



## **T15**

Test Automation

Thursday, May 3rd, 2018

1:30 PM

# **Manual Testers Can Thrive in a Test Automation World**

Presented by:

**Jeanne Schmidt**

Rural Sourcing Inc.

Brought to you by:



350 Corporate Way, Suite 400, Orange Park, FL 32073  
888-268-8770 · 904-278-0524 - [info@techwell.com](mailto:info@techwell.com) - <http://www.stareast.techwell.com/>

# **Jeanne Schmidt**

## **Rural Sourcing Inc.**

As principal consultant for the quality assurance practice at Rural Sourcing, Inc., Jeanne Schmidt leads a team of software testers who help customers deliver quality software and advise customers on test strategies. Rural Sourcing is the leader in domestic sourcing and a cost-effective, onshore alternative to the traditional model for IT outsourcing. With more than thirty years of experience working in software development, Jeanne has held the role of tester, QA manager, business systems analyst, product manager, and technical trainer. Previously Jeanne managed the PeopleTools QA team for PeopleSoft.

# Manual Testers Can Thrive in a Test Automation World

Jeanne Schmidt, Principal Consultant

May 2018



## Who We Are- Executive Snapshot

### Domestic IT Outsourcing Firm- 100% US, 100% Agile

- Industry **leading alternative to offshore** development & ongoing support/maintenance of critical business applications.
- Strong alternative to national/regional/niche project-based firms.
- A different, growing alternative to onsite IT contractors.

We deliver high-quality services at a strong value-point, with a **UNIQUE** delivery model.

### Primary Domains



Mobile Applications



Information Management



Digital Engagement



Business Applications

### Delivering remote IT services from our growing network of smaller city domestic delivery centers, we help clients:

- Increase their effectiveness in application development, QA and on-going support.
- Decrease their TCO by leveraging our outcome-based value model.
- Leverage an untapped resource pool to provide flex-scale capacity through our highly educated, skilled, U.S. citizen employees.



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

## Colleagues and Centers

### Colleague Profile

- **4 years degree** in CS, CE or MIS
- **Cross-trained** in multiple programming languages, technologies or enterprise applications for added flexibility
- Strong **communication skills**
- Client and **team focused**
- Average of **11 years** of experience
  - Local Technology Professionals
  - Former Road Warriors
  - University talent
- High level of engagement and **work ethic**



### Development Centers    Headquarters

- Augusta, GA
  - Jonesboro, AR
  - Mobile, AL
  - Albuquerque, NM
  - Center 5 coming soon...
- Atlanta, GA

### High Retention Rates



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

3

## My Introduction to Automation

## Lessons Learned

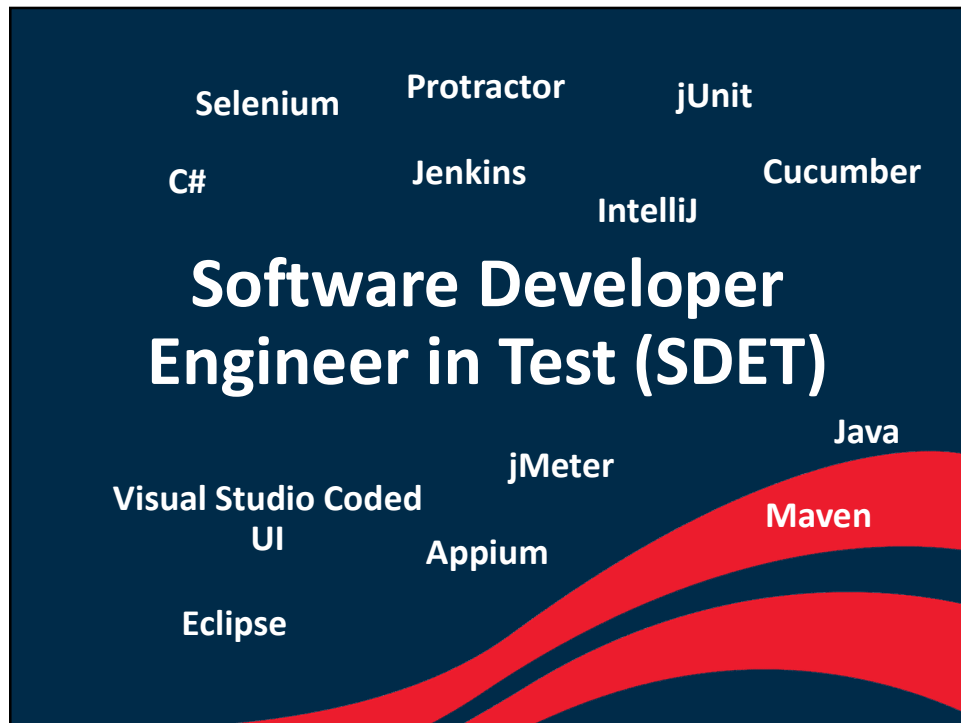
- I could provide valuable input into the testing process
- Naming conventions matter
- Test organization is important
- Code for easy debugging
- Create Standards for test start / end, tear up/tear down
- Automation didn't take away my day job



