Flexibility of Keywords

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My background

- I'm currently working as a Principal QA Engineer at Secureworks.
    - https://www.secureworks.com/
- I have been a tester for approximately 14 years, in agency and product companies.
- I enjoy experimenting with test tools, and learning more about Rapid Software Testing methodology.
    - https://www.satisfice.com/rapid-testing-methodology
- I'm also a part-time writer.
    - https://leanpub.com/toolstrategiesforlonetesters
- I like considering myself as simply a tester.

Some history, an article from 2004...

"Process begins with a test designer writing a test"

"The real benefit is the improved maintainability of the test scripts"

Keyword-driven Testing, Danny R. Faught, November 2004
https://www.stickyminds.com/article/keyword-driven-testing

Keyword-driven Approach

In testing and RPA (Robotic Process Automation).

- Keyword-driven approach has been around the testing industry for at least 17 years.
    - ... Possibly longer.
- "Action word" is a similar concept, and way of thinking about it.
- Can <u>help you focus more on designing</u> tests.
    - ... Hopefully you consider your product risks as you do it

Keyword-driven Approach

In testing and RPA (Robotic Process Automation).

- Maintainable, readable, accessible, adaptable etc.
    - Non-technical and technical team members should be able to understand the tests written with this approach.
    - <u>Terse, straight-forward plain english</u>, natural language, with no additional extra DSL needed.
- You are probably in a small team, and "wear multiple hats".
    - Keywords can help you <u>experiment quickly in a project with rapidly changing context</u>.
- If you are comfortable with keywords in your test strategy, <u>that mindset is easily transferred to applying keywords in RPA</u>.

Some people may think...

"Sounds good in theory but...
What is the gist of a Keyword-driven approach?
I am new. How do I start from nothing?"

Identify Your Automation Goals

[Think about your goals](#), consider breaking them down into parts, and basing them on project risks.
- Try building a [list of repetitive challenges or high priority testing goals](#), based on your work environment or project.
- [Map out each of those challenges or tasks into your own outlines](#), and be descriptive about the steps and procedures that feed them.
- For example, your outlines could look similar to the following.

```
First Outline Title: High-level goal of these tasks

Description of the first repetitive task
    [Risk Level] High
    Step one for this first task
    Step two for this first task
    ... etc.

Description of the second repetitive task
    [Risk Level] Low
    Step one for this second task
    Step two for this second task
    ... etc.

Second Outline Title:... etc.
```

Reliable Frameworks Can Help You

<u>Robot Framework</u> is a well maintained, adaptable, and accessible Keyword Driven Testing and automation framework
- The following example is based on the outlines from the previous slide.
- This is written in <u>Robot Framework's natural language syntax</u>.
    - <u>https://robotframework.org/#examples</u>
```

*** Settings ***

Documentation     High-level goal of these tasks

*** Test Cases ***

Description of the first repetitive task
    [Tags]    High Risk Level
    Step one for this first task
    Step two for this first task

Description of the second repetitive task
    [Tags]    Low Risk Level
    Step one for this second task
    Step two for this second task
```

Demonstrations

First Demo/Walkthrough: Robot Framework in your testing, it's much more than just "browser automation"

Second Demo/Walkthrough: Using Robot Framework RPA for fun, and possibly a little crypto profit

.... Also, this is my humble little mining set up.

Summary

Flexibility of Keywords
- Keyword-driven approach is not limited to just the testing industry anymore
- RPA is an industry growing in popularity
    - Keyword-driven tester experience is reusable in RPA roles
- Robot Framework has contributed a lot to testing and RPA
    - https://robotframework.org/

The automation examples for this session can be found here.
- https://github.com/jg8481/Tool-Strategies-Lone-Testers-Test-Leadership-Congress-2019/tree/master/Workshop-Examples/Shared-Resources/General-Purpose-RPA-Toolkits

Additional RPA examples combined with a conversational AI assistant can be found here.
- https://github.com/jg8481/leon/tree/develop/packages/robotframework-test-assistant

Questions?