



# Getting Started with **MACAW**

Build responsive websites with a cutting-edge application



JOE CHELLMAN & REX RAINY



# Getting started with **MACAW**



JOE CHELLMAN & REX RAINY

## **Getting Started with Macaw**

Joe Chellman and Rex Rainey

Peachpit Press

Find us on the web at: [www.peachpit.com](http://www.peachpit.com)

To report errors, please send a note to [errata@peachpit.com](mailto:errata@peachpit.com)

Peachpit Press is a division of Pearson Education

Copyright © 2015 Joe Chellman and Rex Rainey

Editor: Kim Wimpsett

Composer: Danielle Foster

Indexer: Valerie Haynes Perry

Copyeditor: Liz Welch

Proofreader: Nancy Bell

Cover design: Aren Straiger

Interior design: Danielle Foster

## **Notice of Rights**

All rights reserved. No part of this book may be reproduced or transmitted in any form by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. For information on getting permission for reprints and excerpts, contact [permissions@peachpit.com](mailto:permissions@peachpit.com).

## **Notice of Liability**

The information in this book is distributed on an "As Is" basis without warranty. While every precaution has been taken in the preparation of the book, neither the author nor Peachpit shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the instructions contained in this book or by the computer software and hardware products described in it.

## **Trademarks**

Macaw is a trademark of Macaw LLC. Many of the designations used by manufacturers and sellers to distinguish their products are claimed as trademarks. Where those designations appear in this book, and Peachpit was aware of a trademark claim, the designations appear as requested by the owner of the trademark. All other product names and services identified throughout this book are used in editorial fashion only and for the benefit of such companies with no intention of infringement of the trademark. No such use, or the use of any trade name, is intended to convey endorsement or other affiliation with this book.

ISBN 13: 978-0-133-99583-1

ISBN 10: 0-133-99583-6

9 8 7 6 5 4 3 2 1

Printed and bound in the United States of America

*For Kate and Monica  
whose fault it is  
we know each other*

# Acknowledgments

Joe wants to thank everyone on the book team: Kim for all her great work managing and editing, Cliff for his own work (and for bringing up the idea in the first place), and Rex for his excellent work as co-author and all-around fine fellow. Thanks to the Macaw team for making such cool and useful software and for fielding my questions and issues I've filed. Thanks to my friends and colleagues whose own books I've read and enjoyed, who inspired me to take the plunge myself. Thanks to my parents for (aside from everything) helping me enjoy learning and inspiring me to pass some along to others. Most of all, thanks to Kate for the love, the support, and the general cheering on.

Rex would like to thank Joe for bringing him on board the project and being so darn great to work with. A huge thanks to the rest of the book team: Kim, for cleaning up our writing and keeping us on task, as well as Cliff and the rest of the Pearson team for taking everything and putting it all together into the final publication. Thanks to the Macaw developers for creating such a handy new tool and constantly making it better. Thanks to my mom and dad for always being so incredibly encouraging. And an extra shout-out to my dad who always says, "Everyone should write a book." You're right, Dad, consider that one checked off the list. And a special thanks to Monica for her love and never-ending support.

# About the Authors

PHOTO: JENN SPAIN PHOTOGRAPHY



**Joe Chellman** is an old fart by Internet standards, having first used the web in text mode on a dial-up Unix system in the mid-1990s and learning HTML in the late 1990s. In any case, he got a little hooked and has been a web professional since 2000, currently operating the

mostly-one-man web studio ShooFly Development and Design. He has also been a drummer for more than half his life, which is frankly alarming. He lives in Los Angeles with his wife and their frequently adorable, occasionally noisy cat.

PHOTO: ADAM MIKRUT



**Rex Rainey** has loved making things on the computer since his family got their first one in the early 1990s, trying out any design applications he could get his hands on. After graduating with a degree in digital illustration, he got a job at an interactive agency in the early 2000s and quickly became a big fan of designing things for the web. He's currently an art director at a marketing and design agency in Grand Rapids, Michigan, where he lives with his wife and their two pets.



# Contents

## CHAPTER 1 Why Are You Here? 1

Who Are You? .....	2
Who Are We? .....	2
A Brief History of Everything .....	3
Designing in the Browser Is Not Fun .....	4

## CHAPTER 2 What Is Macaw? 7

Macaw, in Basic Terms .....	8
Don't Throw Away Your Other Tools! .....	8
Built on a Web-Based Foundation .....	10
Where to Get Macaw .....	10

## CHAPTER 3 Unique Tools 11

Breakpoints .....	13
Special importance of the default breakpoint .....	15
Setting breakpoints first .....	15
Fluid Grids .....	16
Reusables: Global Styles and Components .....	20
Honorable Mentions .....	24
Outline .....	24
Pages .....	25
View Modes .....	25
Retina and HiDPI Images .....	26

## CHAPTER 4 The Rest of the Tools 27

The Interface .....	28
Top area .....	29
Page Manager .....	29
Page tabs .....	29

Options bar .....	30
Breakpoint and DOM information.....	30
Left side.....	30
Select tool .....	30
Direct Select tool .....	30
Text tool .....	31
Element tool .....	31
Container tool.....	31
Button tool.....	32
Input tool(s) .....	32
Embed tool .....	32
Hand tool.....	32
Eyedropper tool .....	32
Global Styles.....	33
Swatches .....	33
Feedback .....	33
The canvas .....	33
The grid .....	33
Ruler and breakpoints.....	34
Resize handle .....	34
The right side .....	35
Inspector .....	35
Outline .....	36
Library.....	36
The menu bar.....	37
<b>CHAPTER 5 Consider Your Workflow</b>	<b>39</b>
Make Some Sketches.....	40
Think About Mobile First .....	40
Set Some Breakpoints .....	41
Don't Forget to Resize.....	42
Care About Semantics.....	42
Use Containers (Grouping) Liberally .....	43

Reuse Everything You Can .....	43
Let Macaw Do the Work.....	45

**CHAPTER 6** Let's Build a Prototype 47

Setting the Breakpoints .....	48
Setting Up the Grid .....	51
Working with the Outline .....	57
An overview of the Outline .....	58
The Outline in action. ....	60
Putting Elements into Place .....	61
Static positioning and flow .....	61
Position and breakpoints .....	65
Fixed position and origins .....	66
Origins .....	70
Absolute positioning.....	72
Containers .....	73
Conclusion .....	84

**CHAPTER 7** Building a Website: Part 1 85

Think First, Think Often.....	86
Setting Up the Breakpoints, Grid, and Containers .....	89
Page header and background image.....	91
Menu bar and background gradient .....	92
Main and secondary content .....	94
Footer and page background .....	95
Initial review .....	96
Building the Header .....	98
Medium breakpoint .....	103
Small breakpoint .....	104
Building the Navigation.....	107
Medium breakpoint .....	114
Small breakpoint .....	117