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

5

# Automation Today





## How Can a Non-Programmer Add Value to an Automation Project?

- Do what you do best!
- Test assumptions!
- Ask questions
- Trust, but verify!

## Don't ABDICATE your role



### ab·di·cate

/ˈæbdəˌkæt/ ◀▶

verb

(of a monarch) renounce one's throne.

"in 1918 Kaiser Wilhelm abdicated as German emperor"

*synonyms:* resign, retire, stand down, step down, bow out, renounce the throne; **More**

• fail to fulfill or undertake (a responsibility or duty).

the government was accused of **abdicated its responsibility**

*synonyms:* disown, reject, renounce, give up, refuse, relinquish, repudiate, abandon, turn one's back on, wash one's hands of, forgo, waive, *formal* abjure, *literary* forsake  
"the state abdicated all responsibility for their welfare"



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

11

## Redefine your role

- Drive what gets tested
- You, along with the automation team, can work together to make a better quality product
- Automation can enable you to create a better quality product



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

12



## How Can a Non-Programmer Add Value to an Automation Project?

- Write great test scenarios
- Create a test strategy plan
- Identify where automation will help the most
- Define the objective of the tests
- Define test data
- Drive the usability of the tests and test results



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

13

## Focus on efficiency, not just automation

- Load data
- Configuration Setup
- Queries
- Reports
- API Testing
- Unit testing
- Load testing
- Monitoring
- Are there other things you can do to make testing more efficient?



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

14

## What is your test strategy?

- What is quality?
- Who is responsible for quality?
- Identify risks
- Which tests will help us reduce risk
- What tools should we use?
- How do we check and how do we test?



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

15

## Plan the Automation

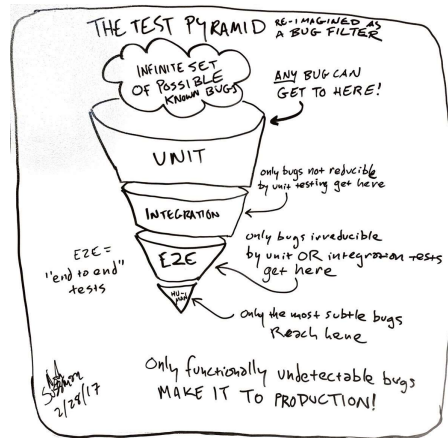
- What types of tests will you automate?
  - Unit tests
  - API tests
  - End to End tests
- Which tests will identify issues soonest?
- Which tests are easier to create and maintain?
- What skills will the team need?
- When will these tests run?
- What happens when a test fails?



