



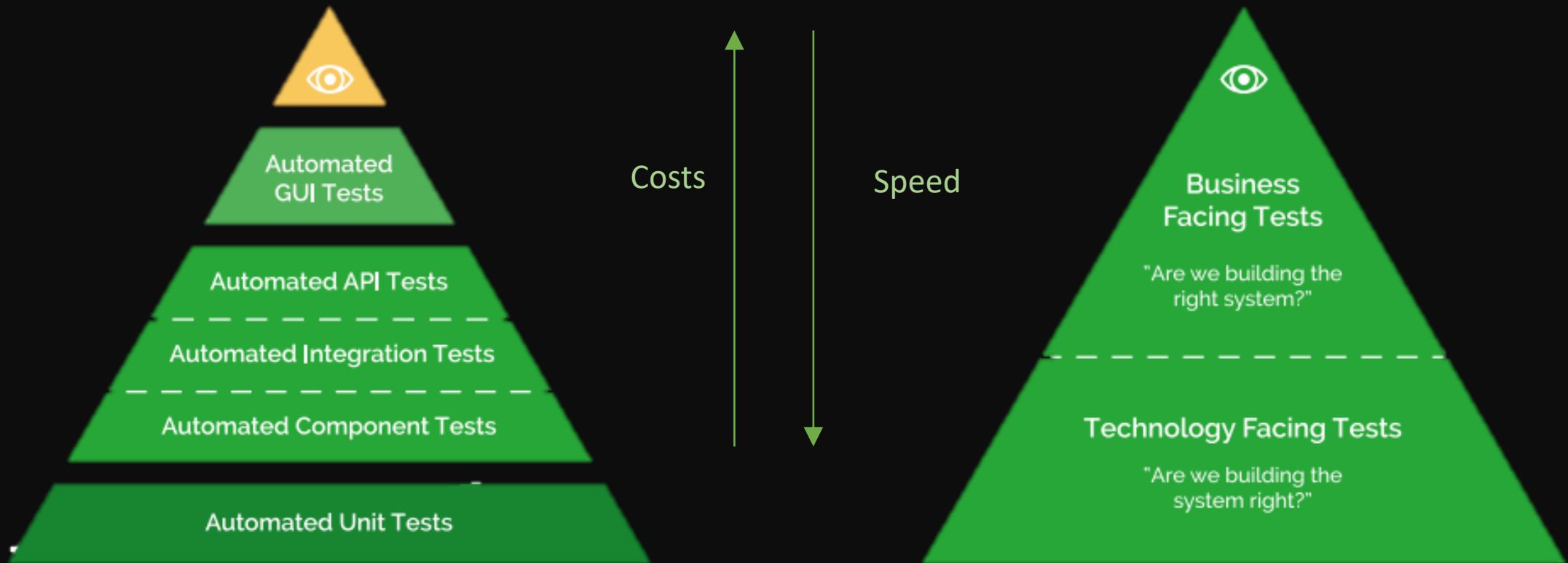
# Robot Framework Automation

DevOps Course KTH

Pauline Vaillant

Asim Jarrar

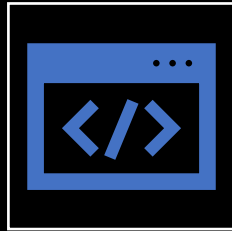
# Difficulties of end user



# Robot Frame Work – Automates E2E testing



Acceptance testing,  
Acceptance Test-Driven  
Development (ATDD),  
Robotic Process  
Automation (RPA).