The Importance of Preview .....	120
Next Steps .....	124
<b>CHAPTER 8 Building a Website: Part 2</b>	<b>125</b>
Highlights .....	126
A brief intermission for global styles .....	131
Back to highlights .....	133
Medium breakpoint.....	136
Medium-small breakpoint: no mock-up.....	139
Small breakpoint .....	139
Medium-small breakpoint: all yours .....	141
Testimonials: A Challenge .....	142
Current solution: mock it up .....	144
Medium breakpoint.....	150
Small breakpoint .....	150
Secondary content:	
“Meet the Developers” .....	152
Medium breakpoint.....	155
Small breakpoint .....	156
Footer: Pleasantly Easy .....	157
Footer fixes for other breakpoints .....	159
A Full Page: Done! .....	160
<b>CHAPTER 9 Building a Website: Part 3</b>	<b>161</b>
Review the Mock-ups .....	162
Create a New Page.....	162
Revise the header .....	163
Medium breakpoint .....	165
Medium-small breakpoint.....	166
Small breakpoint .....	166
Revise the Navigation .....	167
Adding links .....	168

Build the Content Area .....	169
Big text box.....	170
The image grid: first image.....	.171
Image grid: the other three.....	174
Take a Break: More on Images.....	176
In-App cropping.....	176
CSS transforms and filters.....	177
Device-specific images .....	178
Back to Work.....	179
Medium breakpoint .....	.181
Small breakpoint .....	182
A small bug, and a solution.....	184
Secondary Content: Embedded Map.....	185
Next Steps .....	188
<b>CHAPTER 10 Building a Website: Part 4</b>	<b>189</b>
Review the Mock-ups .....	190
Create the Page.....	190
Build the Form .....	.191
Build and style the first field.....	192
Create the other text fields.....	196
Add the radio buttons .....	197
Add the select box .....	198
Add the last elements .....	200
Positioning cleanup.....	204
Medium breakpoint .....	204
Small breakpoint .....	206
That's It! .....	207

<b>CHAPTER 11 Preview and Publish</b>	<b>209</b>
Resulting Files .....	210
Project Settings .....	212
Pages .....	212
Head & Tail .....	213
General Settings .....	214
Styles .....	214
Units .....	215
Grids .....	216
Images .....	216
Remote Preview .....	216
Published and Done! .....	217
<b>CHAPTER 12 The Possible Future of Macaw</b>	<b>219</b>
Big Things .....	220
Mobile-first workflow .....	220
Integration of popular frameworks or preset components libraries .....	221
Linked image assets .....	221
Custom fonts, especially icons .....	222
Template files .....	222
Better component editing .....	222
Export/import/share components and global styles .....	223
Add custom states to elements .....	223
Enhanced SVG styling .....	224
Little Things .....	224
Multiple open projects .....	224
Swap an image from the library .....	224
More global styles options .....	224
Custom library folders .....	224
Workspace customization .....	225

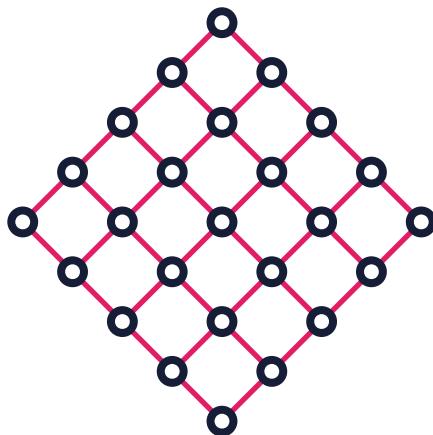
Enhanced swatches .....	225
Use different background images at different breakpoints .....	225
A Bright Future .....	225
<b>APPENDIX A Helpful Shortcuts</b>	<b>227</b>
<b>APPENDIX B Further Reading</b>	<b>233</b>
More on Macaw .....	234
Macaw Forums .....	234
Macaw Documentation.....	234
Macaw Videos.....	234
<i>Designing and Building Websites with Macaw,</i> by Adi Purdila.....	234
Responsive Web Design .....	235
<i>Responsive Web Design</i> , by Ethan Marcotte.....	235
<i>Responsive Web Design: Learn by Video</i> , by Tim Kadlec.....	235
Articles on responsive design from A List Apart .....	235
<i>Mobile First</i> , by Luke Wroblewski.....	235
Making Good Mock-ups.....	236
Adobe Photoshop .....	236
Sketch.....	236
Pixelmator.....	236
Adobe Fireworks .....	236
Tuts+.....	237
Smashing Magazine .....	237
Photoshop Etiquette.....	237
Front-End Web Developer Tools.....	238
Other Areas of Interest.....	239
Accessibility .....	239
CSS transforms, transforms, and filters.....	239
<i>CSS Animations and Transitions for the Modern Web,</i> by Steven Bradley.....	239

CSS Transitions and Transforms, by Joseph Lowery .....	239
CSS Transforms and CSS Animations, both by Vicky Murley .....	239
Retina-safe and responsive images.....	240
<i>Retinify your Web Sites &amp; Apps,</i> by Thomas Fuchs.....	240
Articles on responsive images from Opera .....	240
Better embedded maps .....	240
Hosted front-end toolkits .....	241
Stationery files on OS X.....	241
<b>APPENDIX C Troubleshooting</b>	<b>243</b>
Save, Quit, and Restart .....	244
Create a New Project, and Then Switch Back .....	244
Send Feedback.....	245
Post in the Forums .....	245
<b>APPENDIX D Custom Integrations</b>	<b>247</b>
Custom CSS.....	248
Custom Web Fonts.....	250
Making fonts available.....	251
Adding the custom CSS.....	252
Changes before uploading .....	254
Loading fonts from the Internet.....	254
Custom JavaScript .....	254
Loading the plugin.....	255
Activating the plugin .....	257
Recommendation .....	259
<b>Index</b>	<b>261</b>

