

MADCAP FLARE 2023 r2

Using Media Queries

Copyright © 2023 MadCap Software. All rights reserved.

Information in this document is subject to change without notice. The software described in this document is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of those agreements. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of MadCap Software.

MadCap Software
9171 Towne Center Drive, Suite 335
San Diego, California 92122
858-320-0387
www.madcapsoftware.com

THIS PDF WAS CREATED USING MADCAP FLARE.

CONTENTS

CHAPTER 1

Welcome	5
---------------	---

CHAPTER 2

Creating a Project From a Template	6
How to Create a New Project From a Template	7

CHAPTER 3

Understanding Media Queries	8
How to Select Media Queries in the Stylesheet Editor	9
How to Edit Tablet and Mobile Breakpoints	11

CHAPTER 4

Editing Styles for Media Queries	13
How to Edit a Media Query Style	14
How to View Screen Sizes With a Web Browser	16

CHAPTER 5

Viewing Media Queries in Editors	19
How to View Media Queries in the XML Editor	20
How to View Media Queries in the Internal Text Editor	21

CHAPTER 6

Creating Custom Media Queries	23
How to Create a New Media Query	24
How to View Media Query Precedence	27

APPENDIX

PDFs	29
Tutorials	29
Cheat Sheets	30
User Guides	31

CHAPTER 1

Welcome


Approximate Time: 15 minutes

Welcome to the Flare Styles Tutorial—Using Media Queries.

- **Tutorial Goal** Learning how to use media queries in a Flare project.
- **Key Concepts** Getting familiar with the tablet and mobile media queries that come with Flare, creating a custom media query, and seeing how media queries are tied to HTML5 responsive output.


When specific media conditions are met, media query style settings display in the output.


The screenshot shows the Flare Styles interface. On the left, a 'Responsive Output Settings (Overrides the Skin)' panel is visible, with 'Tablet Breakpoint' set to 1200 px and 'Mobile Breakpoint' set to 700 px. An orange arrow points from this panel to the right. On the right, two preview windows are shown side-by-side. The left window is titled 'Medium: tablet h1' and shows a 'Background' property set to 'aqua'. Below it, a preview of the text 'This is MadCap' is shown with an aqua background. The right window is titled 'Medium: mobile h1' and shows a 'Background' property set to 'yellow'. Below it, a preview of the text 'This is MadCap' is shown with a yellow background.

 **NOTE** Since media queries are tied to responsive output, it is recommended to work through the Responsive Output Tutorial after completing this tutorial.

Creating a Project From a Template

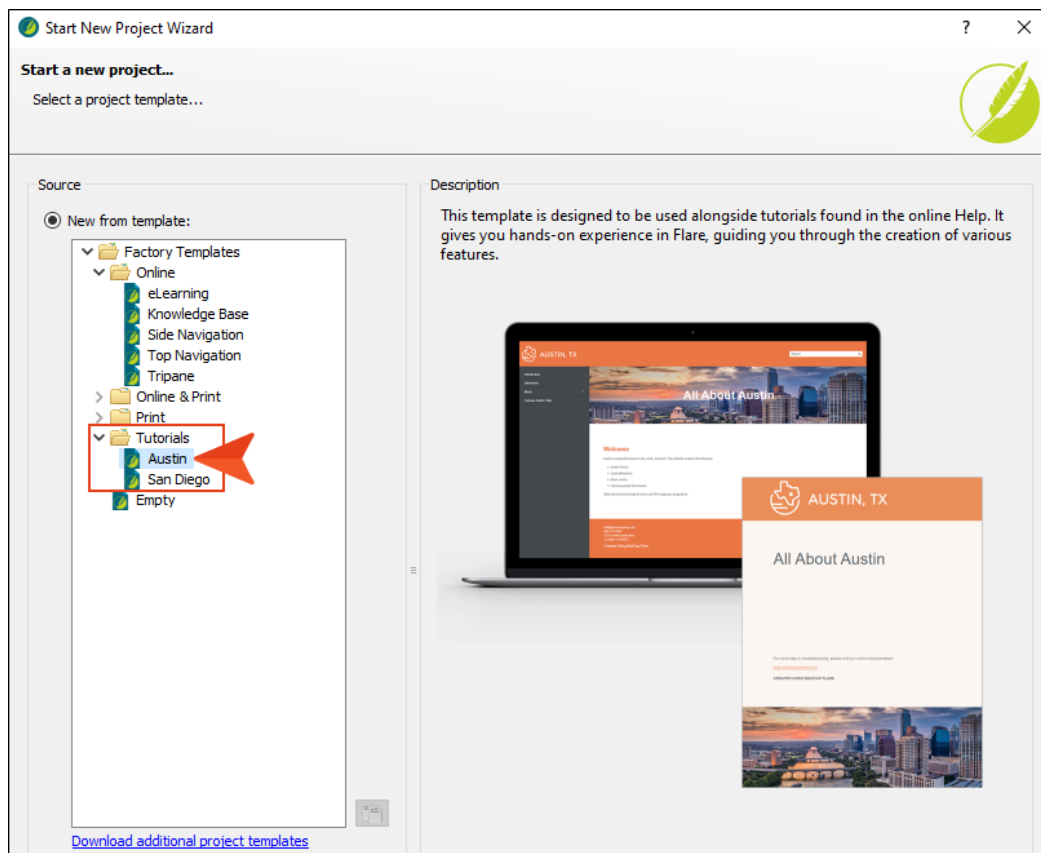
To start, let's create a new project based on Flare's Austin template.

