APACHE SLING & FRIENDS TECH MEETUP
BERLIN, 25-27 SEPTEMBER 2017

Responsive Website Testing with Galen and Selenium

Andres Pegam, pro!vision GmbH

About the Speaker

- pro!vision since 2008
- AEM dev, QE dev
- Galenium lead

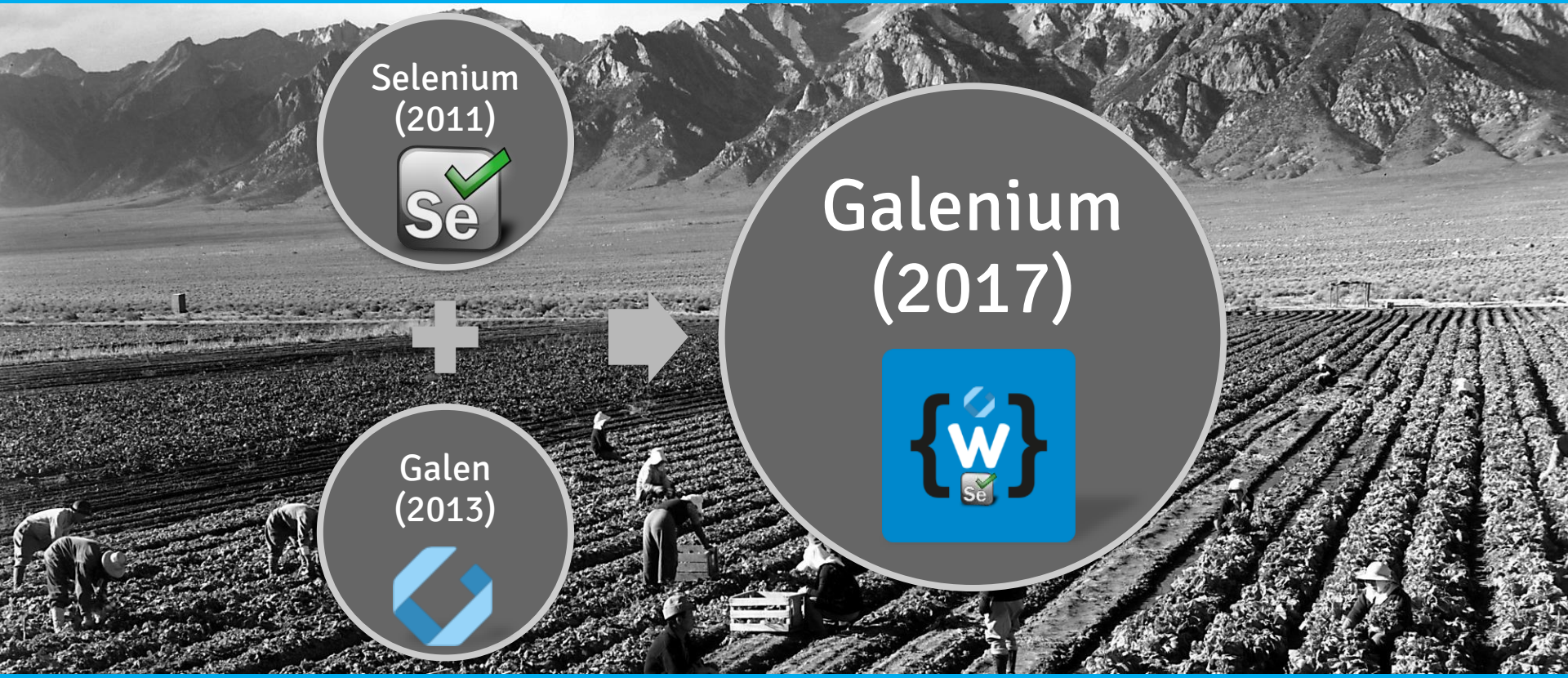
Andres Pegam

PRO!VISION
SOFTWARE CRAFTSMANSHIP

https://www.pro-vision.de

The History

The History of Galenium