*This page intentionally left blank*

# 4

## The Rest of the Tools

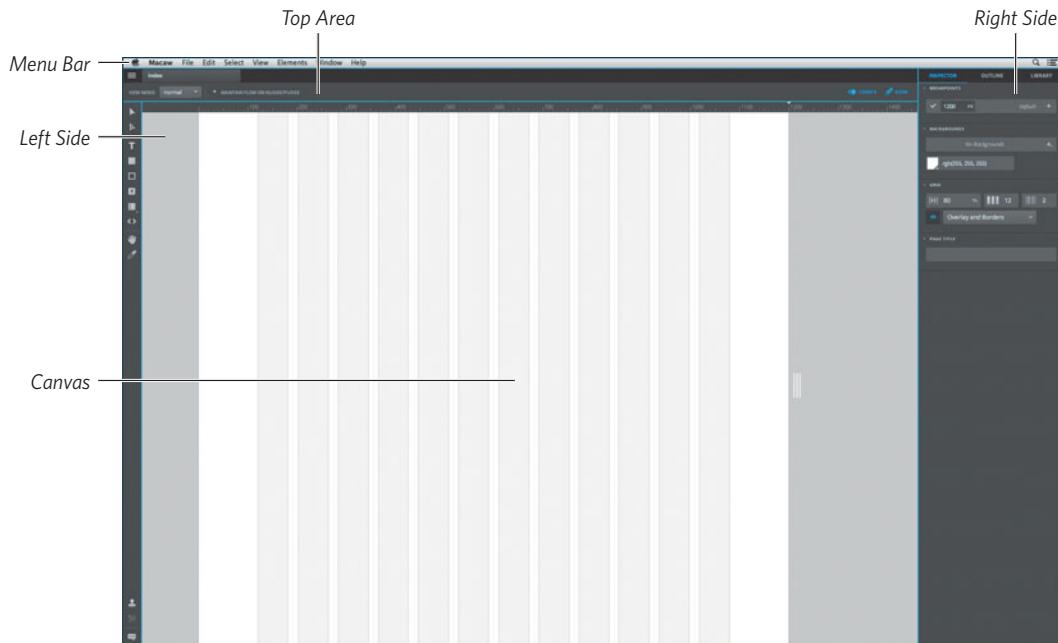


Here we'll introduce you to all of Macaw's other tools and show you where they're located throughout the application.

## The Interface

Macaw's interface is more akin to the interface of a graphics application than a web design text editor. This is part of its appeal because for many users the interface of a graphics application is much more familiar, and less intimidating, than a traditional text editor. These types of interfaces tend to be more approachable because users can draw shapes and text directly on a canvas or page, without having to create everything through lines of code. To make it easier to describe Macaw's interface as well as to help you get oriented to where everything is, we've divided it into five main areas (see **Figure 4.1**):

- The top area contains the Page Manager, page tabs, options bar, breakpoint and DOM information.
- The left side contains the toolbar and links for global styles, swatches, and feedback.
- The large area in the middle is the canvas (where you'll create your site).



**Figure 4.1** Macaw's full interface.

- The right side contains the Inspector, Outline, and Library panes. Each shows different information, based on which element(s) are selected on the canvas.
- Lastly, at the very top of the screen (or window if you're on Windows) is the standard operating system menu bar. All sorts of actions can be accessed here. The various drop-down menus work just like other applications you have on your computer.

## Top area

The top area contains a handful of helpful items.



**Figure 4.2**  
Page Manager icon.

### Page Manager

In the upper-left corner is a small, three-line list icon that accesses the Page Manager (see **Figure 4.2**). Clicking this icon shows a list of all of your pages. There you can add, rename, or copy pages.

#### NOTE

**When you create a new page, Macaw automatically adds a tab for that page to the right of the Page Manager icon. If you close the tab for a particular page, it does not delete the page—it just closes the window/tab view of that page. If you do intend to delete a particular page, you need to click the trash icon next to that page in the Page Manager.**

### Page tabs

The tabs next to the Page Manager icon are open windows for any of your site's pages (see **Figure 4.3**). Each new project you create starts with a blank page with the title "index" (feel free to keep or rename this page as desired).



**Figure 4.3** Page tab.

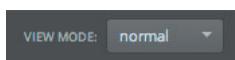


### Options bar

The information shown in the options bar changes depending on what is currently selected, whether it be a tool from the toolbar or an element on the page (see **Figure 4.4**). It consists of information and settings that can be adjusted to alter the next action you'll make with your currently selected tool or to modify attributes of any currently selected element.



**Figure 4.4** Options bar.



**Figure 4.5** View Mode toggle.

One common item that shows up in the options bar is the View Mode toggle (see **Figure 4.5**).

This toggle allows you to switch between normal, outline, and wireframe view modes. Keep in mind that the options bar is visible only when certain tools are selected.



**Figure 4.6** Breakpoint and DOM information.

### Breakpoint and DOM information

To the right of the options bar is the breakpoint and Document Object Model (DOM) information (see **Figure 4.6**). This area simply tells you which breakpoint you're currently looking at and whether you can edit the DOM. The "DOM" text turns blue, and a little pencil icon appears when you can edit the DOM. When you cannot edit the DOM, the "DOM" text turns gray, and the pencil icon changes to a lock icon.

## Left side

The left side contains the toolbar and a few other commonly used items.



### Select tool

You use the Select tool (keyboard shortcut: V) to select whole elements or groups on the canvas.



### Direct Select tool

You use the Direct Select tool (keyboard shortcut: A) to select a single element within a group or component.



### ***Text tool***

You use the Text tool (keyboard shortcut: T) to create or edit text elements. Macaw has two types of text elements: point text and paragraph text. Clicking once on the canvas with the Text tool will make a point text field that has auto width and behaves like an inline element. Clicking and dragging on the canvas with the Text tool will create paragraph text, which has set dimensions and behaves like a block element (which means it can also be made scrollable if desired—more on that later). The actual text within text elements can have various tags applied to them: spans, links, regular and strong emphasis. Each of those tags may be styled as well.



### ***Element tool***

You use the Element tool (keyboard shortcut: R) to create or edit basic elements. With this tool, you can create empty elements that don't have any content in them. This tool comes in handy when you're prototyping or creating initial styles. Keep in mind, though, these elements should eventually be converted to containers for better structure and semantics when you publish the final project (more on that later).

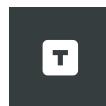


### ***Container tool***

You use the Container tool (keyboard shortcut: G) for grouping multiple elements. Containers have their own dimensions and can be styled like any other element.

To create a container with the Container tool, first select the tool from the toolbar and then click and drag on the canvas. Drag over the elements you want to group in a container and those elements will highlight as you drag. All of the highlighted elements will then be placed inside the new container.

Containers can also be created by selecting a bunch of elements and then selecting the Elements > Group command from the menu bar, or by pressing ⌘-G (Mac) or Ctrl-G (Windows).



### ***Button tool***

You use the Button tool (keyboard shortcut: B) to create or edit button elements. The text in buttons is centered by default. The button type (submit for forms, button for general use, and reset to clear a form) can be set in the Advanced palette in the Inspector.



### ***Input tool(s)***

You use the Input tool (keyboard shortcut: N) to create or edit various form input elements: single-line text fields, multiline text areas, select (that is, popup or drop-down) menus, check boxes, and radio buttons. To access the various input elements, click and hold on the current Input Tool icon, or use the keyboard shortcut Shift-N. Keep in mind that input fields are editable. Any text you type inside the element will be used as placeholder text when you publish your project.



### ***Embed tool***

You use the Embed tool (keyboard shortcut: M) to create or edit embedded elements such as HTML, iframes, maps, and videos. Unfortunately, Macaw doesn't always display every kind of embedded content while in the editor or while previewing in the browser. But the embedded content will display correctly when you publish your project.



