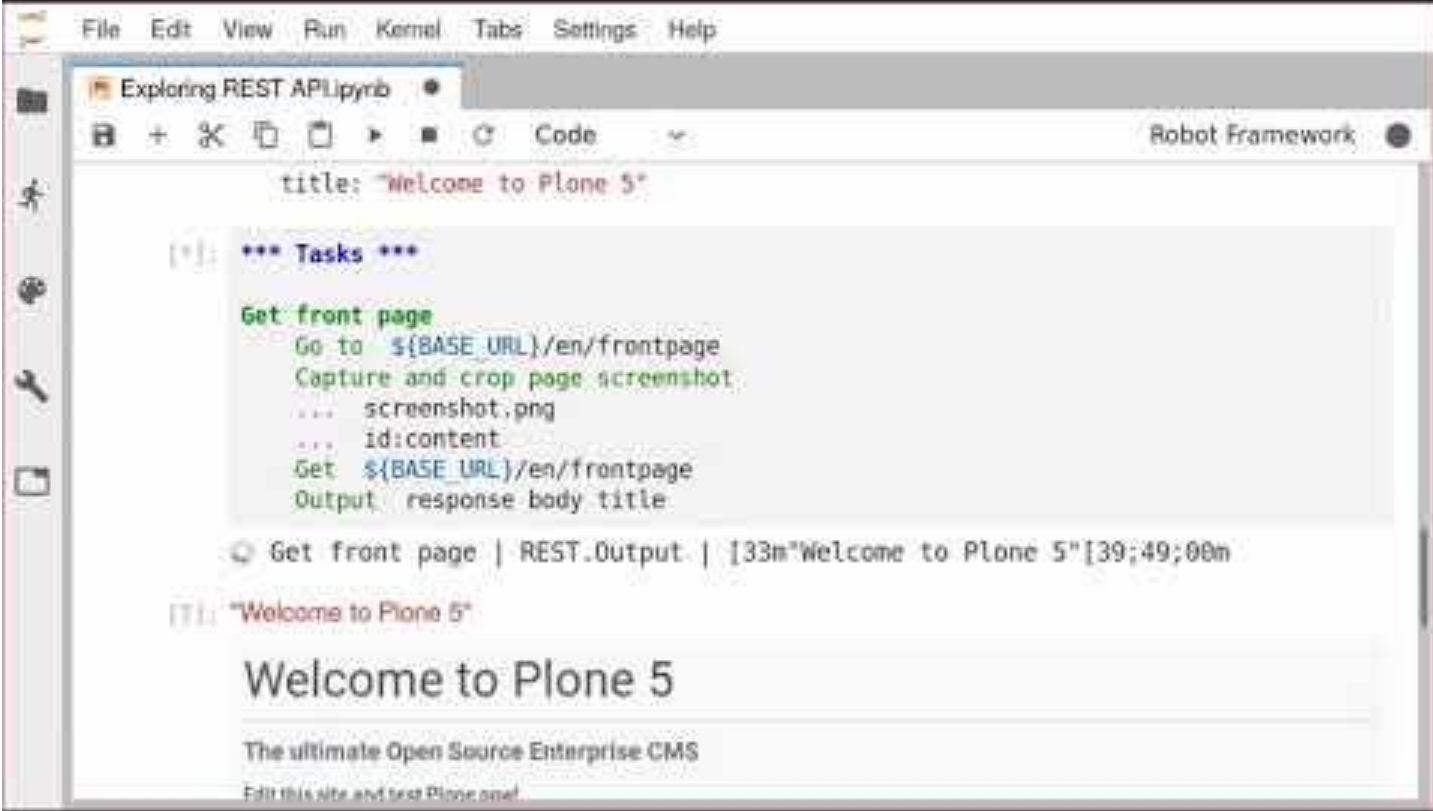
BRACKETS



WHAT CAN WE DO NOW?



Rapid iteration on Web API Interaction with REST Instance



The screenshot shows a REST client interface with a menu bar (File, Edit, View, Run, Kernel, Tabs, Settings, Help) and a toolbar. The main window displays a task execution for "Get front page". The task steps are:

- Go to `$(BASE_URL)/en/frontpage`
- Capture and crop page screenshot
 - ... screenshot.png
 - ... id:content
- Get `$(BASE_URL)/en/frontpage`
- Output response body title

The output shows a response with the title "Welcome to Plone 5". Below the task execution, a preview of the page content is shown:

```
[T]: "Welcome to Plone 5"
```

Welcome to Plone 5

The ultimate Open Source Enterprise CMS

Edit this site and test Plone online!