The History of Galenium

Many projects

Volkswagen | Bentley | AMG | Others

Brand | DBS | .COM | CC | Brand | …

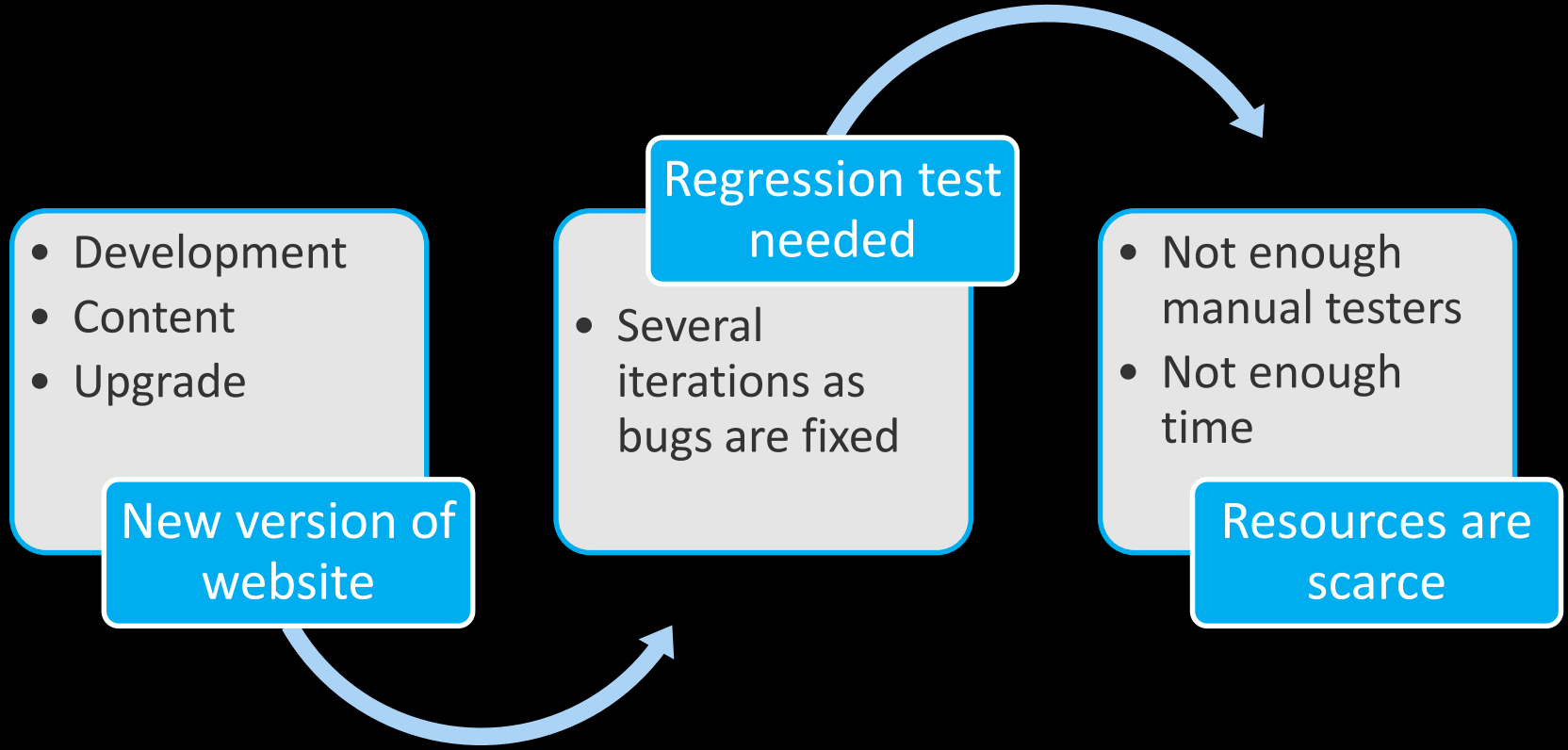
The History of Galenium

Many developers

Martin Wehner		Dirk Tschentscher		Andres Pegam		Others
Selenium integration	Multi-threaded WebDriver handling	Galen integration	invented the name “Galenium”	Maven integration	Open sourced on GitHub	…