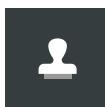
### ***Hand tool***

You use the Hand tool (keyboard shortcut: H or spacebar) to pan (click and drag) around your page. When this tool is active, a thumbnail of the whole canvas is displayed in the upper right, and can be clicked to pan quickly to anywhere on the canvas.



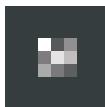
### ***Eyedropper tool***

You use the Eyedropper tool (keyboard shortcut: I) to select and match colors from existing elements. This tool works very much like eyedropper tools in other standard graphics applications.



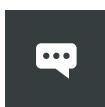
### Global Styles

You use this tool to access any global styles you've created for the current project and create new ones.



### Swatches

You use this tool to open the Swatches palette (Keyboard shortcut: S), which includes any swatches you saved for the current project. This icon is only clickable when an element that can have a swatch applied to it is selected on the canvas. Click a swatch to make it the background color of the selected element.



### Feedback

You use the Feedback tool to send feedback directly to the developers of Macaw, right from within the app. As we mentioned earlier, Macaw is a pretty new tool and is constantly being refined and improved upon. If you run into a bug, or you have any feature requests, please let the developers know!

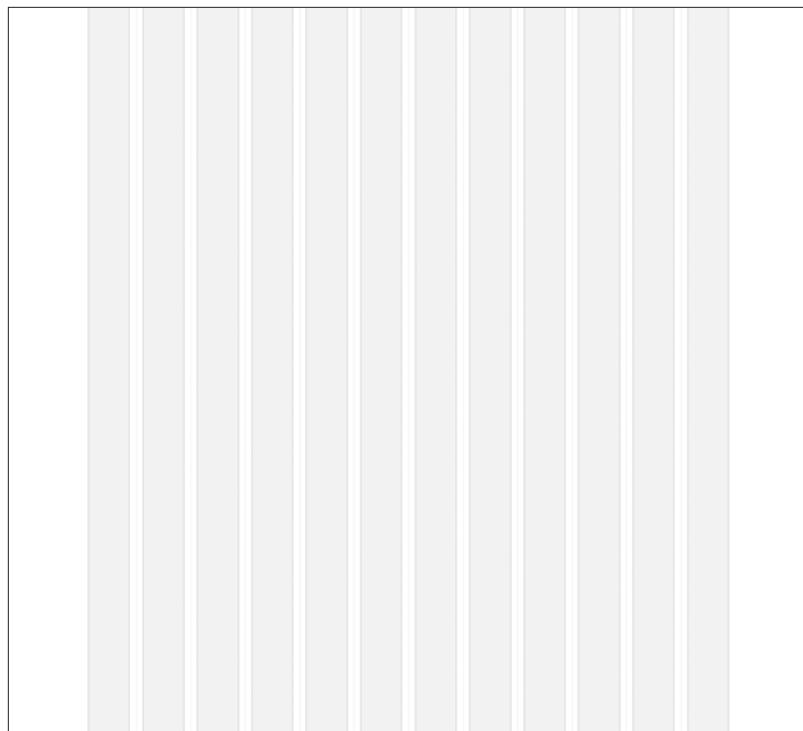
## The canvas

The large area in the middle is known as the canvas. This is where you'll do the bulk of your creating. Let's explore a few key portions of the canvas.

### The grid

The grid—keyboard shortcut: ⌘G (Mac) or Ctrl (Windows)—is the invisible structure of your site (see **Figure 4.7**). Any quality site is designed using a grid. It gives you guidelines for separating and organizing your content. The default breakpoint is set with a 12-column grid, but this grid can be edited to your liking using the Inspector on the right. Various other attributes of the grid can be modified in the Inspector as well, but we'll get into those later in this book when we start making a site. You can turn the visibility of the grid on or off from the menu bar by selecting View > Toggle Grid.

**Figure 4.7** The grid (in light gray) over a blank page.



### Ruler and breakpoints

At the top of the canvas is your ruler (see **Figure 4.8**). The ruler shows you the width of your site. You can use the ruler to quickly jump between your various breakpoints (once you've created more than one).



**Figure 4.8** The ruler features arrow markers for each breakpoint (only one breakpoint is shown).

### Resize handle



**Figure 4.9** Resize handle.

To the right of the grid (but still within the canvas) you'll see the resize handle (see **Figure 4.9**). You can click and drag this handle to see how your site responds to various screen widths. If you have only one breakpoint, any elements on your page will just squish or stretch based on the adjusted width. Once you have more breakpoints and set various

properties for each element on your page (at each breakpoint), the various elements on your page will respond as you've defined in real time as you drag the resize handle.

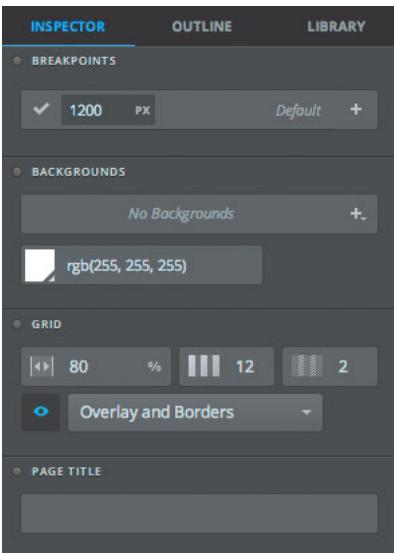
## The right side

The right side is where the Inspector, Outline, and Library panes are located.

### Inspector

All the various properties, such as dimensions, color, font, border styles, and effects, that can be edited for the currently selected element show up here (see **Figure 4.10**). The properties that appear change depending on what element on the canvas is selected (not all properties are applicable to all elements). The Inspector will be used constantly to modify and tweak the various elements in your design. The various features of the Inspector will be covered in more detail when we create a project in later chapters. Even when you have nothing selected, properties appear in the Inspector that you can edit. These properties apply to your overall project: breakpoints (add, rename, delete), background images/color, grid properties, and page title.

**Figure 4.10**  
The Inspector.

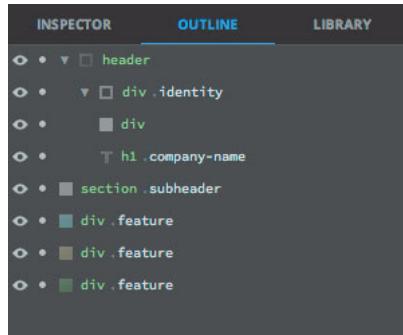


## Outline

The Outline pane shows you the structure of your site (see **Figure 4.11**). You can control how items are ordered visually, change their tag types, add or remove HTML classes, and nest elements within others. The outline gives you a lot of control over structure of your pages, so if you're a control freak, you're going to love it!

**Figure 4.11**

The Outline pane.

