{ cōdify }

DESIGN STUDIO

HOW Design Conference 2014

Photoshop to HTML
Chris Converse

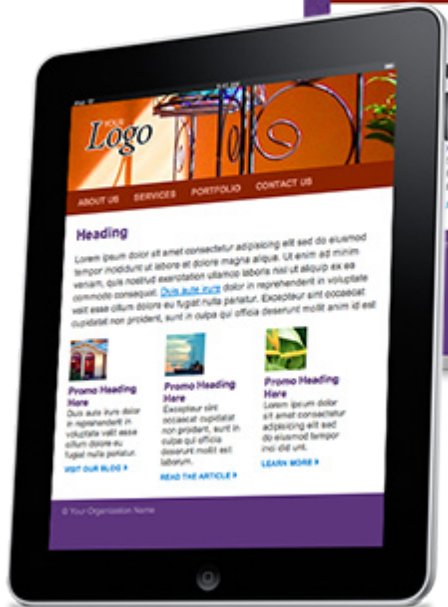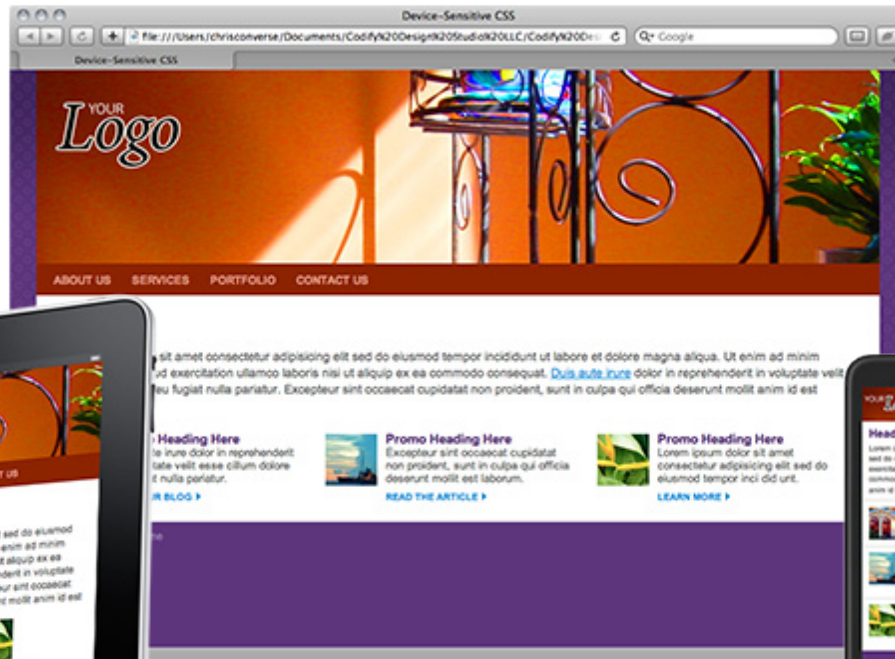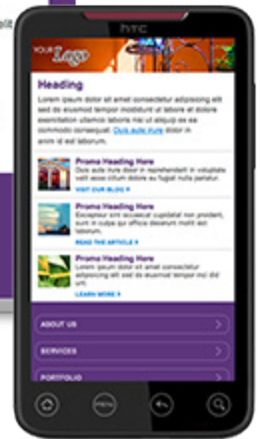ˈkōd əˌ fī *verb.* To arrange (design) into a systematic code.