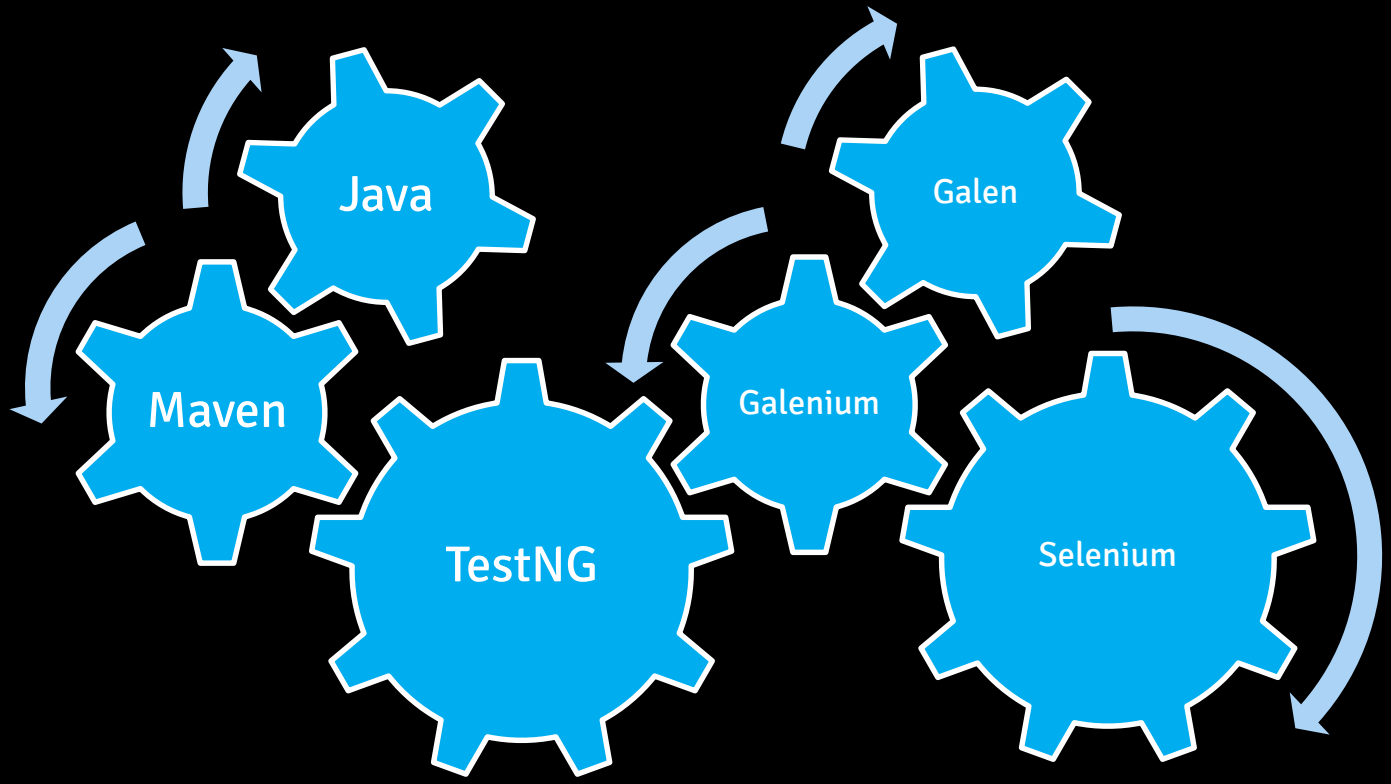
The Challenge

The Challenge



The Players

The Players



Galen

Galen - Intro

- Layout oriented specifications
  - Constraints, Image Comparison
- Uses Selenium to drive browsers
  - Interaction in JS with interface to Selenium
- Still relatively unknown
  - Web: http://galenframework.com