ITERATE

COMPLETE

INSPECT

DOCUMENT

REUSE

EXTEND



COLLABORATE

**ANNOTAT
E**

Extend and customize your Robot runtime



File Edit View Run Kernel Tabs Settings Help

Robot Framework

```
        "start": cursor_pos,
        "end": offset + len(line),
        "type": "wu-tang album",
        "text": m,
    }
    for m in matches
],
return [], []

register_robot_completion_finder(complete_wu_tang_discography)
```

Now, pressing TAB on a line that ends with `Wu` will give back a number of different options.

```
[2]: *** Test Case **
Check out an album
Log Wu
```

w	Log 8 Diagrams	wu-tang album
w	Log A Better Tomorrow	wu-tang album
w	Log Enter the Wu-Tang (36 Chambers)	wu-tang album
w	Log Iron Flag	wu-tang album
w	Log Once Upon a Time in Shaolin	wu-tang album
w	Log The W	wu-tang album
w	Log Wu-Tang Forever	wu-tang album

er (such as the defaults from

Uncomplete

Once again, you can `register_robot_completion_finder`:

```
[ ]: %%python module WuFinder
from irobotframework import unregister_robot_completion_finder
import WuFinder

unregister_robot_completion_finder(WuFinder.complete_wu_tang_discography)
```