Responsive Web Layout

Computer Screen

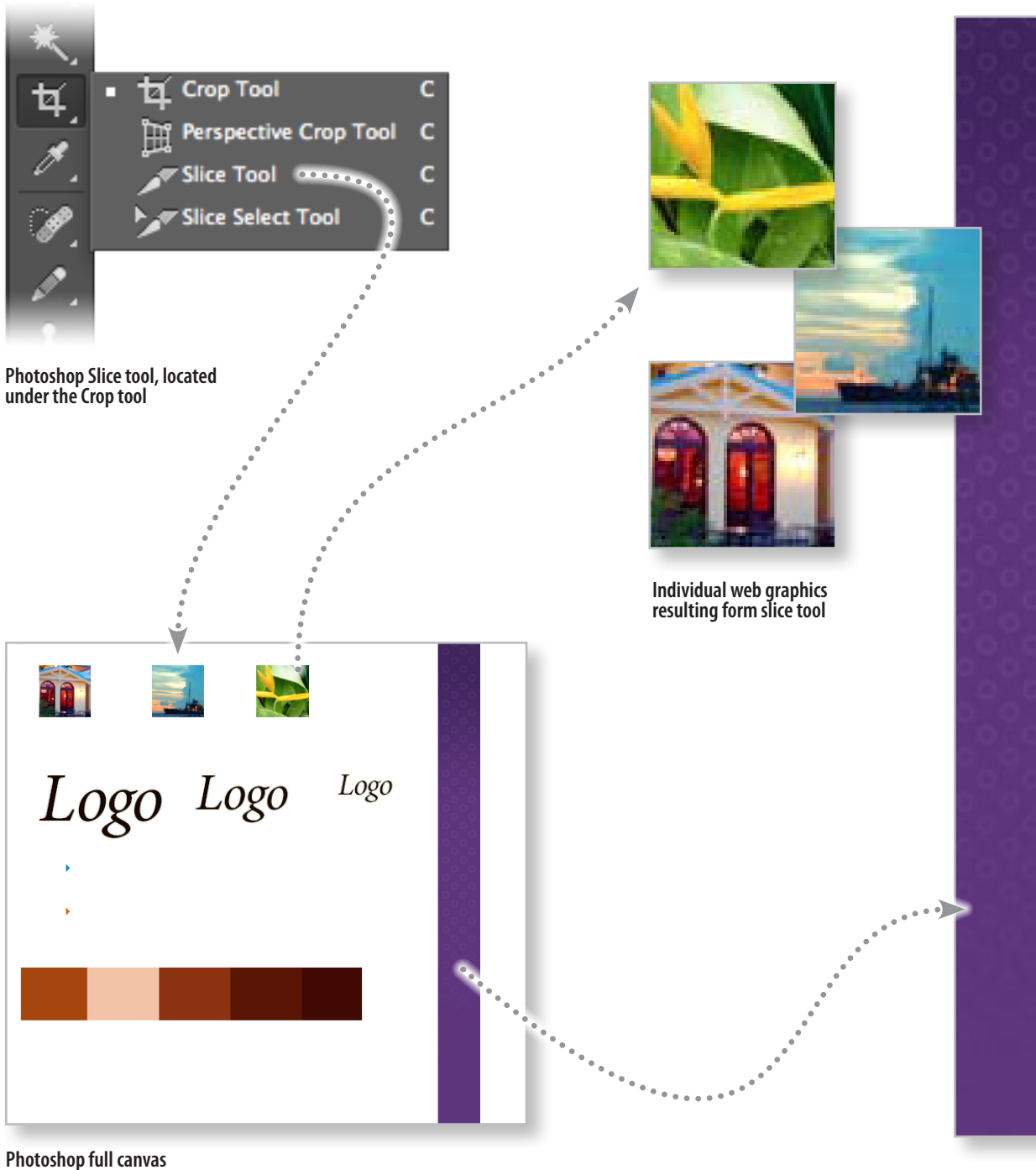**Tablet Screen**

Phone Screen

Use this QR code to view this responsive design example on your camera-enabled device, or visit:
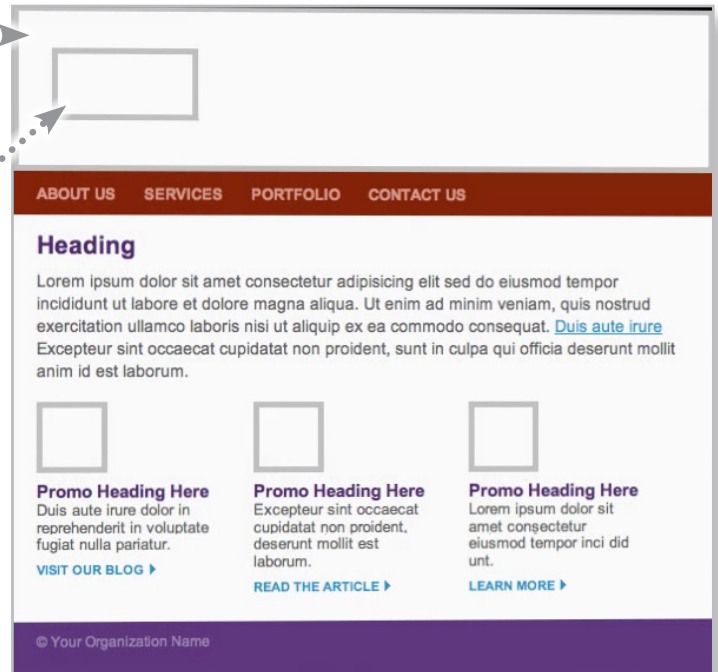
codifydesign.com/go/how

ˈkōd ə̩ fī

Slicing Artwork

Both Photoshop and Illustrator provide tools for slicing artwork into small, individual, web-optimized graphics that can be referenced in your web layouts via HTML or CSS.

	Crop Tool	C
	Perspective Crop Tool	C
	Slice Tool	C
	Slice Select Tool	C

Photoshop Slice tool, located under the Crop tool

Individual web graphics resulting form slice tool

Logo   *Logo*   *Logo*

Photoshop full canvas

HTML Containers for Layout

CSS is used to assign the imagery into the HTML elements specified in the HTML5 document.

HTML containers

```
<header>
      <a class="logo" href="#"></a>
</header>
```

HTML markup for the banner and logo

```
header {
      height: 225px;
      background: url(../images/banner_large.jpg) no-repeat right 0px;
}

header a.logo {
      width: 150px; height: 85px; top: 35px; left: 20px;
      background-image: url(../images/logo_large.png);
}
```

CSS rules for the banner and logo

HTML5 for Older IE Browsers

In order to help the adoption of HTML5, Google offers a free HTML5 shiv. This offering is a single JavaScript file that can be added to your HTML5 web page. Once added, this script allows Internet Explorer 6, 7 & 8 to render HTML5 as if it were an earlier version of HTML.

HTML page

```
<!DOCTYPE HTML>
<html>
    <!-- This template was designed and developed by Chris Converse, Codify Design Studio -->
    <head>
        <meta charset="UTF-8">
