



AUTOMATING RESPONSIVE WEBSITE TESTING

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#testcon

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WHAT IS RESPONSIVE WEB DESIGN



One URL

+



Single content

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Same Code

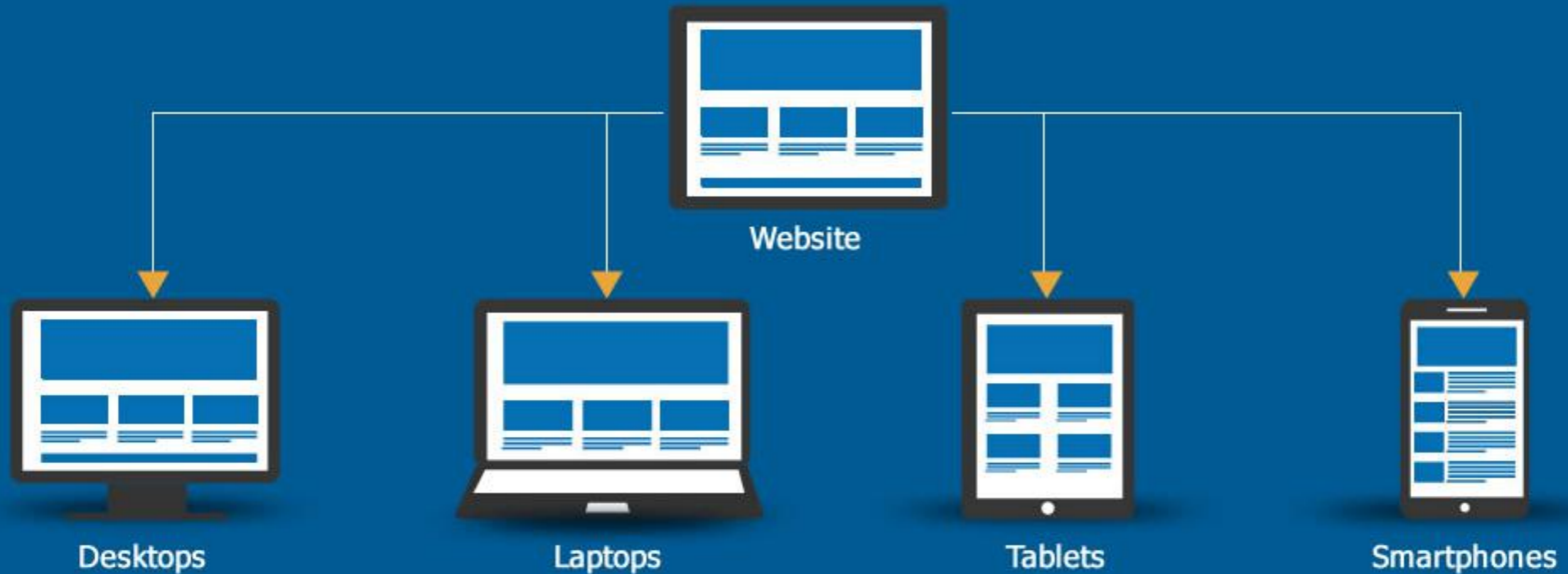
+



Using CSS3
Media Queries



Multi screen



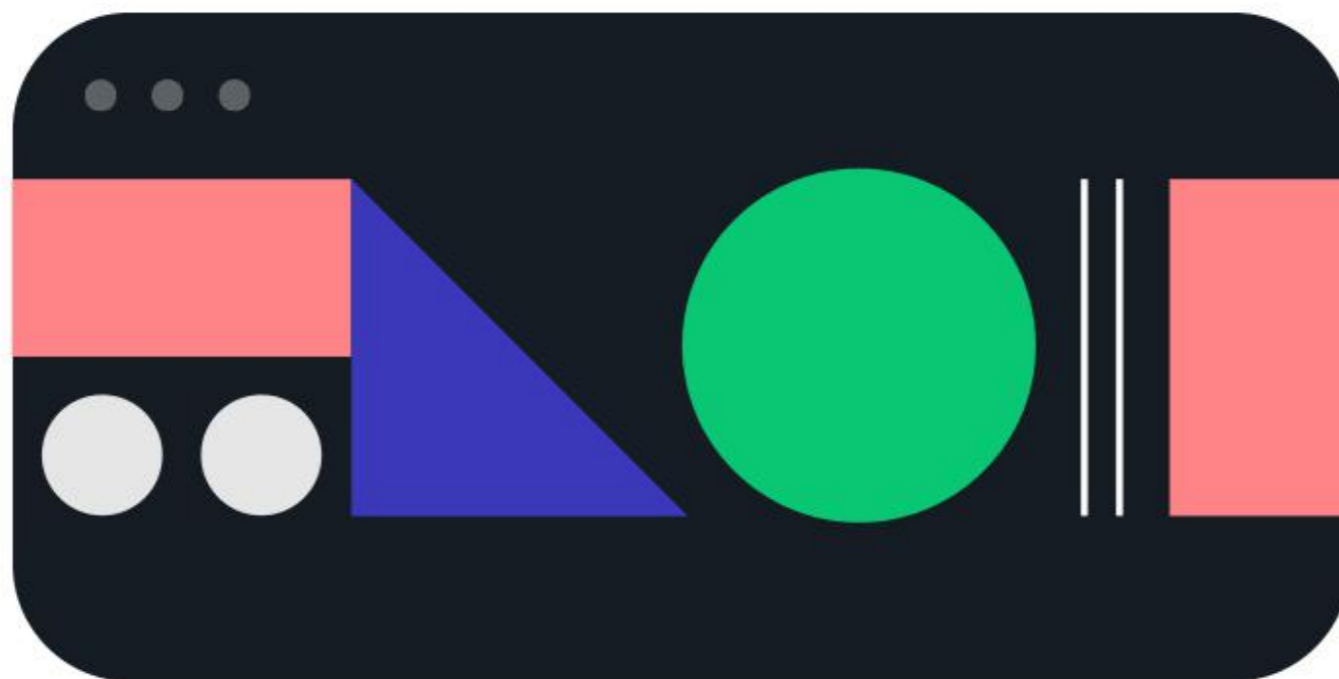
@HANG&R17.TCT

- Ethan Marcotte: The Godfather of RWD
- Write once publish everywhere.
- Design your development to meet user's behaviour and environment

HOW IS IT ACHIEVED

- ▶ A flexible grid based layout
 - Page element sizing should be in relative units
- ▶ Enable flexible media
 - Flexible images are sized in relative units
- ▶ Addition of media queries
 - Allow the page to use different CSS style rules based on the width of the browser





