

Target Audience

- Manual software testers
- Test automation engineers
- Programmers & DevOps Engineers

No prior knowledge in test automation / programming is required.

Project managers and Business analysts might also find useful.

Testimonies

"I really don't believe without your training & guidance I would be even considering automation as a career path, So thank you again." - Chelsea R.

"Zhimin taught me valuable skills in Test Automation and Continuous Integration. I wouldn't be where I am today without his coaching. He knowledge is among the best in the industry." - Lien Nguyen

About the Instructor

Zhimin Zhan started practising hands-on test automation and continuous integration from 2006. As an agile testing coach, he helps organisations by implementing test automation with Continuous Testing using open technologies such as Selenium WebDriver.

Zhimin is the creator of **TestWise**, the next-generation functional testing tool that supports functional test refactoring and **BuildWise**, a Continuous Testing Server, which won the International Ruby Award in 2008.

Zhimin authored 11 books on software testing and programming. He is a frequent speaker at international software testing conferences, including the premium STARWEST 2013 in USA.



Learning Outcome

No trainings can turn one to an expert in one day. Our objective is to enable attendants with practical knowledge that they want to and are able to use for their work. Only positive feedback from real work can inspire people to grow further.

Web test automation with Selenium

Feeling confident to develop Selenium WebDriver test scripts for work on the next day, with the knowledge:

- Maintainable test design
- Selenium and RSpec syntax
- Test Refactoring
- Debugging test errors, ...

Practical Continuous Testing

Set up BuildWise Server and build agents to run automated tests in a continuous testing process. Attendants may apply the following general practices to other CI tools:

- Intelligent ordering
- Custom test execution with env
- Auto and manual retry (parallel execution)
- ...

API Testing with Ruby

- Effective testing SOAP/REST web services (not using SOAPUI)
- Parse XML/JSON response
- Generate test data with templating
- Data driven testing with Excel/CSV
- DB testing, Check emails, verify zip/PDF, ...



testwisely.com

AgileWay 

Brisbane ☎ (07) 3863 2079

Est. 2006 Winner of Ruby Award (2018)

AgileWay's one-day agile testing workshops

Web Test Automation with Selenium WebDriver

Test Automation is the only practical way to manage regression testing, it simply enables Agile.

Practical Continuous Testing

Continuous Testing is essential to DevOps. Delivering software with "Quality at speed" is only possible with a solid continuous testing process in place.

Non-UI Functional Testing with Ruby

Automated functional testing without UI goes far beyond SOAP/REST web services testing.

- Practical, no jargons
- Getting real, hands-on
- Testing tools and materials provided, just bring your laptop
- Test scripts are all in popular, free, and open-source frameworks.
- Proven! - 'Practical Web Test Automation' book (voted as one of the best Selenium books of all time by BookAuthority)





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Web test automation with Selenium



Hands-on

-  Develop 2-3 raw Selenium WebDriver tests for AgileTravel site, using TestWise



Introduction

-  Why most test automation attempts failed?
-  Demystify Web test automation
-  Driver framework: Selenium WebDriver
-  Test syntax framework: RSpec



Demo & Hands-on

-  More raw Selenium tests to cover more testing aspects, including waits
-  Execute tests from command line

Maintainable Test Design

-  Reusable functions
-  Page object pattern



Test Refactoring

-  Introduce 5 test refactorings
-  Demo: when and how to refactor



Hands-on

-  Refine raw selenium tests using test refactoring

Demo: Be effective

-  Debugging techniques
-  Improve efficiency

Q&A and Hands-on

-  Same test design in other languages: Python
-  Attendants independently create test scripts for a web app of their choice, under guidance of the instructor.

Attendants may prepare a few test cases from their own work/projects and implement them in the class with coaching.

Practical Continuous Testing




Hands-on

-  Create a build project to run 5 Selenium tests from Github, in an existing BuildWise server



Introduction

-  Why most CI/CD and DevOps attempts failed?
-  Demystify CI/CD, Continuous Testing & DevOps



Hands-on:

-  Set up own BuildWise server from scratch
-  Create a new Git repository with selenium tests
-  Create your own new build project and run it!



Build Scripts - the Magic

-  Build targets
-  Custom build with Rakefile




Sequential Build practices

-  Custom test execution via Environment Variables
-  Intelligent ordering, ...

Demo & Hands-on

-  Set up multiple build agents
-  Create a parallel build project

Parallel Build practices

-  Dynamic ordering
-  Auto & Manual retry
-  Delay completion, ...

Hands-on (group)

-  Manage a parallel build

Large scale test automation



-  Set up a build farm

Q&A and Demo/Hands-on




-  Execute tests in other test syntaxes: such as Python unittest, Mocha, and Cucumber

Non-UI Functional Testing with Ruby




Demo & Compare

-  SOAP testing: two methods
-  Why SOAPUI approach is bad?



API Testing in 3 Steps

-  Prepare request data (XML/JSON)
-  Invoice API/service
-  Parse response data (XML/JSON)



Hands-on

-  SOAP web services
-  REST web services
-  Extract data from XML/JSON



Test Data Generation

-  Simple: utilities such as Faker, ActiveSupport
-  Complex: templating

Data Driven Testing

-  Data Driven Testing with CSV/Excel
-  Verify file: Zip, Excel and PDF

Hands-on

-  Calling SOAP/REST webservice to get URL
-  Download and verify a zip, excel or PDF file

Database Testing

-  Straight SQL
-  Advanced: Model

Synergy

-  Run API tests in Continuous Testing server
-  Compliment UI tests

Hands-on

-  Checking emails with mailcatcher

Q&A