        <title>Device-Sensitive CSS3 Template</title>
        <meta id="view" name="viewport" content="width=device-width, initial-scale=1.0" />
        <meta http-equiv="X-UA-Compatible" content="IE=9" />
        <link rel="stylesheet" type="text/css" href="includes/stylesheet_all.css" />
        <link rel="stylesheet" type="text/css" href="includes/stylesheet_layout_large.css" />
        <link rel="stylesheet" type="text/css" href="includes/stylesheet_layout_medium.css" media="only screen and (min-width:551px) and (max-width:900px)">
        <link rel="stylesheet" type="text/css" href="includes/stylesheet_layout_small.css" media="only screen and (min-width:50px) and (max-width:550px)">
        <!--[if lt IE 9]>
            <script src="http://html5shiv.googlecode.com/svn/trunk/html5.js"></script>
            <link rel="stylesheet" type="text/css" href="includes/stylesheet_ie.css" />
        <![endif]-->
    </head>
    <body>
        <div class="page">
            <header><a class="logo" href="#"></a></header>
            <div class="page_content">
                <div class="page_content_container_left">
                    <div class="content">
                        <h1>Heading H1</h1>
```

HTML markup for the banner

One unique aspect of this example is there are no `<img>` tags in the layout. Images are brought in as backgrounds to other elements, which is determined by CSS. The only HTML markup the `<header>` tag includes is an anchor link for the logo. CSS is used to determine the size and background image to use in the header, as well as which version of the logo to place in the background of the `<a>` tag.

```
<header> <a class="logo" href="#"></a> </header>
```


