

Implementing a CSS Preprocessor



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spartandesignuniversity.com



Agenda



Review CSS preprocessors

View capabilities

Test our site

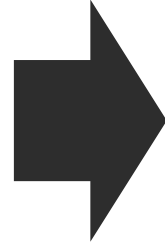
See examples

Convert “Bethany’s Pie Shop” site



What Is a CSS Preprocessor

Scripting Language



CSS

Sass

less

stylus

SASS Basics

Preprocessing



Modules



Variables



Mixins

Nesting



Extend

Partials



Operators



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Hands-on Responsive Web Design 1:
Media Queries & CSS Preprocessing

by Paul Cheney

Responsive, mobile first web design is a skill required for web developer's in today's mobile world. This course, you'll learn how to build a responsive template using SASS and a CSS preprocessor that you'll use in your next web development...

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Table of contents

Description

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Discussion

Learning Check

Related Courses

▶ Course Overview

✓

🔖

1m 21s

▼

▶ Introduction

✓

🔖

3m 19s

▼

▶ Building the Start File

✓

🔖

15m 3s

▼

▶ HTML Semantic Markup

✓

🔖

4m 50s

▼

▶ CSS Preprocessor Setup

✓

🔖

18m 2s

▼

▶ Auto Dealer Page Structure

✓

🔖

20m 31s

▼

▶ Auto Dealer Page Content

✓

🔖

24m 37s

▼

▶ Modify the Design and Testing


🔖

19m 49s

▼

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Course author



Paul Cheney

Paul Cheney specializes in Responsive Design, Content Management Systems, and Virtual Reality Photography. He teaches courses for Pluralsight and runs a web development business and Spartan Design...

Course info

Level

Intermediate

Rating

★★★★★ (89)

My rating

★★★★★

Duration

1h 47m

Released

6 Jun 2017

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Testing Your Site

HTML Checker

Mobile Friendly

CSS Checker

Speed Test



HTML Checker

Nu Html Checker

This tool is an ongoing experiment in better HTML checking, and its behavior remains subject to change

Showing results for <https://sandbox.spartandesignweb.com/start/>

Checker Input

Show ☐ source ☐ outline ☐ image report

Check by

<https://sandbox.spartandesignweb.com/start/>

Use the Message Filtering button below to hide/show particular messages, and to see total counts of errors and warnings.

1. **Warning** Section lacks heading. Consider using `h2` - `h6` elements to [add identifying headings to all sections](#).

From line 42, column 13; to line 42, column 45

```
<section class="column small-12">
```

Document checking completed.

Used the HTML parser.

Total execution time 413 milliseconds.



CSS Validation



The W3C CSS Validation Service

W3C CSS Validator results for <https://sandbox.spartandesignweb.com/start/> (CSS level 3 + SVG)

Jump to: [Warnings \(22\)](#)

[Validated CSS](#)

W3C CSS Validator results for <https://sandbox.spartandesignweb.com/start/> (CSS level 3 + SVG)

Congratulations! No Error Found.

This document validates as [CSS level 3 + SVG](#) !

To show your readers that you've taken the care to create an interoperable Web page, you may display this icon on any page that validates. Here is the XHTML you could use to add this icon to your Web page:



```
<p>  
  <a href="https://jigsaw.w3.org/css-validator/check/referer">  
      
  </a>  
</p>
```



```
<p>  
  <a href="https://jigsaw.w3.org/css-validator/check/referer">  
      
  </a>  
</p>
```



Mobile Friendly Test

<https://search.google.com/test/mobile-friendly>

Mobile-Friendly Test

Is your web page mobile-friendly?

URL

CODE

Enter a URL to test

TEST URL

About this tool

Test how easily a visitor can use your page on a mobile device. Just enter a page URL to see how your page scores.

[MORE USAGE TIPS](#) →

Why mobile?

The web is being accessed more and more on mobile devices. Designing your websites to be mobile friendly ensures that your pages perform well on all devices.

[LEARN MORE](#) →

About Search Console

Search Console alerts you about critical site errors such as detection of hacked content, and helps you manage how your content appears in search results.

