



# < Visual/CSS Regression Testing />

Catching the “Unintended Consequences” of Modifying Your Theme

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DrupalGovCon

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# Who am I?



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# ABOUT PROMET SOURCE



Founded in 2003, Promet Source is a web design and development company that specializes in open source solutions for government, higher education and association/nonprofit clients.



Promet realigned its core services and solutions to be a Drupal development shop in 2009.



With headquarters in Chicago and an office in Cebu, Promet Source is a comprehensive Drupal development agency that offers custom design, custom implementations and full 24x7 support to its clients.





# What is Regression Testing?

How do you regression test the visual components of a user interface?

**What if you could take a “before” and “after” picture....**

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**...and could easily compare those pictures to each other?**



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# Enter PhantomCSS

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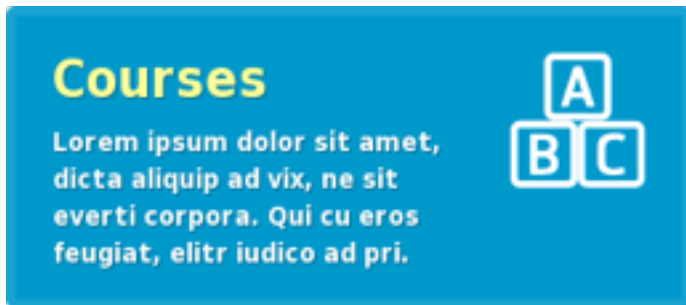
# How does it work?

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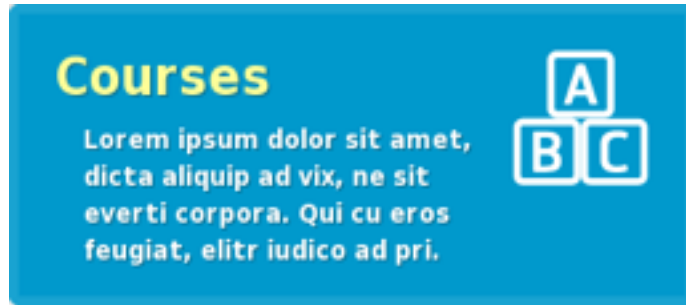




# What does that look like?



Baseline



Comparison



PhantomCSS Diff

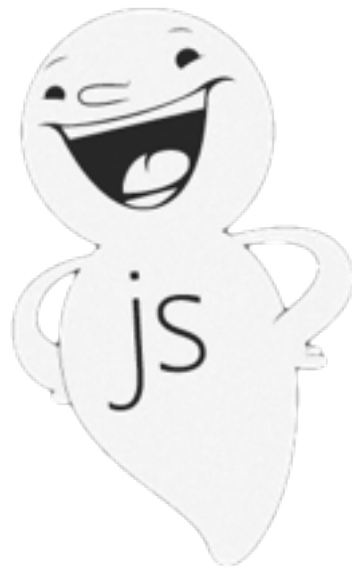


# PhantomCSS Dependencies

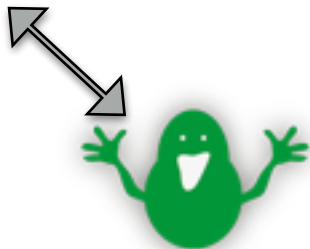


PhantomJS

+



CasperJS



SlimmerJS



# Other Dependencies for Testing Servers (Linux)

 FontConfig

 FreeType

 ttf-dejavu

 ttf-mscorefonts-installer

 xvfb (SlimerJS)



# Skillsets Needed to Write Tests for PhantomCSS

## Javascript



```
casper.start( 'url-of-web-page' );  
casper.then(function(){  
    phantomcss.screenshot('#css-selector', 'image-name');  
});  
casper.then( function now_check_the_screenshots(){  
    phantomcss.compareAll();  
});  
casper.then( function end_it(){  
    casper.test.done();  
});  
casper.run(function(){  
    phantom.exit(phantomcss.getExitStatus());  
});
```



# Javascript Object Instances Available to Test Scripts



phantom








casper



phantomcss



# Author Recommended Best Practices for PhantomCSS

-  Does not replace functional testing
-  Don't use complex CSS3 selectors
-  Name Your Screenshots
-  Don't try to test all the visuals
-  Full page screenshots are a bad idea