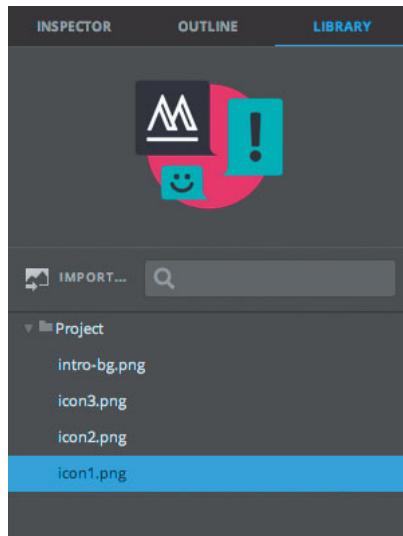


## Library

The Library lets you import images of all kinds (including SVG) for use on the canvas (see **Figure 4.12**). Any components you create will appear here as well. These items are shared among all pages in your project.

**Figure 4.12**

The Library pane.



## The menu bar

The Macaw menu bar is located at the top of your screen. It functions like other menu bars in other applications on your computer (see **Figure 4.13**). You can access common actions associated with working with files and projects on your computer, actions such as setting preferences, saving, printing, copying/pasting, and grouping.

**Figure 4.13** Menu bar.



**NOTE**

If you need further help getting to know Macaw's interface, please check out the in-depth documentation at <http://docs.macaw.co>.

*This page intentionally left blank*

*This page intentionally left blank*

# Index

## A

absolute positioning, 67, 72-73, 184  
accessibility resources, 239  
Advanced palette, setting for images, 173  
Align palette, using in navigation, 113  
Alt key. See keyboard shortcuts  
Anchor palette, using with footer, 158  
arithmetic in fields, tip for, 231  
arrow keys, using, 231

## B

background gradient, creating for Macawfrence, 92-93  
background images. See *also* images  
    adding quote marks as, 149  
    adding to header, 99-100  
    creating for Macawfrence, 90-92  
    making room for, 128  
    PNG file, 128  
    SVG file, 128  
    using, 126  
Backgrounds palette, accessing, 52  
"Big Button" global style, 21  
big text area, creating for Contact form, 200-203  
"Big Text" global style, 21-22  
black box. See *also* containers  
    adding company name, 75  
Border palette, 74

changing text color, 76  
Outline, 77  
selecting company name, 77  
selecting logo circle, 77  
as site header, 73  
Typography palette, 76  
WidgetCo header, 77  
width and height, 73  
blue outlines, checking, 137  
Border palette, using with black box, 74  
breakpoint information  
    locating, 28  
    reading, 30  
breakpoints  
    adding, 16  
    best practices, 16  
    changing, 15  
    copying settings to, 231  
    creating, 14, 17-18  
    creating with resize handles, 18  
    default, 14-15, 144  
    extra large, 15  
    finding in Inspector, 13  
    versus frames, 15  
    identifying in user interface, 12  
interaction with grids, 56  
jumping between, 34  
large, 15

breakpoints (*continued*)

- managing, 16
  - medium, 15
  - palette, 14
  - resizing, 69
  - setting, 41–42, 89–90, 103–107
  - setting first, 15–16
  - setting for prototype, 48–51
  - showing, 15
  - small, 15
  - switching, 69
  - using grids with, 51
  - using media queries with, 13
  - using popovers with, 90
- Breakpoints palette, accessing, 50
- browser
- designing in, 4–5
  - opening pages in, 123
- Button tool, 32
- button type, indicating, 203

## C

canvas

- breakpoints, 34
- described, 33
- grid, 33–34
- identifying, 28
- locating, 33
- maximizing space for, 12
- resize handle, 34–35
- response to width changes, 18
- result of resizing, 80–81
- ruler, 34

Center Canvas command, using, 51

centered origin, using, 71

centering identity group, 84

check boxes

- creating, 197
  - selecting, 14
- Chrome developer tools, 238
- Chromium, 10
- circle, turning square into, 74
- classes, best practices, 42
- clicking on options, 14
- closing projects, 245
- CodeMirror, 10
- color of text, changing, 76
- Color Picker
- making swatch for Macawfrence, 96
  - using, 53
- company name, adding, 75
- components
- creating from elements, 23
  - delete button, 24
  - features of, 23
  - naming, 23
  - placing on canvas, 24
  - templates, 23
  - using, 45
- Contact form. *See also* form elements
- adding inner shadow, 195
  - big text area, 200–203
  - building, 191
  - editing inner shadow, 200
  - field types, 194
  - First Name field, 192–195
  - form field global style, 195
  - form label global style, 195
  - Gradient Editor, 194
  - gradient settings, 201
  - input.form-text tag, 193
  - input options, 193

- medium breakpoint, 204–205  
placeholder text, 192  
positioning cleanup, 204  
radio buttons, 197–198  
select box, 198–200  
small breakpoint, 206–207  
submit button, 200–203  
text fields, 196–197
- Contact form fields  
    company name, 196  
    email, 197  
    first name, 196  
    last name, 196  
    phone, 197  
    website, 196
- Contact page  
    creating title for, 190  
    updating navigation menu, 191
- containers. *See also* black box; prototyping process  
    converting elements to, 133  
    editing contents of, 79  
    Expand command, 83  
    Fit To command, 83  
    fixing spacing in, 134  
    using, 43  
    workflow for, 80
- Container tool, using, 31, 90–91
- content, workflow for, 80
- content area. *See also* main content;  
    secondary content  
    Agenda image, 184  
    big text box, 170–171  
    container for stacked group, 174–176  
    establishing images as links, 174  
    fixing negative margins, 172  
    image grids, 171–176
- medium breakpoint, 181–182  
reviewing for mock-up, 89  
small breakpoint, 182–183  
context menus, displaying for pages, 163  
Copy All command, using, 134  
copying  
    folders, 217  
    settings to breakpoints, 231  
    visual properties, 229
- Copy Visual Properties command, using, 170
- cropping, in-app, 176–177
- CSS (Cascading Style Sheets)  
    introduction of, 3  
    negative margins in, 77–78  
    reset style sheet, 99  
CSS3, support for, 52
- CSS custom integration, 248–249
- CSS files, running through optimizer, 217
- CSS positioning, 63
- CSS transforms and filters, 177–178, 239
- Ctrl key. *See* keyboard shortcuts
- custom integrations  
    CSS (Cascading Style Sheets), 248–249  
    JavaScript, 254–259  
    web fonts, 250–254
- D**
- date and location header, placing, 165
- deployment, automating, 217
- designing in browser, 4–5
- Details page. *See also* pages  
    changing title of, 163  
    copying, 162  
    creating, 162  
    duplicating, 190  
    medium breakpoint, 165–166