75.2 Kb combined file size
Large banner and sidebar photo
compressed to JPG @ 65% quality.

32.4 Kb combined file size
Medium banner and sidebar photo
compressed to JPG @ 50% quality.

12.1 Kb combined file size
Small banner and sidebar photo
compressed to JPG @ 30% quality.

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CSS3 Media queries

The following lines of code represent the syntax for including alternate CSS files based on screen size. The CSS file responsible for large screen layout is always included for older browsers. When screen conditions are met, the medium and small screen files override the layout settings in the large layout file.

```html
<link
   rel="stylesheet"
   type="text/css" href="includes/stylesheet_layout_medium.css"
   media="only screen and (min-width:551px) and (max-width:900px)"
/>

<link
   rel="stylesheet"
   type="text/css" href="includes/stylesheet_layout_small.css"
   media="only screen and (min-width:50px) and (max-width:550px)"
/>
```

stylesheet_all.css
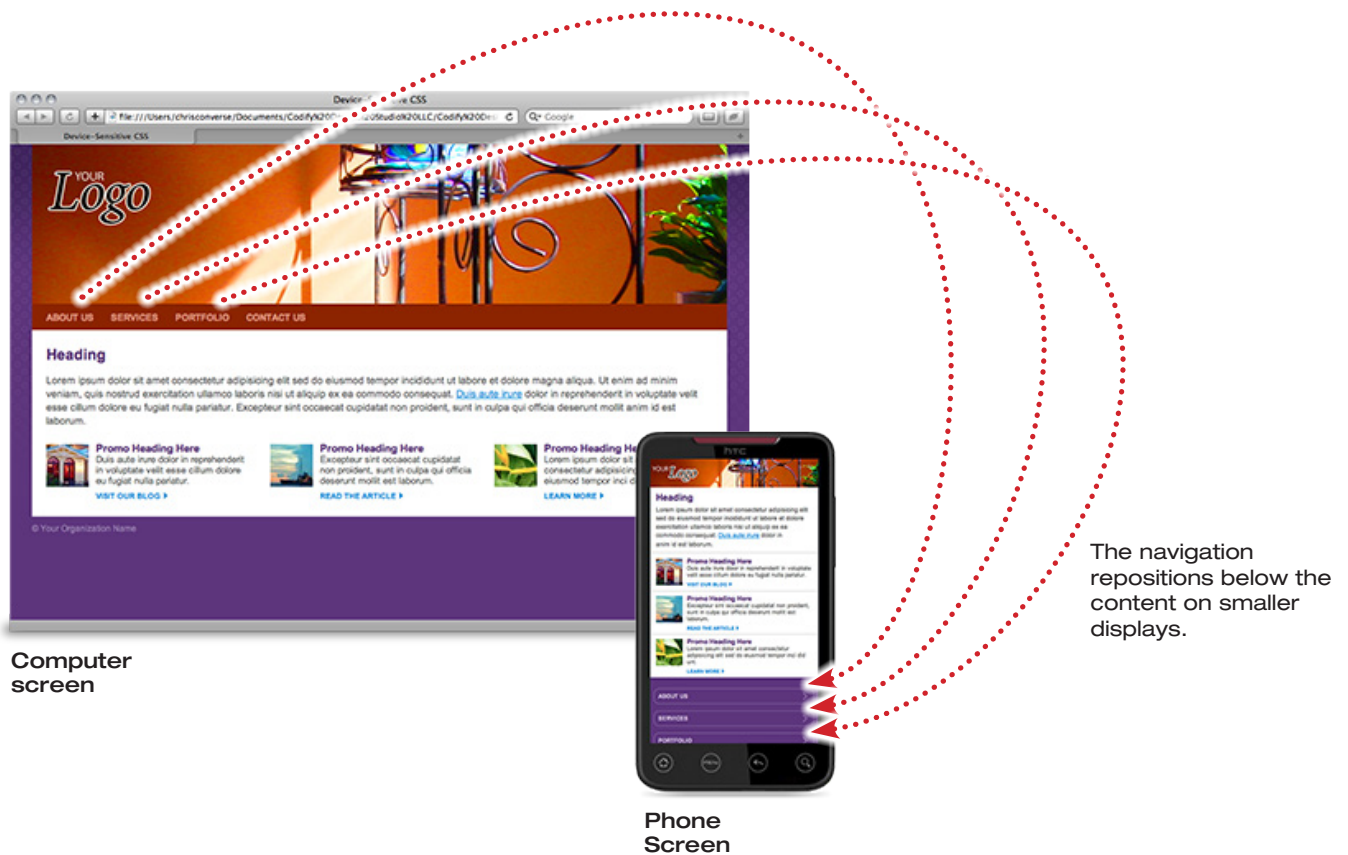
stylesheet_layout_large.css