# Let's Look at a Test Site



Fixed Header and Nav Bar  
Nav bar Items are Mega Menus

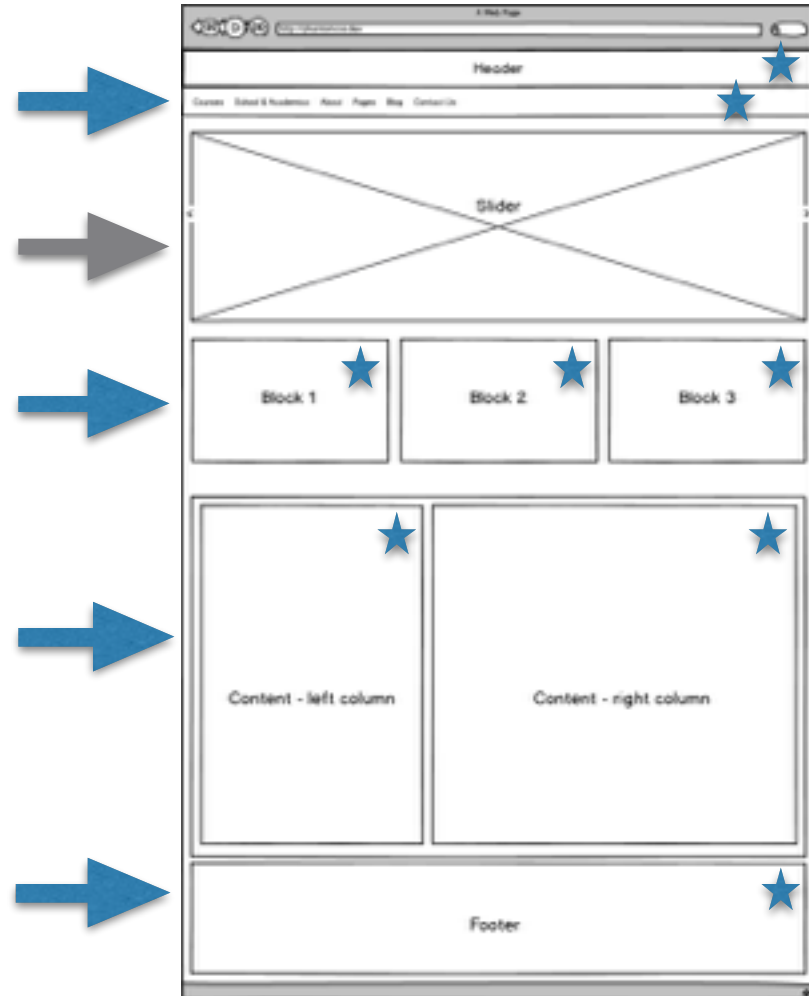
Front Page Slider

Pre Content Blocks








Blocks have mouseover background color change

Two column content area

Fixed Footer



# Test Suite for the Test Site

-  Home page
-  Home page with each Megamenu Displayed
-  Each Megamenu Element
-  header, nav bar, footer
-  PreContent Blocks
-  PreContent Blocks in hover state
-  Content Areas (left and right)

20 images in all





Let's Switch to the Actual Site and Run a Demo

# Documentation

 [casperjs.readthedocs.org](https://casperjs.readthedocs.org)

 [casperjs.readthedocs.org/en/latest/selectors.html](https://casperjs.readthedocs.org/en/latest/selectors.html)

 [casperjs.readthedocs.org/en/latest/modules/casper.html](https://casperjs.readthedocs.org/en/latest/modules/casper.html)

 [casperjs.readthedocs.org/en/latest/modules/mouse.html](https://casperjs.readthedocs.org/en/latest/modules/mouse.html)

 [casperjs.readthedocs.org/en/latest/modules/utils.html](https://casperjs.readthedocs.org/en/latest/modules/utils.html)

 [phantomjs.org/documentation/](https://phantomjs.org/documentation/)

 [github.com/Huddle/PhantomCSS/blob/master/README.md](https://github.com/Huddle/PhantomCSS/blob/master/README.md)



# Demo Test Script

<http://bit.ly/1I6AtfH>



# Questions?



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