RESPONSIVE WEB DESIGN TESTING





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THINGS TO KEEP IN MIND

Pages should be readable on all resolutions

Content defined 'important' need to be visible in all breakpoints

Text, controls, image alignment
color, shading, gradient
consistency

Typed text (data entry) scrolls
and displays properly

COMMON CHALLENGES

Selecting set of devices for test

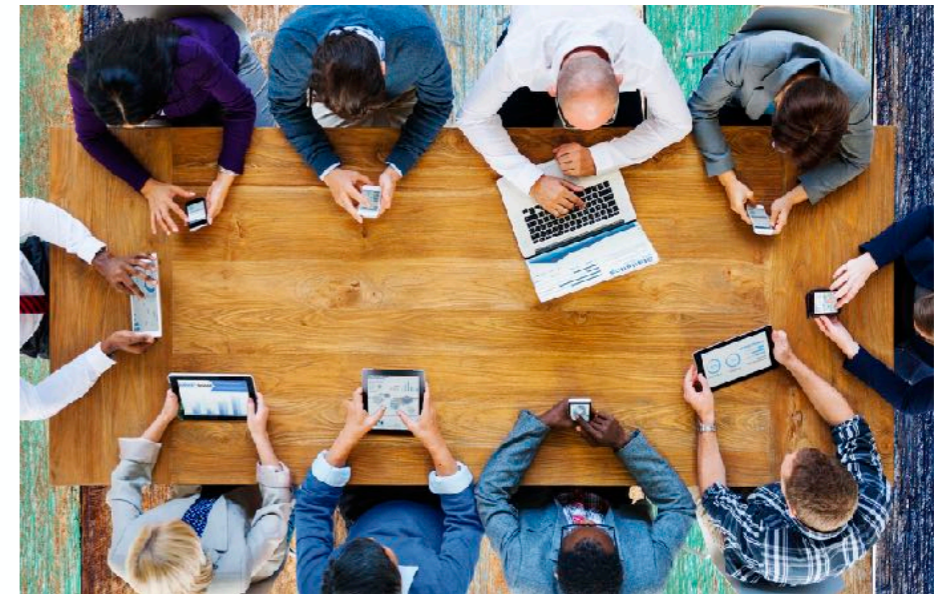


Frequent change of requirements

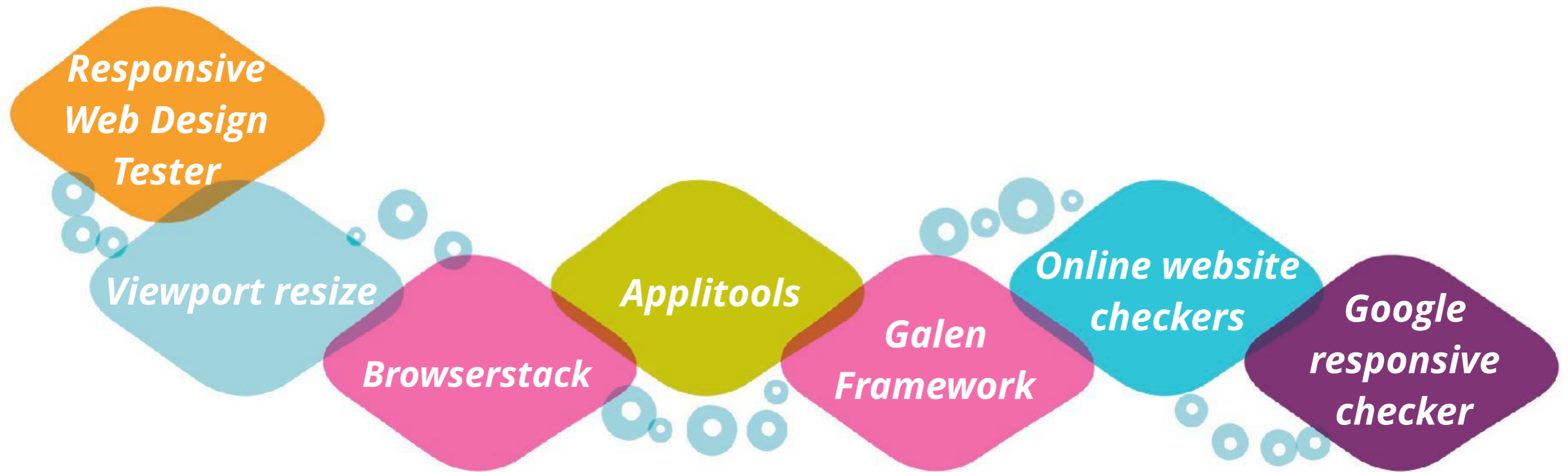


"The client kept changing the requirements on a daily basis, so we decided to freeze them until the next release."

Manual testing on all the devices?

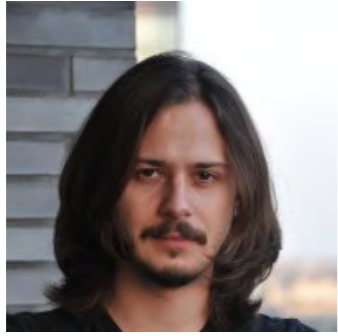


AVAILABLE TOOLS IN THE MARKET



GALEN FRAMEWORK

GALEN FRAMEWORK



Developed by Ivan Shubin



Open Sourced, distributed under Apache License 2



Designed with responsiveness in mind



Uses Selenium for web page interactions

HOW GALEN WORKS

- ➔ Define a set of devices that needs testing
- ➔ Write a spec file that defines the layout on these devices
- ➔ Galen opens a browser, resizes to specified dimension and verifies the spec file
- ➔ Can be used along with Selenium Grid

GALEN SPEC FILE

- ★ Language used to define the layout of the page on different devices
- ★ Uses simple English words to describe the layout
- ★ Human readable
- ★ Minimal text to define the complete page

GALEN SPEC FILE

```
@objects
  Header          css          html>body>header
  |
= Header Section =
  @on desktop
    Header:
      width is 100% of viewport/width
      height is ~105px

  @on mobile
    Header:
      width is 100% of viewport/width
      height is 55px
```

GALEN SPEC LANGUAGE

- ◆ *.gspec
- ◆ Object Definition
- ◆ Tagging
- ◆ Relative positions (near, below, inside)
- ◆ Alignment
- ◆ Height and Width
- ◆ Color Scheme
- ◆ Image Comparison
- ◆ CSS properties

DEMO

Github repo:

<https://github.com/PranathiB/Galen-TestCon>



```
galen check filename --url "http://www." --size "" --include "mobile, desktop" --htmlreport "reports"
```


OTHER FEATURES

- * Error Reporting using HTML and JSON
- * Screenshot capture
- * Image Comparison
- * Warning levels
- * Custom errors

THANK YOU

Questions?

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