Details page (*continued*)  
medium-small breakpoint, 166  
renaming, 162  
revising header for, 163–165  
small breakpoint, 166–167  
details text box, 171  
developers block, resetting, 155–156  
Direct Selection tool, using, 30, 100, 138  
DOM (Document Object Model), 15, 68, 147  
DOM information  
    locating, 28  
    reading, 30  
Down arrow key, using, 231  
drop shadows, adding to images, 181  
Duplicate command, using, 51–52  
duplicating  
    elements, 109–110, 196, 229  
    pages, 190

## E

element positioning, 78  
    absolute, 67, 72–73  
    fixed position and origins, 66–67  
    Maintain Flow on Nudge/Pudge, 63–65  
    Origin settings, 70–71  
    position and breakpoints, 65–66  
    static positioning and flow, 61–63  
elements  
    changing stacking order of, 68  
    moving at breakpoints, 65–66  
    placing in containers, 180  
    resizing at breakpoints, 65–66  
Element tool, using, 31, 48–49, 187–188  
email field, including in Contact form, 197  
embedded maps, 185–188, 240–241  
Embed tool, using, 32, 186–187  
Eyedropper tool, using, 32, 53, 96

## F

Facebook icon  
    background settings for, 110  
    positioning, 123  
feedback  
    locating links for, 28  
    sending, 245  
Feedback tool, 33  
files, converting into templates, 217  
Firefox developer tools, 238  
First Name field, building and styling, 192–196  
fixed position and origins, 66–67  
folders, copying, 217  
font panel, using, 76–77. *See also* web fonts  
footer  
    Anchor palette, 158  
    building, 157–160  
    creating for Macawfrence, 95–96  
    fixing for breakpoints, 159–160  
    reviewing for mock-up, 87  
    states button group, 159  
    states for links, 159  
    underline versus bottom border, 158  
form elements. *See also* Contact form  
    accessing, 192  
    styling, 194  
forums, posting in, 245  
front-end toolkits, hosted, 241  
front-end web developer tools, 238  
full screen, accessing, 12  
future of Macaw. *See also* Macaw  
    background images at breakpoints, 225  
    component editing, 222  
    custom fonts, 222  
    custom library folders, 224  
    custom states for elements, 223  
    enhanced SVG styling, 223

enhanced swatches, 225  
export components, 223  
frameworks, 221  
global style options, 224  
global styles, 223  
icons, 222  
import components, 223  
linked image assets, 221  
mobile-first workflow, 220  
multiple open projects, 224  
preset components libraries, 221  
share components, 223  
swapping images from library, 224  
template files, 222  
workspace customization, 225

## G

General settings  
Grids, 216  
Images, 216  
Remove Preview, 216–217  
Styles, 214–215  
Units, 215–216  
global styles  
benefit of, 132  
“Big Button,” 21  
“Big Text,” 21–22  
defining, 132  
features of, 20–21  
granularity of, 199  
identifying in user interface, 12  
locating links for, 28  
managing, 22  
mapping to CSS classes, 21  
naming, 22  
for navigation items, 131–133  
overriding, 133, 139

properties, 22  
using, 44–45  
using Stamp icon with, 22  
Global Styles tool, 33  
Gradient Editor, using with Contact form, 194  
gradients, generating, 93  
gradient settings, using with Contact form, 201  
grid lines, snapping to, 19  
grids  
changing units, 17  
creating for prototype, 51–57  
default settings, 17  
extending, 54  
fixed-width, 55  
“fluid,” 16–20  
identifying in user interface, 12  
interaction with breakpoints, 56  
resize handles, 18  
setting to pixels, 17  
setting up for Macawfrence project, 89–90  
snapping, 54–55  
using, 44  
using with breakpoints, 51  
visibility settings, 19  
working statically, 17  
grid settings, changing at breakpoints, 20  
Grids publish setting, 216  
grid systems, changing, 17  
grouping elements, 43, 73, 77–78, 113

## H

Hand tool, 32  
Head & Tail settings, 213  
header content  
background image, 99–100  
box for logo, 98–99  
explained, 98

header content (*continued*)

- hiding text, 101
- image replacement technique, 102
- indentation setting, 101-102
- positioning heading, 100
- headers
  - converting to containers, 98
  - date and location, 165
  - resizing for Details page, 163-164
  - reviewing for mock-up, 87
  - revising for Details page, 163-165
  - setting maximum width on, 101
- hiding
  - palettes in Macawfrence, 98
  - text in headers, 101
  - tools in Macawfrence, 98
- HiDPI images, support for, 26

highlight blocks

- medium breakpoint, 136, 138
- placing, 131
- resetting container width, 135
- warnings in, 133
- highlights. *See also* Macawfrence project
  - background image, 128
  - header settings, 127
  - image size, 138
  - medium-small breakpoint, 139, 141-142
  - padding text box, 128
  - point text for header, 127
  - small breakpoint, 139-141
  - speakers background image, 128-129
  - speaker text and header, 130
  - text block below header, 128
  - three-column setup, 126
  - type size, 138
- horizontal origin settings, 71

hosted front-end toolkits, 241

- :hover, clicking, 167
- HTML tags, best practices, 42-43
- hyperlinks. *See* links

## I

- icons in text fields, using, 231
- identity group, centering, 84
- identity header, appearance of, 82-83
- IDs, setting, 43
- image grids, creating, 171-176
- image optimizer, using, 217
- Image palette, displaying, 172
- images. *See also* background images;
  - responsive images
  - device-specific, 178-179
  - downloading for mock-ups, 89
  - establishing as links, 174
  - extracting from mock-ups, 88
  - importing, 36, 171
  - replacing in headers, 102
  - responsive, 240
  - retina-safe, 240
  - setting Advanced palette for, 173
  - swapping, 178-179
- images folder, contents of, 211
- image shadow global style, creating, 181
- Images publish setting, 216
- importing images, 36, 171
- in-app cropping, 176-177
- indentation setting, invoking, 101-102
- Input palette, resize setting for, 200-201
- Input tools
  - changing to text area, 200
  - using, 32
- using with Contact form, 192

Inspector  
explained, 35  
locating, 29  
switching to, 112  
*interface.* *See also UI (user interface)*  
canvas, 28, 33-35  
documentation, 37  
left side, 28, 30-33  
menu bar, 37  
right side, 35-36  
top area, 28-30  
Internet Explorer developer tools, 238

**J**

JavaScript custom integration, 254-259  
Jekyll, using with static sites, 217

**K**

keyboard shortcuts  
Button tool, 32  
Center Canvas command, 51  
Container tool, 31  
Copy All command, 134  
copying settings to breakpoints, 231  
copying visual properties, 229  
Copy Visual Properties, 170  
default breakpoint, 144  
Direct Select tool, 30  
Duplicate command, 51  
duplicating items, 109-110, 229  
Element tool, 31  
Embed tool, 32  
expanding elements, 229  
Eyedropper tool, 32  
Feedback tool, 33  
grids, 33  
grouping items, 229