[GO TO SEARCH CONSOLE](#) →

Mobile-Friendly Test

http://sandbox.spartandesignweb.com/start/

Test results

✓ No loading issues [VIEW DETAILS](#)

Tested on: May 21, 2020 at 9:26 AM

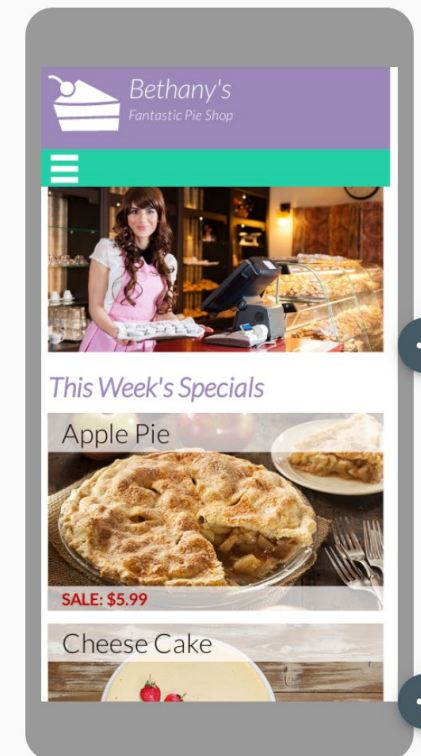
Page is mobile friendly

This page is easy to use on a mobile device


Additional resources

- [Open site-wide mobile usability report](#)
- [Learn more about mobile-friendly pages](#)
- [Post comments or questions to our discussion group](#)

Rendered page [HTML](#) [SCREENSHOT](#)



Website Speed Test



[Product](#) [Pricing](#) [Resources](#) [Support](#) [Tools](#)

Pingdom Website Speed Test

Enter a URL to test the page load time, analyze it, and find bottlenecks.

URL

Test from

START TEST

www.example.com

North America - USA - San Francisco

Nobody Likes a Slow Website

We built this Website Speed Test to help you analyze your website load speed.

The test is designed to help make your site faster by identifying what about a webpage is fast, slow, too big, and so on.

We have tried to make it useful both for experts and novices alike. In short, we wanted it to be an easy-to-use tool built to help webmasters and web developers everywhere optimize their website performance.

About Pingdom

Pingdom offers cost-effective and reliable uptime and performance monitoring for your website.

We use more than 70 global polling locations to test and verify our customers' websites 24/7, all year long.

With Pingdom you can monitor your websites' uptime, performance, and interactions for a better end-user-experience.

Your customers will thank you.

State Colors

The following colors are used in the chart bars to indicate the different stages of a request.

DNS	Web browser is looking up DNS information
SSL	Web browser is performing an SSL handshake
Connect	Web browser is connecting to the server
Send	Web browser is sending data to the server
Wait	Web browser is waiting for data from the server
Receive	Web browser is receiving data from the server
Blocked	Web browser is not ready to send


Content Types

The following icons are used to indicate different content types.

HTML	HTML Document
JavaScript	JavaScript file
{ }	CSS file
Image	Image file
Text/Plain	Plain text document
Other	Any other unknown content type
Warning	The request got a 4XX, 5XX response or couldn't be loaded
Redirect	The request got a 3XX response and was redirected

Server Response Codes

To make it easy for you to differentiate between the HTTP response codes in the chart, we've added color-coded data beside each URI



[Product](#) [Pricing](#) [Resources](#) [Support](#) [Tools](#)

Pingdom Website Speed Test

Enter a URL to test the page load time, analyze it, and find bottlenecks.

URL

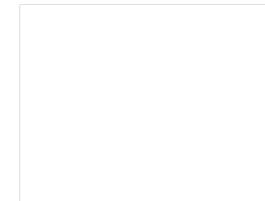
Test from

START TEST

http://sandbox.spartandesignweb.com/start/

North America - USA - San Francisco

Your Results:

[Download HAR](#) [Share Result](#)

Performance grade

B 84

Page size

634.8 KB

Load time

328 ms

Requests

16

Improve page performance

GRADE	SUGGESTION
B 88	Make fewer HTTP requests
A 100	Avoid empty src or href
A 100	Put JavaScript at bottom
A 100	Reduce the number of DOM elements
A 100	Make favicon small and cacheable
A 100	Avoid HTTP 404 (Not Found) error

Response codes

RESPONSE CODE	RESPONSES
200 OK	15
404 Not Found	1



HTTP Requests

GRADE

SUGGESTION

B

88

Make fewer HTTP requests



Decreasing the number of components on a page reduces the number of HTTP requests required to render the page, resulting in faster page loads. Some ways to reduce the number of components include: combine files, combine multiple scripts into one script, combine multiple CSS files into one style sheet, and use CSS Sprites and image maps.

```
<meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1">
```

```
<link href="https://fonts.googleapis.com/css2?family=Lato:ital,wght@0,300;0,700;1,300&family=Roboto:ital,wght@0,300;0,400;0,700;1,300;1,400;1,700" rel="stylesheet">
```

```
<link href="css/normalize.css" rel="stylesheet">
```

```
<link href="css/small.css" rel="stylesheet">
```

```
<link href="css/medium.css" rel="stylesheet">
```

```
<link href="css/large.css" rel="stylesheet">
```

```
<title>Home | Bethany's Pie Shop</title>
```