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

16

## What types of automated tests do you need?



Sussman, N. Abandoning the Pyramid of Testing in Favor of a Band-Pass Filter model of risk management.  
<http://infiniteundo.com/post/158179632683/abandoning-the-pyramid-of-testing-in-favor-of-a>



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

17

## Test Results

- Do the test results clearly report what the issue is?
- Can you clearly tell what the problem is when a test fails?



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

18

## Define the Test Data

- Own the data!
- What data is important to test?
- Remember that tests should manage their own data



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

19

## Naming Conventions

- Can anyone on the team look at the tests and know what they are doing?
- Does the team know how to name new tests?




Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

20

## Standards for test start / end, tear up/tear down


- Tests should be small, independent
- Can you run multiple tests simultaneously?
- What happens if a test dies in the middle? Can you rerun it?




Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

21


## Plan for multiple runs of tests




- Login to application
- Check to see if test data exists
- If test data exists, delete test data
- Logout of application



- Test 1
- Test 2
- Test 3



- Login to application
- Check to see if test data exists
- If test data exists, delete test data
- Logout of application



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

22

## Know the Test Environment Configuration

- On which environments will the automated tests run?
- Are the environments configured similarly?
- How often are these environments built, updated?
- What data is stored in each environment?
- Do our tests need to work differently in different environments? How will we manage that?
- Can your team easily deploy test environments as needed?



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

23

## Do you need to run all tests all the time?

How will you identify and organize which tests should run when?



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

24

## Interact with automation!

- QA the tests - even unit tests!
- Run the tests
- Debug the tests
- Write the test cases
- Learn Gherkin
- Learn an automation tool - Katalon



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

25

## Pairing

- Pair with developers so they can understand what to test and you can understand what they are developing.
- Pair with SDETs so you can learn automation.
- Pair with other testers so you can learn together.



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

26

## Automation Retrospective

- Do we have “flaky” tests?
- Are the test results easy to read?
- How long does it take us to respond to a test failure?
- Do we have issues that our tests did not identify?
- Is quality improving?
- How much time does team spend in care of feeding of automated tests?
- Has our automation given us more time to do other things to improve quality?



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

27

## What will you do with all your free time?



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

28



## Software Tester in Automation World

- Be the person who knows WHAT to test and HOW to test
- Advocate for users
- Test the requirements
- Write awesome acceptance tests before features are written
- Be the driver in “test-driven development”
- Master exploratory testing



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

29

# Resist Labels

## “Just” a manual tester

- Quality strategist
- Test architect
- Test designer
- Test data designer
- Automation partner
- Customer advocate



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

31

# Lean In!

## What is the opposite of abdicate?

**defend**      **seize**      **uphold**  
**assert**      **claim**      **occupy**  
**adopt**      **adopt**      **advocate**  
**adopt**      **adopt**      **pursue**



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

33

## Reclaim and Redefine Your Role

## Wear Your Crown!



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

35

## References

Clokie, K. A Practical Guide to Testing in DevOps, Leanpub, 2017.

Crispin, L.; Gregory, J. Agile Testing: A Practical Guide for Testers and Agile Teams, 1st ed.; Addison-Wesley Professional: Boston, MA, 2009.

Hendrickson, E. Explore It! Reduce risk and increase confidence with exploratory testing, 1st ed.; The Pragmatic Programmers: Raleigh, NC, 2013.

Sussman, N. Abandoning the Pyramid of Testing in Favor of a Band-Pass Filter model of risk management. <http://infiniteundo.com/post/158179632683/abandoning-the-pyramid-of-testing-in-favor-of-a>



Rural Sourcing, Inc. Confidential & Proprietary. Copyright ©. All rights reserved.

36

# Thank You!

Jeanne Schmidt | [Jeanne.schmidt@ruralsourcing.com](mailto:Jeanne.schmidt@ruralsourcing.com) | <https://www.ruralsourcing.com>  
[https://twitter.com/Jeanne\\_Schmidt](https://twitter.com/Jeanne_Schmidt) | <https://www.linkedin.com/in/jeanneschmidt>