stylesheet_layout_small.css

stylesheet_layout_medium.css

```
index.html          stylesheet_layout_large.css
3
4   <!DOCTYPE HTML>
5   <html>
6       <!-- This template was designed and developed by Chris Converse, Codify Design Studio -->
7       <head>
8           <meta charset="UTF-8">
9           <title>Device-Sensitive CSS3 Template</title>
10          <meta id="view" name="viewport" content="width=device-width, initial-scale=1.0" />
11          <meta http-equiv="X-UA-Compatible" content="IE=9" />
12          <link rel="stylesheet" type="text/css" href="includes/stylesheet_all.css" />
13          <link rel="stylesheet" type="text/css" href="includes/stylesheet_layout_large.css" />
14          <link rel="stylesheet" type="text/css" href="includes/stylesheet_layout_medium.css" media="only scr
15          <link rel="stylesheet" type="text/css" href="includes/stylesheet_layout_small.css" media="only scr
16          <!--[if lt IE 9]>
17              <script src="http://html5shiv.googlecode.com/svn/trunk/html5.js"></script>
18              <link rel="stylesheet" type="text/css" href="includes/stylesheet_ie.css" />
19          <![endif]-->
20      </head>
21      <body>
22          <div class="page">
23              <header><a class="logo" href="#"></a></header>
24              <div class="page_content">
25                  <div class="page_content_container_left">
                        <div class="content">
26                          <h1>Heading H1</h1>
27                          <p>Suspendisse vestibulum dignissim quam. Integer vel augue. Phasellus nulla
                                Pellentesque habitant morbi tristique senectus et netus et malesuada fam
28                          <h2>Heading H2</h2>
                            <p>Fusce magna mi, porttitor quis, convallis eget <a href="#">sodales ac</a> urn
```
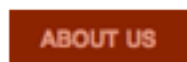
Repositioning Layout for User Experience

When using a small screen hand-held device, navigation is often presented to the user at the end of the content. While this is not the convention for larger displays, our design needs to be able to adapt for optimal user experience.
In our HTML markup for the following web page, the navigation code follows the content code. When rendered on large and medium screen devices, however, the CSS rules reposition the navigation to the top of the page. This provides an optimized user experience without requiring changes to the markup.

Computer screen

The navigation repositions below the content on smaller displays.

Phone Screen

Restyling Links

The navigation links are re-styled to look like mobile phone buttons when the small screen CSS rules are invoked.

Navigation link style for large and medium screen

Navigation links adjust their appearance between screen sizes.

Navigation link style for small screens

Creating a Responsive Web Design: PSD-to-HTML

Learn to build a responsive web layout from scratch. Follow along as Chris Converse shows you how to go from Photoshop to HTML in this online course.

Get a link at: http://codifydesign.com/go/how

Learn to create HTML layouts and more jQuery from Chris Converse on Lynda.com

Get a **FREE 7-Day Trial** from Chris. Find an activation link at:

Get a link at: http://codifydesign.com /go/how

Create a Responsive Web Design from scratch on udemy.com

Save **50%** and join **17,400+ creative professionals** in this course by Chris Converse
Coupon Code: **HOW**

www.udemy.com/creating-responsive-web-design/?couponCode=HOW

Find Chris online at:

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LinkedIn:	linkedin.com /in /chrisconverse
YouTube:	youtube.com /chrisconverse