Easy-to-write and easy-  
to-read automated test  
scripts, based on  
keyword

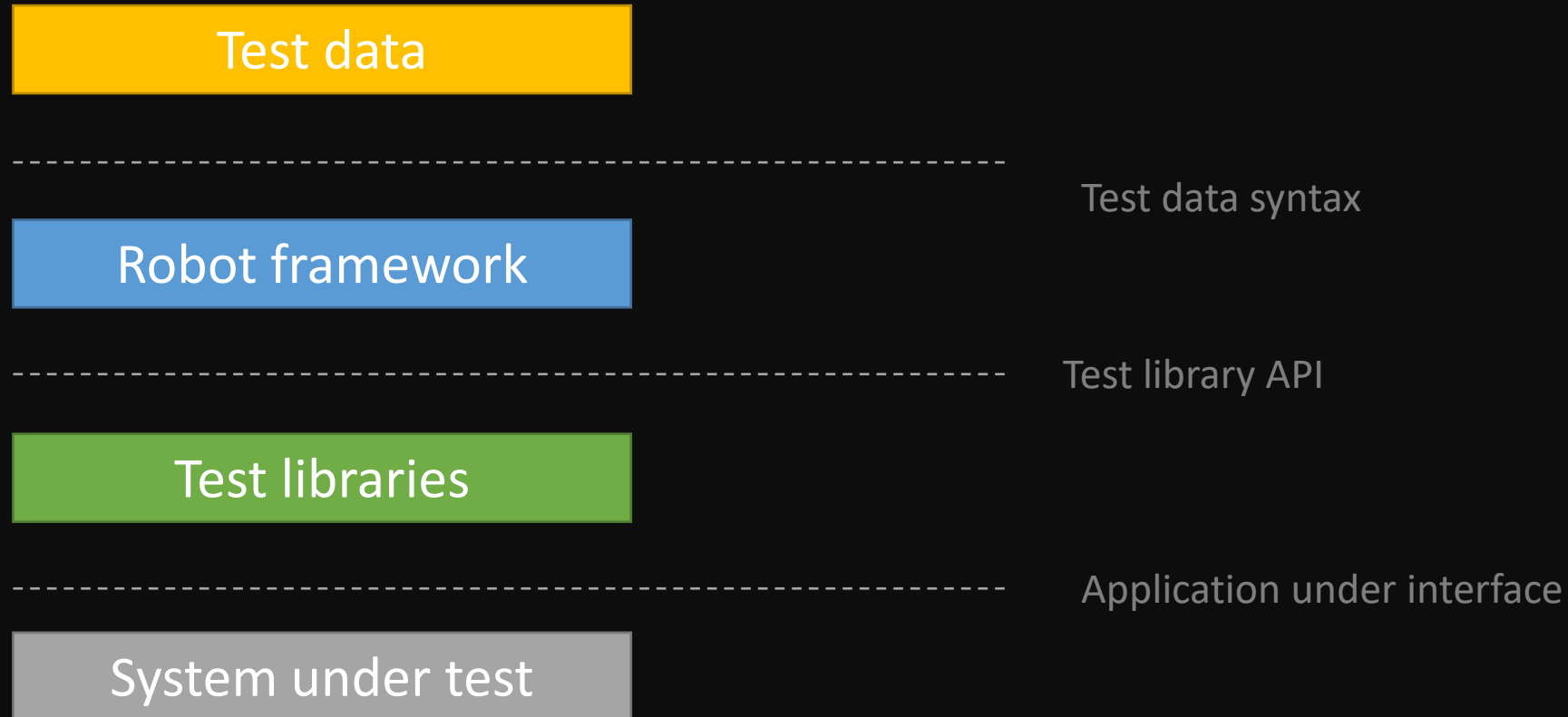


Can also be used for  
teams for Behaviour  
Driven Development  
(BDD) and can supports  
Gherkin syntax



Customized test reports

# Robot Framework Architecture



# Example of external libraries

SeleniumLibrary



HTTP RequestsLibrary (Python)



AppiumLibrary



Excel Library



RESTinstance

Test library for HTTP JSON APIs.

# Example of user keyword definitions

```
Library              SeleniumLibrary

*** Variables ***

${SERVER}            testpages.herokuapp.com
${BROWSER}           Firefox
${LOGIN URL}         http://${SERVER}/
${VALIDATION TEST}   basic-javascript-validation-test.html
```

## Open Browser To Home Page

```
Open Browser    ${LOGIN URL}    ${BROWSER}
```

## Go To Validation Page

```
Go To    ${LOGIN URL}${VALIDATION TEST}
```

## Write Input Field Validation Page

```
[Arguments]    ${input_int}

Input Text    id:lteq30    ${input_int}

Click Button    name:submitbutton
```

### Basic Ajax Example

*JavaScript can be added to input fields for validation. In this example, when you finish typing in a value to the input it will be validated.*

Values Less Than 30 please :

Submit Value

# Example of a input field validation test

## Test Input Field Validation

Go To Validation Page

Write Input Field Validation Page 20

Alert Should Not Be Present

Go To Validation Page

Write Input Field Validation Page 50

Alert Should Be Present

## Basic Ajax Example

*JavaScript can be added to input fields for validation. In this example, when you finish typing in a value to the input it will be validated.*

Values Less Than 30 please :

Submit Value

# Tests Report

Generated  
20220326 17:45:47 UTC+01:00  
2 days 4 hours ago

LOG

## Summary Information

Status:	All tests passed
Start Time:	20220326 17:45:31.518
End Time:	20220326 17:45:47.574
Elapsed Time:	00:00:16.056
Log File:	log.html

## Test Statistics

Total Statistics	Total	Pass	Fail	Skip	Elapsed	Pass / Fail / Skip
All Tests	3	3	0	0	00:00:16	

Statistics by Tag	Total	Pass	Fail	Skip	Elapsed	Pass / Fail / Skip
No Tags						

Statistics by Suite	Total	Pass	Fail	Skip	Elapsed	Pass / Fail / Skip
Tests	3	3	0	0	00:00:16	
Tests .testSuite	3	3	0	0	00:00:16	

## Test Details

All Tags Suites Search

Status:	3 tests total, 3 passed, 0 failed, 0 skipped
Total Time:	00:00:15.768

Name	Documentation	Tags	Status	Message	Elapsed	Start / End
Tests .testSuite .Calculator Validation			PASS		00:00:02.308	20220326 17:45:45.260 20220326 17:45:47.568
Tests .testSuite .Test Input Field Validation			PASS		00:00:05.983	20220326 17:45:39.269 20220326 17:45:45.252
Tests .testSuite .Valid Home Page			PASS		00:00:07.477	20220326 17:45:31.789 20220326 17:45:39.266



# Conclusions

01

Automate both the technology testing but also the end user testing

02

Automate test cases many cases

03

Use RPA to automate work processes

04

Importance of automation in the development phase

# Built in Libraries

- BuiltIn
- Collections
- DateTime
- Dialogs
- OS
- Process
- Screenshot
- String
- Telnet

# Example of user variable definitions

```
${SERVER}          testpages.herokuapp.com
${BROWSER}          Firefox
${DELAY}            0
${LOGIN URL}        http://${SERVER}/
${VALIDATION TEST}  styled/basic-javascript-test.html
${CALCULATOR PAGE} styled/calculator
```