Galen - Basics

Objects

Via CSS selectors

Specs

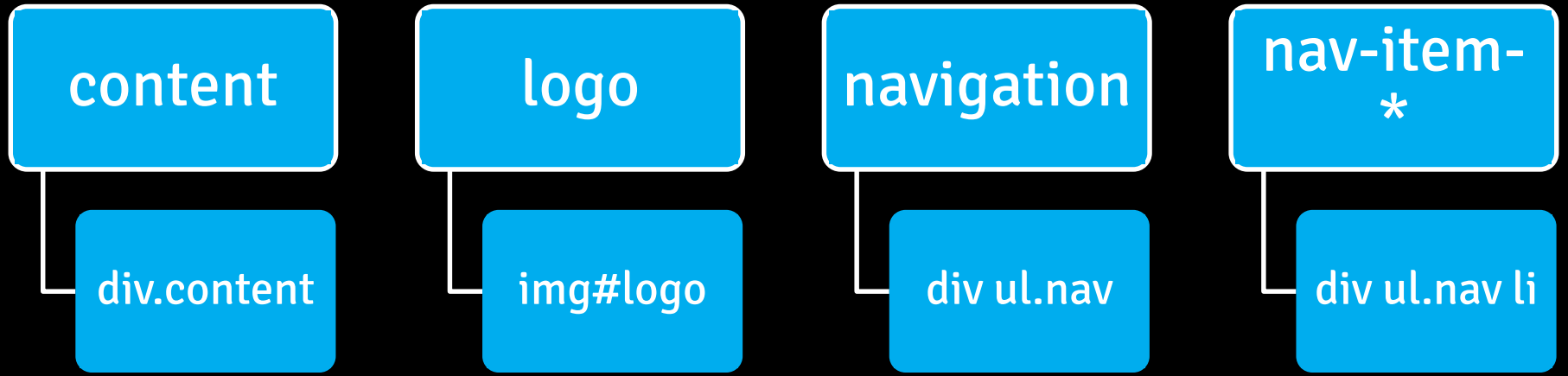
Constraints for objects

Suites

Test cases based on specs

Galen - Examples

Example Object Definitions:



Galen - Examples

Example Specs:

- **content**
  - below: navigation
  - width: 100% width of viewport
- **logo**
  - left of: navigation
  - width: 120px
- **navigation**
  - contains: nav-item-*
  - width: 100% width of viewport
- **nav-item-***
  - aligned horizontally all: logo

Galen - Outro

More

- Image Comparison
- JS tests
- Variables
- Warnings

Galen

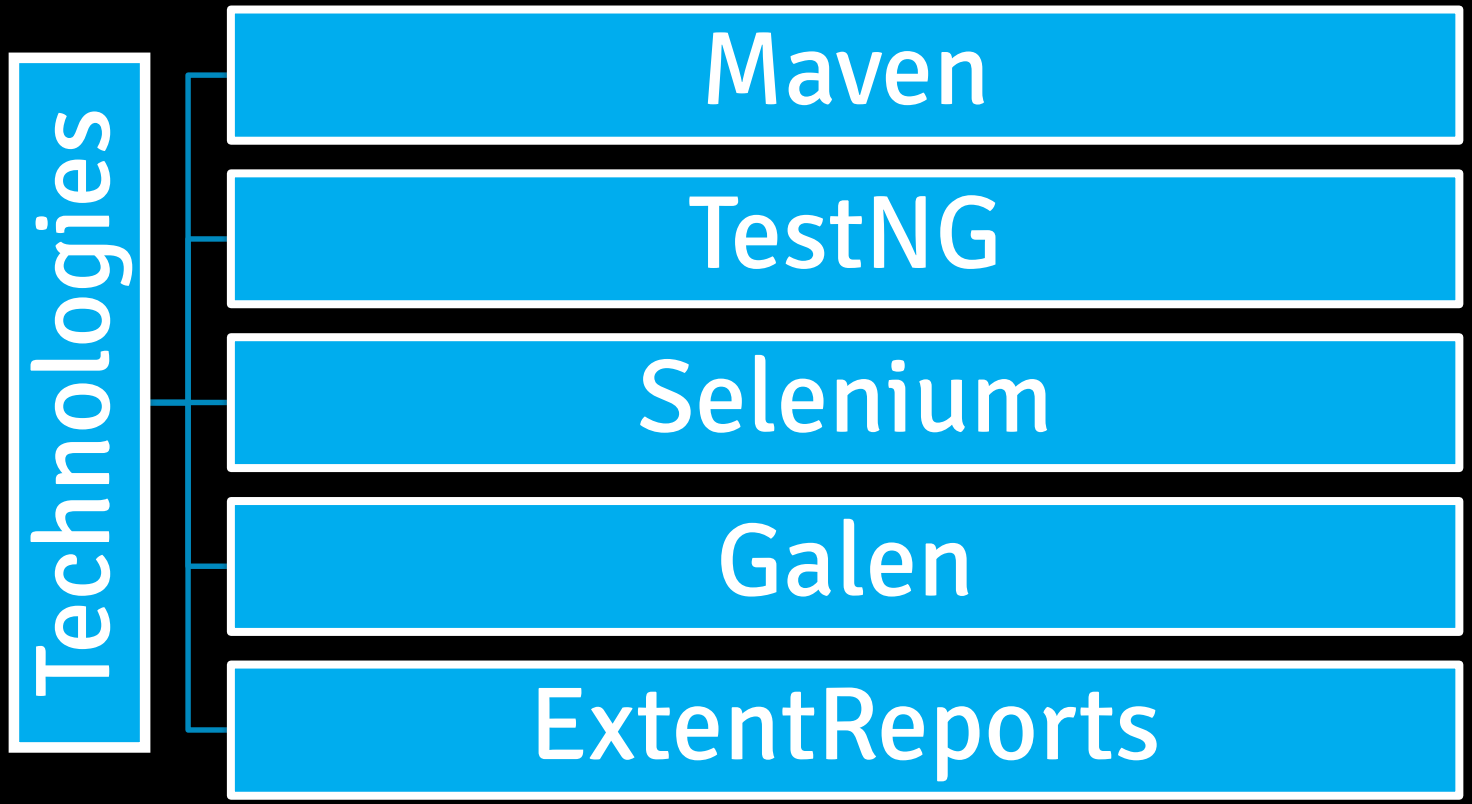
- Ranges
- Tagging
- Groups
- Object Corrections