Hand tool, 32  
Input tools, 32  
Inspector, 112  
keyboard focus on class name, 229  
large breakpoint, 170  
for Mac users, 230  
medium breakpoint, 165, 181  
navigating Outline, 230  
New Project, 89  
nudging pixels, 229  
nudging to grid, 229  
Outline, 96, 230-231  
Paste Visual Properties, 170  
pasting visual properties, 229  
publish and preview page, 230  
Publish command, 120  
Publish Settings, 177-178, 212  
Pudge, 229-230  
Select All, 112  
Select tool, 30  
sending feedback to developers, 230  
Swatches palette, 33  
switching breakpoints, 69  
switching to Outline, 57  
Text tool, 31  
Tight Group command, 77, 97, 113  
Toggle Snap, 48  
tools, 228  
ungrouping elements, 229  
view, 228-229  
viewing publish settings, 230  
for Windows users, 231

**L**

large breakpoint, switching to, 170  
layers, thinking about, 86-87  
layout surprises, dealing with, 137

Library pane  
explained, 36  
locating, 29  
link field, contents of, 169  
links, adding for navigation, 168–169  
locking elements, 137  
logo, creating box for, 98–99  
“lorem ipsum” text, 129

## M

Macaw. *See also* future of Macaw  
default interface, 8  
as design solution, 9  
as development solution, 9  
downloading, 10  
explained, 8  
as prototyping tool, 9  
resources, 234  
trends in usage, 9  
UI (user interface), 12  
uses of, 8–9  
using features of, 46  
web-based foundation, 10  
workflows, 9  
Macawfrence folder, files in, 210–211  
Macawfrence project. *See also* highlights; mock-ups; navigation; projects; testimonials area  
accessing, 85  
in-app cropping, 176–177  
background gradient, 92–93  
background image, 90–92  
building content area, 169–176  
checking stacking order, 96  
creating pages, 162–167  
CSS transforms and filters, 177–178  
device-specific images, 178–179  
embedded map, 185–188

footer, 95–96, 157–160  
header content, 98  
hiding palettes, 98  
hiding tools, 98  
main content, 94  
medium breakpoint, 103  
“Meet the Developers” section, 152–156  
menu bar, 92–93  
outline order, 97  
page background, 95–96  
page header, 90–92  
preview site, 121  
referring to comps for, 89  
reviewing, 96–98  
reviewing mock-up for, 86  
revising navigation, 167–169  
secondary content, 94–95, 152–156, 185–188  
setting up breakpoints, 89–90  
setting up grid, 89–90  
small breakpoint, 104–107  
swatch in Color Picker, 96  
Typography settings, 104  
main content. *See also* content area  
creating for Macawfrence, 94  
reviewing for mock-up, 87  
Maintain Flow on Nudge/Pudge, 63–64  
maps, embedding, 185–188, 240–241  
math in fields, tip for, 231  
media queries, using with breakpoints, 13  
medium breakpoint  
Contact form, 204–205  
content area, 181–182  
Details page, 165–166  
highlight blocks, 136, 138  
Macawfrence project, 103  
navigation, 114–117  
testimonials area, 150

- medium-small breakpoint  
Details page, 166  
highlights, 139, 141-142
- menu bar  
creating for Macawfrence, 92-93  
explained, 37  
identifying, 28
- mobile, considering first, 40-41
- mock-ups. *See also* Macawfrence project  
content area, 89  
downloading images for, 89  
extracting images from, 88  
footer, 87  
header, 87  
main, 87  
navigation, 87  
resources, 236-237  
reviewing, 162, 190  
reviewing for Macawfrence, 86  
secondary, 87
- movement, thinking about, 86-87
- N**
- navigation. *See also* Macawfrence project  
adding letter spacing, 108  
adding links, 168-169  
adding text box, 107  
adjusting background, 108-109  
adjusting items, 115  
Align palette, 113  
clicking :hover, 167  
converting to container, 107  
duplicating items, 109  
Global Style Properties, 109  
grouping items, 113  
hiding background image, 109  
hover behavior for links, 108
- image replacement CSS settings, 110  
medium breakpoint, 114-117  
placement of items, 111-112  
point text box, 110  
p.text and warnings, 111  
reviewing for mock-up, 87-88  
setting fixed width for, 114  
small breakpoint, 117-119  
social icons, 109-110  
navigation items, using global styles with, 131-133  
navigation menu, updating for Contact page, 191
- nodes  
creating in text blocks, 170  
explained, 147
- normalize.css project, 211
- O**
- operating system menu bar, locating, 29
- options bar  
described, 30  
locating, 28
- Opt key. *See* keyboard shortcuts
- Origin settings, centering, 70-71
- OS X, stationery files on, 241
- Outline  
alert icon, 60  
checking for Macawfrence, 96  
class of element, 58-59  
display control, 58  
explained, 36  
including warnings in, 77  
locating, 29  
lock control, 58-59  
semantics, 60  
switching to, 57
- type indicator, 58-59
- type of element, 58-59

Outline (*continued*)

- using, 60–61
  - using with black box, 77
  - visibility controls, 58
- Outline shortcuts, 230–231
- Outline tab
- features of, 25
  - identifying in user interface, 12

**P**

page background, creating for Macawfrence, 95–96

page header, creating for Macawfrence, 90–92

## Page Manager

- locating, 28
  - tabs, 29–30
- pages. *See also* Details page
- creating, 29
  - displaying context menus for, 163
  - features of, 25
  - identifying in user interface, 12
  - naming, 163