**INTERACTIVE
TUTORIALS**

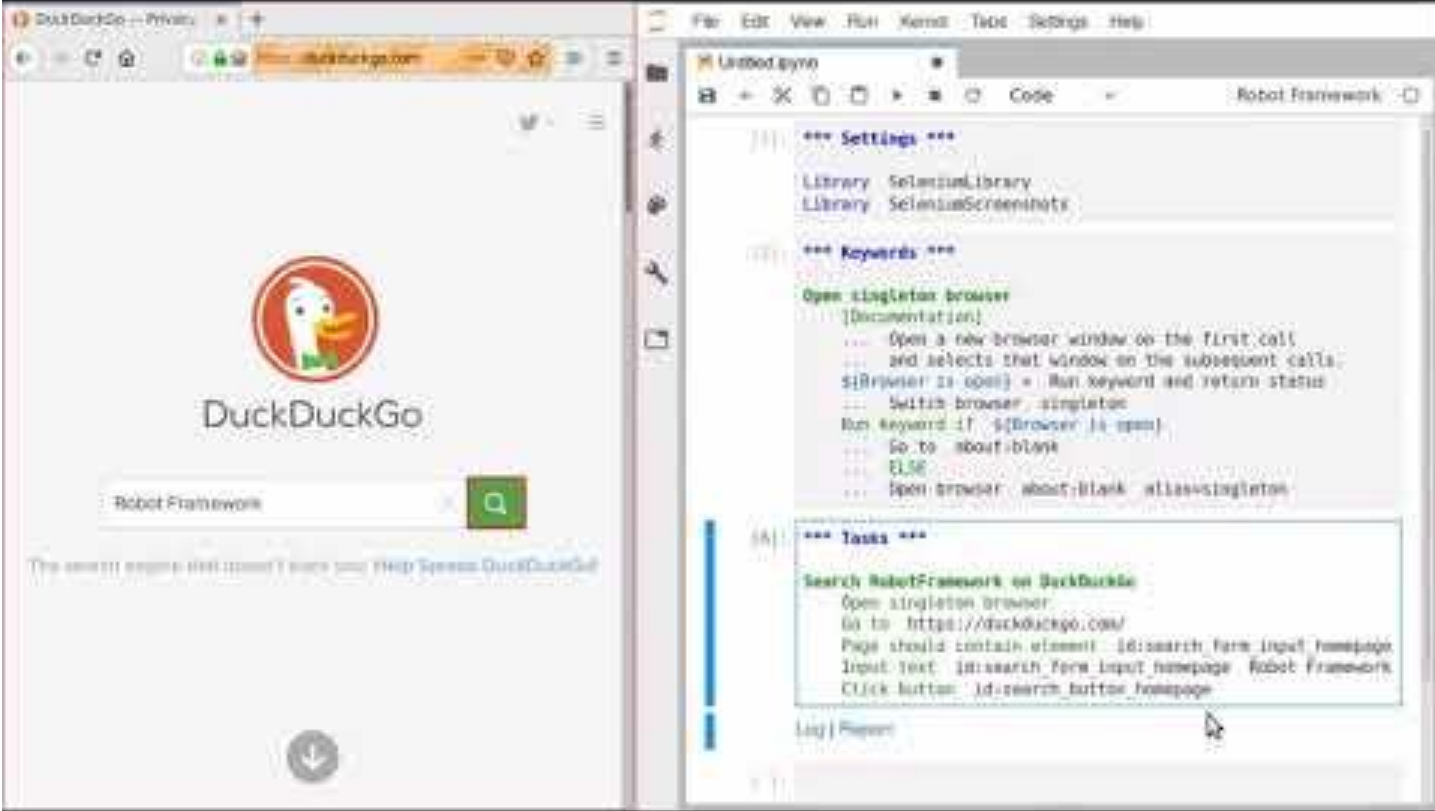
**FAST LIBRARY
PROTOTYPING**

**WORKFLOW
AUTOMATION**

**SCRIPTED
SCREENSHOTS**



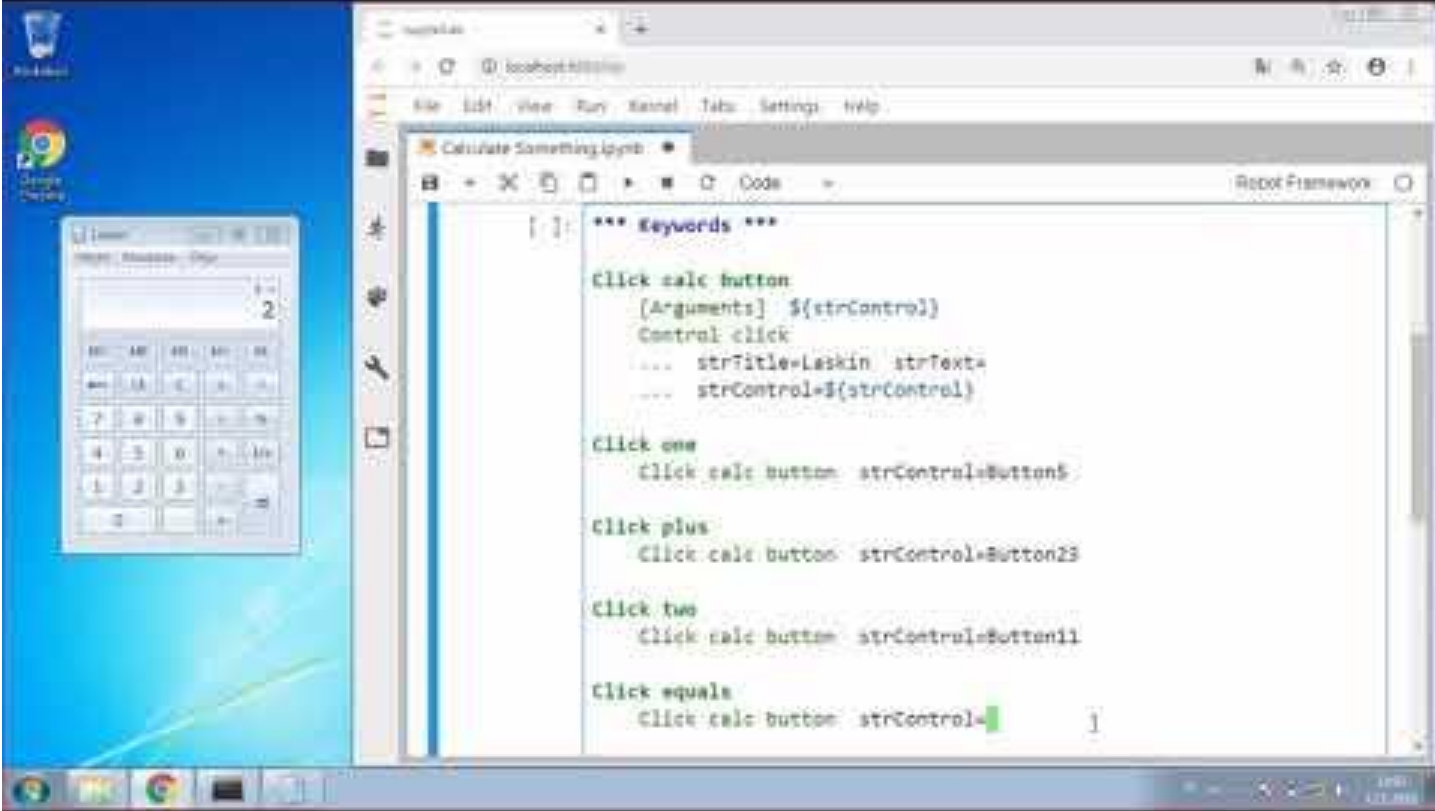
Visual Feedback In the System-Under-Test



MORE. FUN.



More Than Just web Stuff!



RobotLab

 robots-from-jupyter/**robotlab**

A curated, ready-to-install
environment for Robot
Framework & Jupyter on
Windows, MacOS and Linux



Python 3.6

Robot Framework

robotkernel

JupyterLab

SeleniumLibrary

JupyterLibrary

RESTInstance

[Chrome|Gecko]Driver

OpenCV

Conda

Nodejs

Pip

etc...

– GO GET‘EM ROBOTS

```
pip3 install robotkernel  
robotframework-jupyterlibrary  
irobotframework # COMING SOON
```



robots-from-jupyter.github.io

DEMO