Features

- Control loops
- Switches
- Custom rules

Galenium

Galenium - Technologies



Galenium - Parts

Galenium Context

- Access data without inheritance
- Thread safety

Selectors

- Define objects
- Use in Galen and Selenium

The Parts

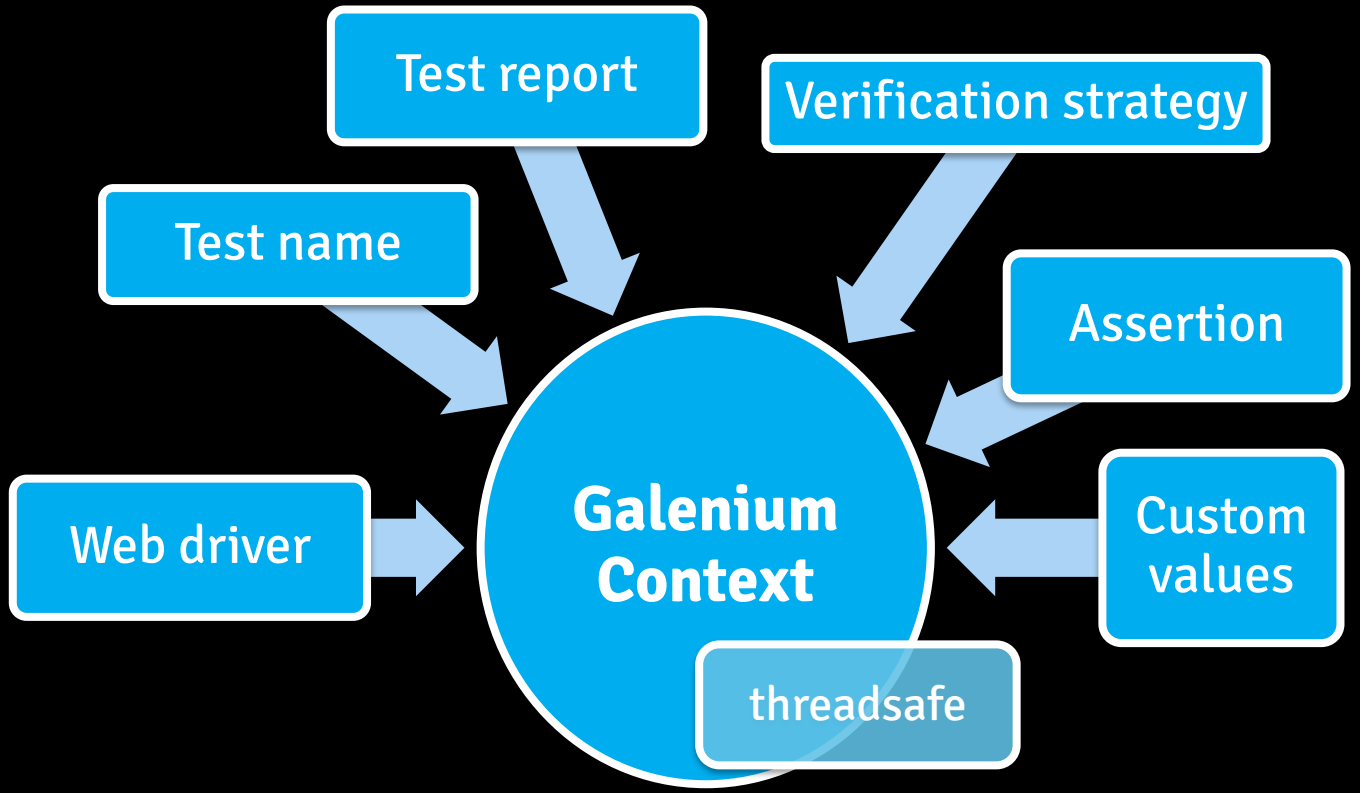
Differences and Sampling

- Image Comparison
- Text Comparison

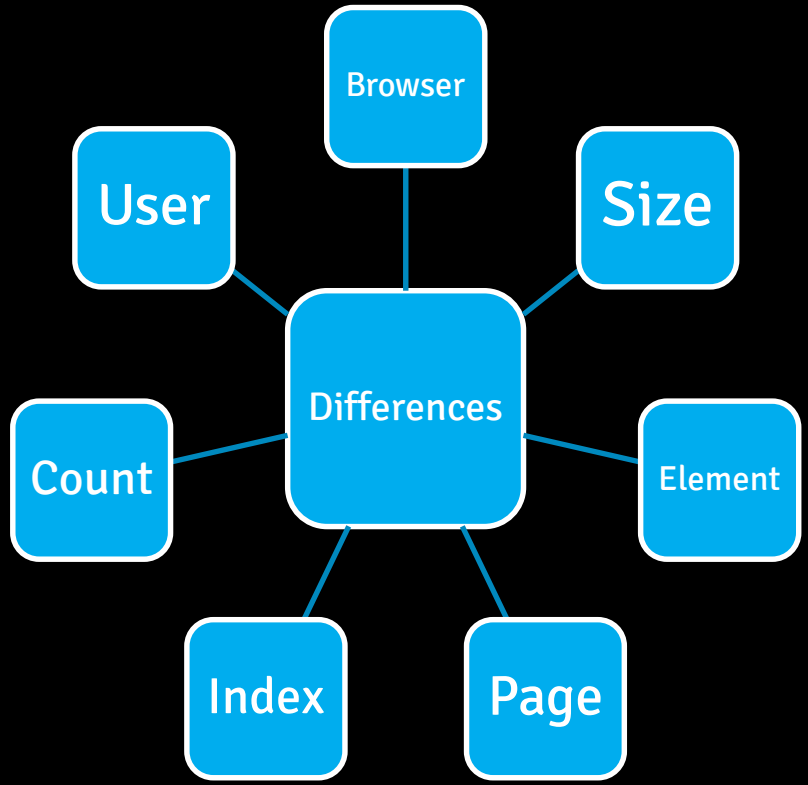
Reporting

- Test case centric
- Logging and Tagging