SASS

Preprocessing

Variables

Nesting

Partials

Modules

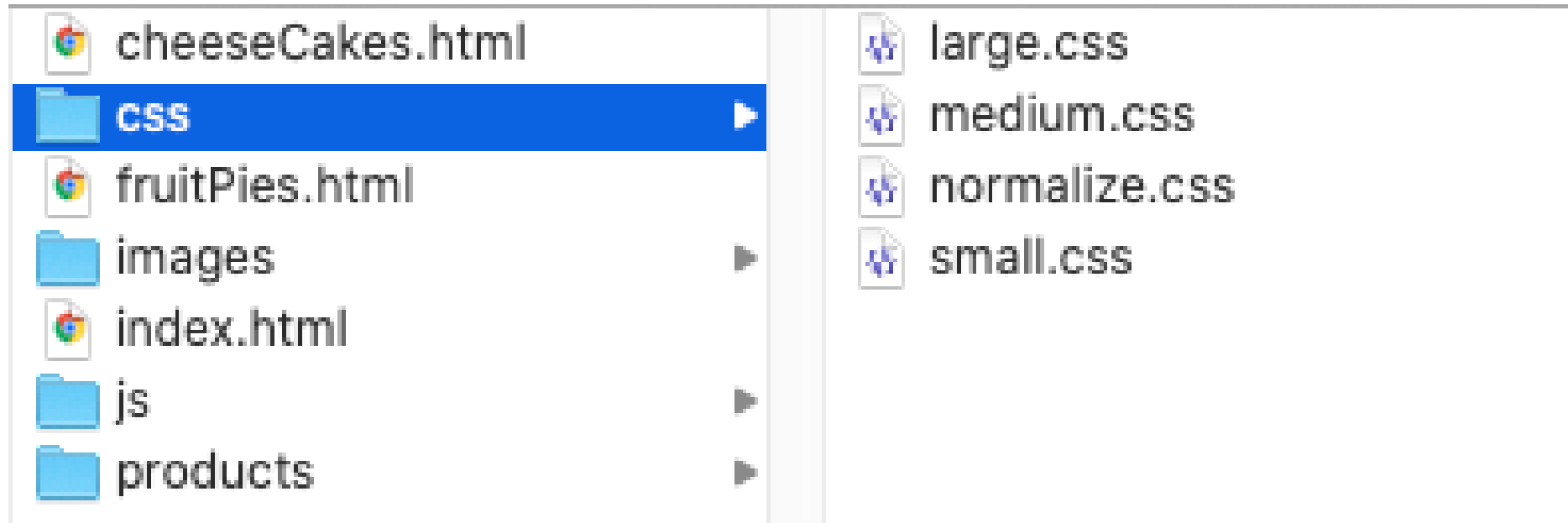
Mixins

Extend

Operators



Modularize



Partials

 `normalize.css`

 `small.css`

 `medium.css`

 `large.css`

 `_normalize.scss`

 `_small.scss`

 `_medium.scss`

 `_large.scss`

 `_variables.scss`



Variables



```
$primaryColor: #123456;
```



```
h1 {  
  color: $primaryColor;  
}
```



```
h1 {  
  color: #123456;  
}
```



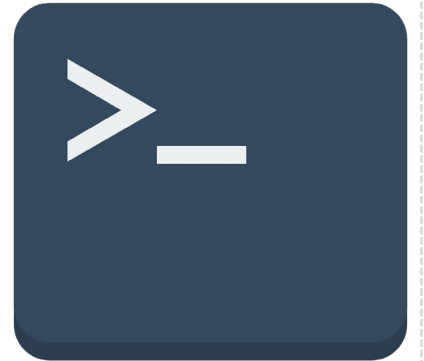
Nesting

```
header {  
  background-color: green;  
  h1 {color: blue;}  
  h2 {color: purple;}  
}
```

```
header {  
  background-color: green;  
}  
header h1 {  
  color: blue;  
}  
header h2 {  
  color: purple;  
}
```



Preprocessing



Start File



demos



start



Demo



Rename folder and files

Add a new variables file

Create a master file

Relink style sheet

Preprocessing



Demo



Implement variables

Minify CSS



Demo



Implement nesting



Summary



Review CSS preprocessors

View capabilities

Test our site

See examples

Convert “Bethany’s Pie Shop” site





Introduction

Basic Page with Semantic Tags

Style Sheets and Media Queries

Build the Header and Footer

Build Responsive Navigation

Build the Hero Image

Build this Weeks Specials

Responsive Fruit Pie Gallery

SASS CSS Preprocessor

Introduction to Bootstrap

Wrap Up