Pages publish settings, 212–213

palettes, hiding in Macawfrence project, 98

Parties image, examining, 184

Paste Visual Properties command, 170

photography website, linking to, 158

<picture> element, 26

## pixels

- setting grids to, 17, 55

- setting type in, 105

polyfill, explained, 46

## popovers

- displaying, 66

- using, 68

- using to copy widths, 81

- using with breakpoints, 90

position and breakpoints, 65–66

positioning guides, using, 196

posting in forums, 245

preview window

- opening, 49

- publishing to, 120–123

- shrinking, 122

project folder, automatic overwriting of, 211

projects. *See also* Macawfrence project

- closing, 245

- starting, 89

project settings

- Head & Tail, 213

- Pages, 212–213

prototyping process. *See also* containers

- absolute positioning, 72–73

- Element tool, 48–49

- fixed position and origins, 66–69

- flow, 61–64

- origins, 70–71

- position and breakpoints, 65–66

- setting breakpoints, 48–51

- setting up grid, 51–57

- static positioning, 61–64

- using Outline, 57–61

prototyping tool, Macaw as, 9

publishing to web, 211

Publish Settings command, using, 177–178, 212

**Q**

quitting Macaw, 244

**R**

radio buttons, adding to Contact form, 197–198

redo and undo, support for, 244

“Remote Preview,” 122

- Remote Preview publish setting, 216–217  
reset style sheet, 211  
resize handles  
    appearance of, 176  
    creating breakpoints with, 18  
    using, 34  
    using with grids, 18  
resizing  
    breakpoints, 69  
    canvas, 80–81  
    remembering, 42  
    windows, 70  
responsive images, 26, 240. *See also* images  
responsive web design, 4, 235. *See also* Web Standards Project  
restarting Macaw, 244  
Retina images, support for, 26  
retina-safe images, 240  
reusables  
    components, 20–24  
    global styles, 20–24  
    overview, 44–45  
ruler, locating, 34
- S**
- Safari developer tools, 238  
Save, Quit, Restart, 244  
saving work, 107  
secondary content. *See also* content area  
    adding shadow, 153  
    embedded map, 185–188  
    “Meet the Developers” section, 152–156  
    reviewing for mock-up, 87  
    setting up, 94–95  
Select All, using with container items, 112  
select box, adding to Contact form, 198–200  
Select tool, 30  
semantics  
    keeping track of, 42–43  
    using with Outline, 60  
Send To Front command, using, 68–69  
Set Current, changing to Set All, 97  
settings. *See* project settings  
shadow, adding to secondary content, 153  
Shift key. *See* keyboard shortcuts  
shortcuts  
    Button tool, 32  
    Center Canvas command, 51  
    Container tool, 31  
    Copy All command, 134  
    copying settings to breakpoints, 231  
    copying visual properties, 229  
    Copy Visual Properties, 170  
    default breakpoint, 144  
    Direct Select tool, 30  
    Duplicate command, 51  
    duplicating items, 109–110, 229  
    Element tool, 31  
    Embed tool, 32  
    expanding elements, 229  
    Eyedropper tool, 32  
    Feedback tool, 33  
    grids, 33  
    grouping items, 229  
    Hand tool, 32  
    Input tools, 32  
    Inspector, 112  
    keyboard focus on class name, 229  
    large breakpoint, 170  
    for Mac users, 230  
    medium breakpoint, 165, 181  
    navigating Outline, 230  
    New Project, 89  
    nudging pixels, 229

- shortcuts (*continued*)  
nudging to grid, 229  
Outline, 96, 230–231  
Paste Visual Properties, 170  
pasting visual properties, 229  
publish and preview page, 230  
Publish command, 120  
Publish Settings, 177–178, 212  
Pudge, 229–230  
Select All, 112  
Select tool, 30  
sending feedback to developers, 230  
Swatches palette, 33  
switching breakpoints, 69  
switching to Outline, 57  
Text tool, 31  
Tight Group command, 77, 97, 113  
Toggle Snap, 48  
tools, 228  
ungrouping elements, 229  
view, 228–229  
viewing publish settings, 230  
for Windows users, 231  
sites, publishing to web, 211  
site header, elements of, 73  
sketches, making, 40  
small breakpoint  
Contact form, 206–207  
content area, 182–183  
Details page, 166–167  
highlights, 139–141  
testimonials area, 150–151  
social icons, adding, 109–110  
speakers image, placing, 173  
sprites  
availability of, 149  
maintainability of, 126  
performance of, 126  
square, turning into circle, 74  
stacking order  
changing, 68  
checking for Macawfrence, 96  
Stamp icon, using with global styles, 22  
static positioning  
versus absolute positioning, 184  
and flow, 61–63  
and vertical centering, 84  
static site, maintaining, 217  
sticky settings, applying, 71  
styles, sharing between text blocks, 170  
Styles publish settings  
Add Browser Prefixes, 215  
Advanced Selectors, 215  
Consolidate Styles, 214  
Shorthand Properties, 214  
Tag Selectors, 215  
Trim Whitespace, 215  
subheader, applying Typography settings to, 104  
submit button, creating for Contact form, 200–203  
SVI images, support for, 26  
swatches  
locating links for, 28  
making in Color Picker, 96  
Swatches tool, 33

**T**

Tag Selectors setting, enabling, 215  
templates, converting files into, 217  
testimonials area. *See also* Macawfrence project  
    adding background images, 149  
        div.testimonial container, 147  
    div.testimonial positioning origin, 148  
    interactivity, 142–143  
    medium breakpoint, 150  
    mocking up the look, 144–150  
    overlapping behavior, 148  
    pager bullets, 145–146  
    quote marks, 149  
    removing negative margin warnings, 147  
    resizing canvas, 148  
    small breakpoint, 150–151  
    styling nodes, 146–147  
    text block for attribution, 144–145  
    text block for quote, 144  
text  
    adding to canvas, 75  
    hiding in headers, 101  
text blocks, sharing styles between, 170  
text box, creating for details, 171  
text color, changing, 76  
text fields  
    creating, 196–197  
    using icons in, 231  
Text tool  
    selecting, 75  
    using, 31  
    using to create logos, 98–99  
thinking  
    about layers, 86–87  
    about movement, 86–87

Tight Group command, using, 77, 97, 113

Toggle Snap, enabling, 48

toolbar, locating, 28

toolkits, hosted front-end, 241

tools

    Button, 32

    Container, 31, 90–91

    Direct Select, 30, 100

    Direct Selection, 138

    Element, 31, 187–188

    Embed, 32, 186–187

    Eyedropper, 32, 53, 96

    Feedback, 33

    Global Styles, 33

    Hand, 32

    hiding in Macawfrence project, 98

    Input, 32, 192

    Select, 30

    shortcuts, 228

    Swatches, 33

    Text, 31, 75, 98–99

troubleshooting, 244–245

Twitter icon, positioning, 123

Twitter link, creating, 110

type, setting in pixels, 105

Typography palette, settings in, 76

Typography settings, applying to subheader, 104

**U**

UI (user interface). *See also* interface

    appearance of, 12

    custom check boxes in, 14

undo and redo, support for, 244

Units publish settings

    Font Size, 216

    Geometry, 216



Unsplash.com link, 158

Up arrow key, using, 231

## V

values, setting, 175

View modes

  features of, 25-26

  identifying in user interface, 12

  toggle in options bar, 30

viewport, explained, 48

view shortcuts, 228-229

visual properties, copying, 229

## W

warnings

  dealing with, 97

  including in Outline, 77

  removing, 147

web fonts, custom integration, 250-254. *See also* font panel

website field, including in Contact form, 196

websites, publishing, 211

Web Standards Project, 3. *See also* responsive web design

whitespace, adjusting, 179

WidgetCo header, clicking, 77

windows, resizing, 70

wireframing process. *See* prototyping process

workflows

  considering mobile first, 40-41

  for containers and content, 80

  grouping items, 43

  making sketches, 40

  resizing, 42

  reusing elements, 44

  semantics, 42-43

  setting breakpoints, 41-42

  using containers, 43

workshops image, 175