Galenium - Context

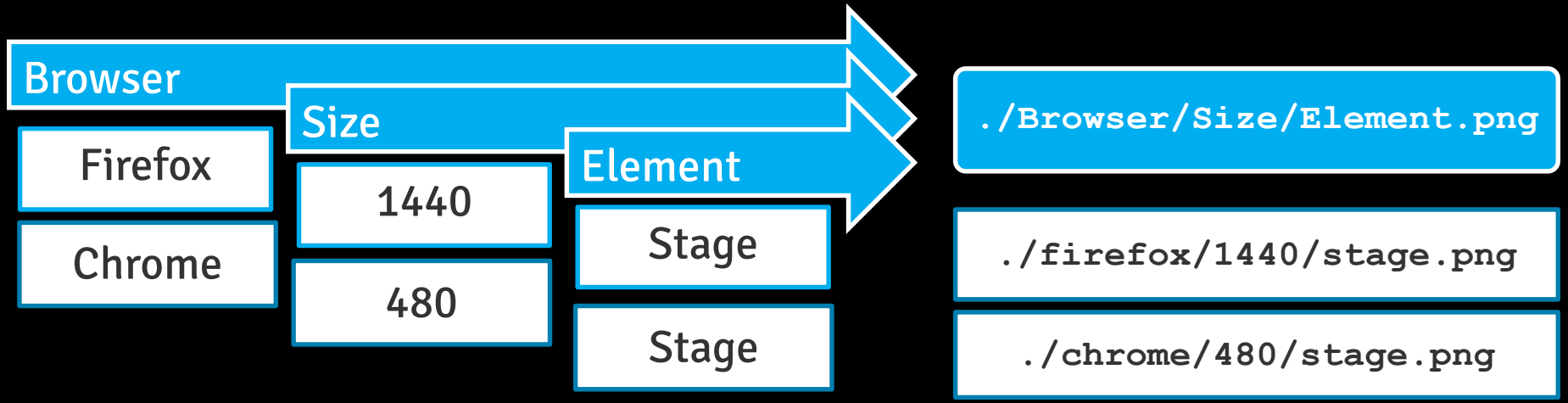


Galenium – Differences and Sampling

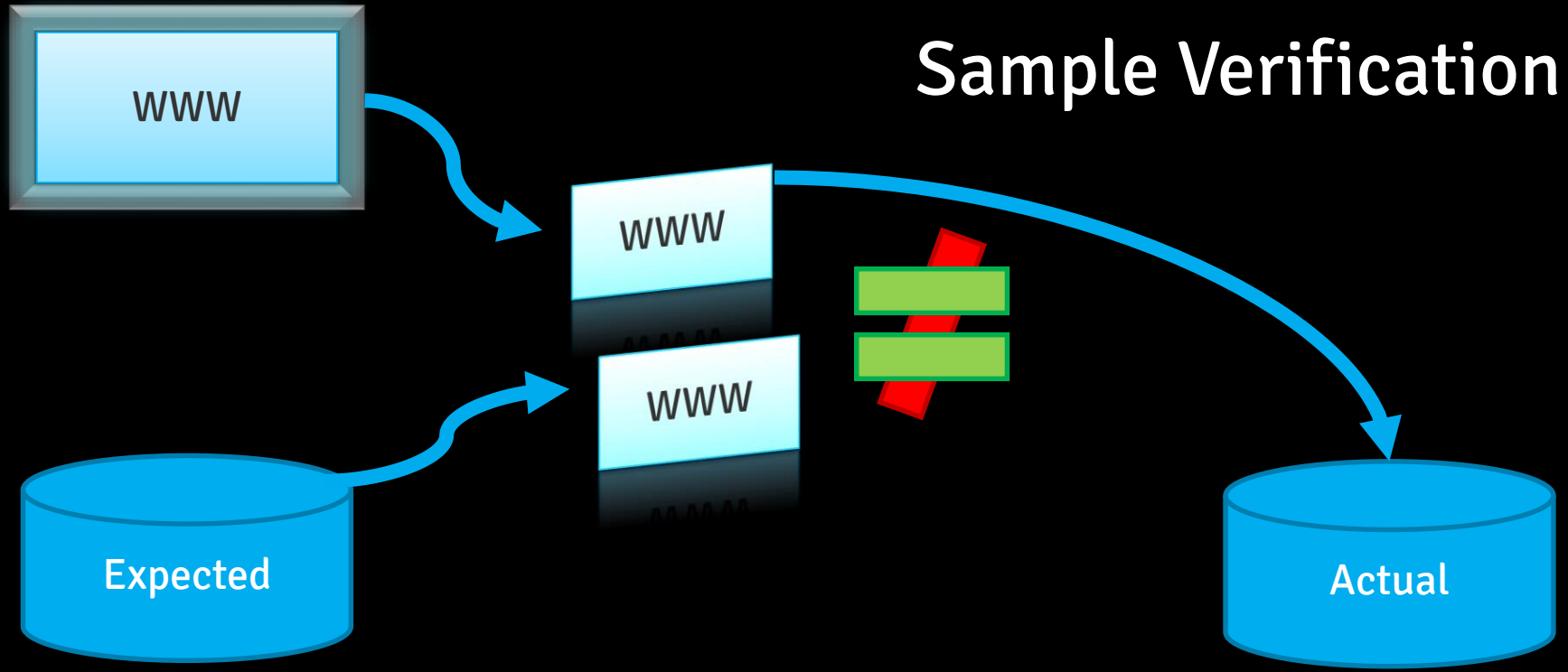


Galenium – Differences and Sampling

Differences file path example:



