An introduction to

ROBOT FRAMEWORK

About Me

Jim Priest

Developer at ICF

TACFUG / NCDevCon

About Robot Framework

Robot Framework is a Python-based, extensible keyword-driven automation framework for acceptance testing, acceptance test driven development (ATDD), behavior driven development (BDD) and robotic process automation (RPA)...

blah blah blah blah...

About Robot Framework

(tl;dr)

Robot Framework does stuff for you using easy to write (and read) keyword based tests.

ROBOT FRAMEWORK

Under The Hood

TESTS (Ride, VSCode, PyCharm)

Robot Framework

Builtin Library

Selenium Library

Db Library

DateTime Library

And more...

Python

Webdriver / Browser

Robot File Weirdness

(this slide intentionally left blank)

Robot File Weirdness Explained

```
*** Variables ***
${MESSAGE}[space][space] Hello, world!


| *** Variables *** |
| ${MESSAGE}        | Hello, world!
```

Robot File Example

```
*** Settings ***

Library          SeleniumLibrary


*** Variables ***

${username}       JoeUser

${password}       JoePassword


*** Test Cases ***

Login with invalid credentials should fail

    [Template]   Invalid logins

    invalid            ${password} #Invalid Username

    ${username}        invalid     #Invalid Password


*** Keywords ***

Invalid logins

    [Arguments]  ${username}   ${password}

    Browser is opened to login page

    User "${username}" logs in with password "${password}"

    Dashboard should not be open
```

Robot File Overview

```
*** Settings ***
*** Variables ***
*** Test Cases ***
*** Keywords ***
```

Robot File Overview

*** Settings ***

- Documentation
- Libraries
- Test and Suite Setup/Teardown
- Resources

Robot File Overview

```
*** Variables ***
${MESSAGE}        Hello, world!

${installation}   TEST (${region})   # nested

${USER}[name]     ${USER}[password]  # dictionary

%{USER}           # environment
```

Robot File Overview

```
*** Test Cases ***
Open Site

    Go To    ${URL}

    Set Window Size  1280  800

    Capture Page Screenshot

    Close All Browsers
```

Robot File Overview

```
*** Keywords ***
Open Browser To Login Page
    Open Browser ${LOGIN URL} ${BROWSER}
    Login Page Should Be Open


Login Page Should Be Open
    Title Should Be  Login Page
```

Robot Framework documentation

This page contains links to version specific Robot Framework User Guide, standard library, and built-in tool documenta

User Guide

Robot Framework User Guide is a reference manual explaining all Robot Framework features in detail. You can either

[Latest ⌄] [View] [Download]

Use View to view the selected version online, and use

Standard libraries

These test libraries are distributed with Robot Framework. Click `View` to view the selected version online.
New standard libraries are added time to time. Dropdown menus list versions in which libraries are available.

Library	Documentation		Introduction
BuiltIn	[Latest ⌄]	[View]	Contains generic often needed keywords. Imported automatically an
Collections	[Latest ⌄]	[View]	Contains keywords for handling lists and dictionaries.
DateTime	[Latest ⌄]	[View]	Supports creating and verifying date and time values as well as cal
Dialogs	[Latest ⌄]	[View]	Supports pausing the test execution and getting input from users.
OperatingSystem	[Latest ⌄]	[View]	Enables performing various operating system related tasks.
Process	[Latest ⌄]	[View]	Supports executing processes in the system.
Remote	N/A		Part of the [remote library interface](). Does not have any keyword
Screenshot	[Latest ⌄]	[View]	Provides keywords to capture and store screenshots of the desk
	[Latest ⌄]	[View]	Library for manipulating strings and verifying their contents.
	[Latest ⌄]	[View]	Supports connecting to Telnet servers and executing command
			modifying XML documents.

Robot Container
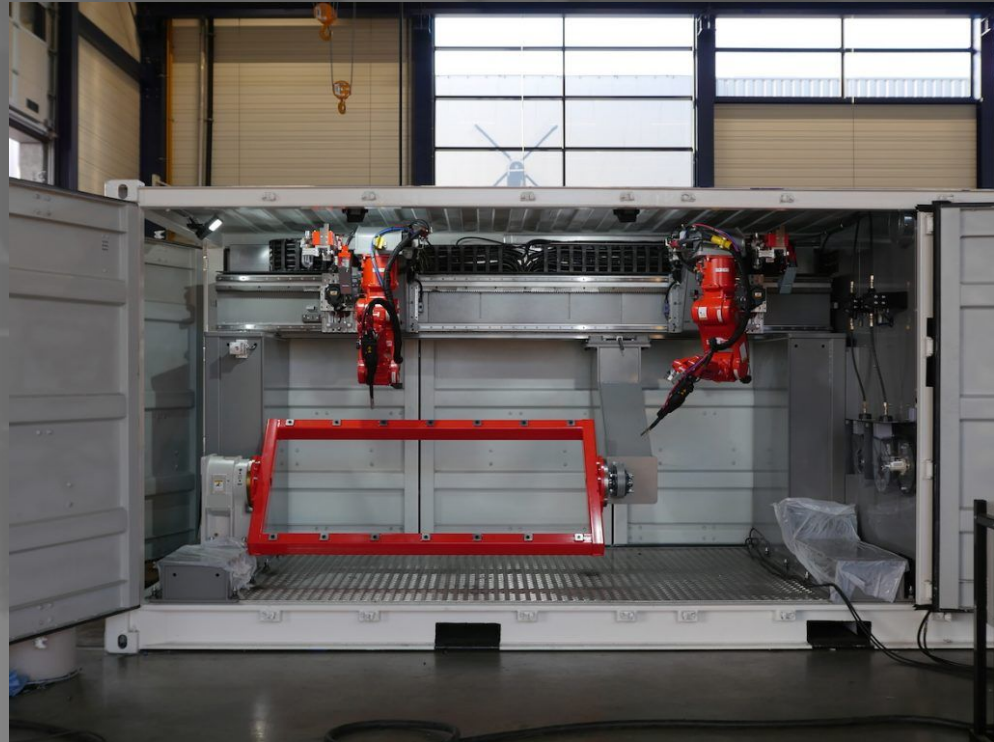
Let's Test Something

Gotchas

Resources

Robot Framework
https://robotframework.org/

Slides and Code:
https://github.com/jimpriest/robotframework-preso

QUESTIONS?