Galenium – Differences and Sampling



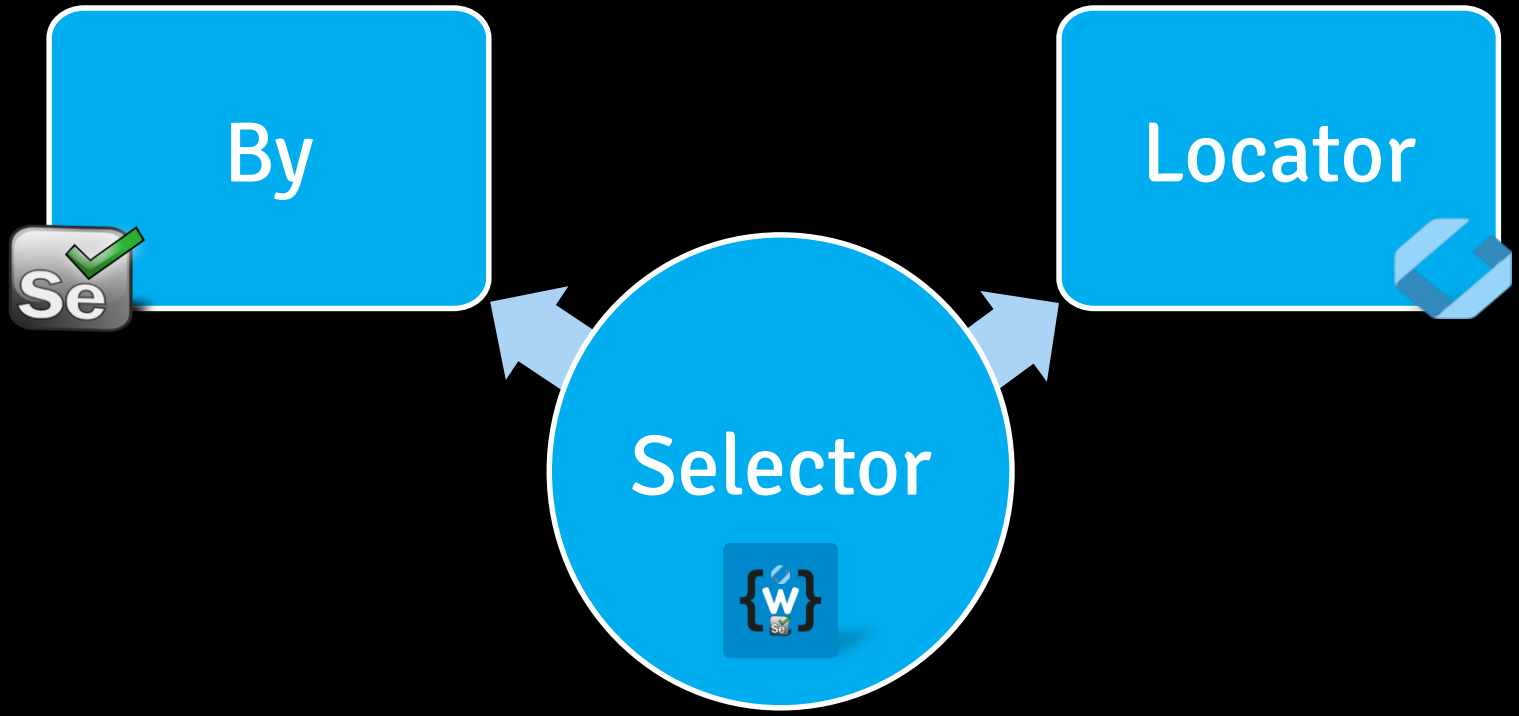
Galenium - Reporting

- ExtentReports 2.0
  - Specialized test reporting
  - Can tag test cases
  - Open Source
  - Integrated via SLF logback

Galenium - Selectors

Very central concept!

Galenium - Selectors



Galenium - Process

Galenium process

Demo

Playground Session

References

- Demo project
  https://github.com/adaptto/2017-responsive-website-testing-galen-selenium
- Galenium Website
  http://qa.wcm.io/galenium/index.html
- Galen Framework
  http://galenframework.com/
- Selenium
  http://www.seleniumhq.org/

Questions or Lunch?