 **NOTE** This is a standalone tutorial. However, if you have completed the previous tutorials, you can skip this topic since a project has already been created.

 **NOTE** If you plan to work with the project from the previous styles tutorials, the images you see as you go through this tutorial will be slightly different. If you want the images to match, then it is recommended to create a new project for this tutorial.

I How to Create a New Project From a Template

1. Select **File > New Project**. The Start New Project Wizard opens.
2. In the **Project name** field, give your project any name you want.
3. (Optional) In the **Project folder** field, you can enter a location where you want to save your project. By default, projects are saved in your Documents > My Projects folder.
4. Click **Next**.
5. Under **Factory Templates**, expand the **Tutorials** folder. Select the **Austin** template.



6. Click **Next**.
7. For branding, keep the default settings. (This is where you could customize your project's look with branding, such as colors and logo.) Click **Next**.
8. Click **Finish**. The project is created and loaded into Flare.

Understanding Media Queries

A media query is an alternative group of settings in a stylesheet. These settings are automatically used under certain conditions, such as when a screen of a certain size is displaying the output. Media queries are able to do this because they are configured with specific criteria (e.g., maximum width of the screen, orientation, resolution). When the criteria are met, the style settings in the media query are used to display the output. *You do not tell a Flare target to use a media query; it just happens automatically.*

You can place any valid CSS style settings in a media query, just as you can in a medium. For example, if you want paragraph text to suddenly turn blue when a topic is viewed on an iPhone, you can edit the mobile media query, telling it to use a blue font for all paragraph styles.


This chapter discusses the following:

How to Select Media Queries in the Stylesheet Editor	9
How to Edit Tablet and Mobile Breakpoints	11

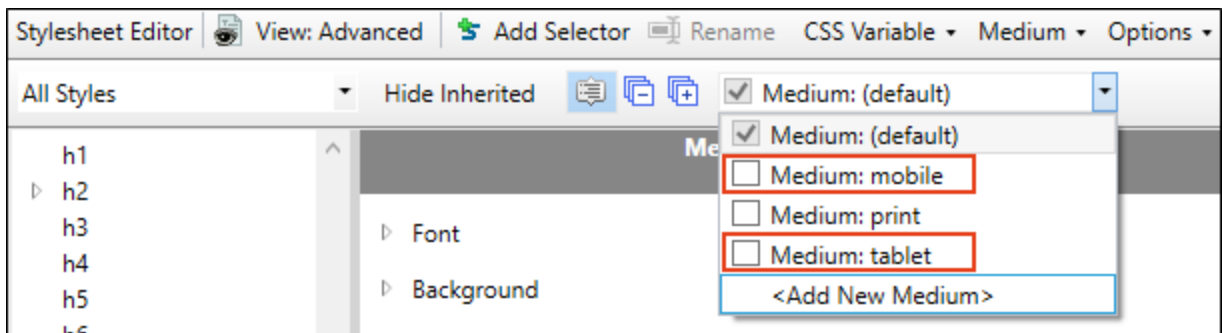
I How to Select Media Queries in the Stylesheet Editor

One of the most common ways to use a media query is to identify a width setting for a device with a different screen size. Let's take a look at the media queries that come with Flare.

1. From the Content Explorer, expand **Resources > Stylesheets**, and double-click the **Styles.css** file.
2. From the local toolbar of the Stylesheet Editor, make sure the first button is labeled **View: Advanced**.

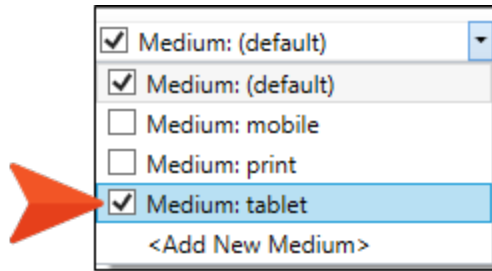
 **NOTE** You can select a media query in the editor's Simplified view. In that case, whichever media query you choose becomes the editable one.

3. In the left pane tree structure, select **p**.
4. From the local toolbar, click the **Medium** drop-down.

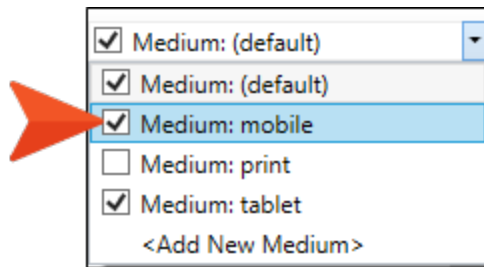


A couple of media queries (tablet and mobile) are already provided in Flare. You can create additional media queries from the Stylesheet Editor if you want, but most authors will be able to do everything they need with just the tablet and mobile media queries. The tablet media query is designed to be used on medium-sized screens, such as iPads. The mobile media query is designed to be used on smaller screens, such as smart phones. (The print item in the drop-down is actually a medium, not a media query. The default is a medium but can also be considered a media query in its relationship with the tablet and mobile items.)

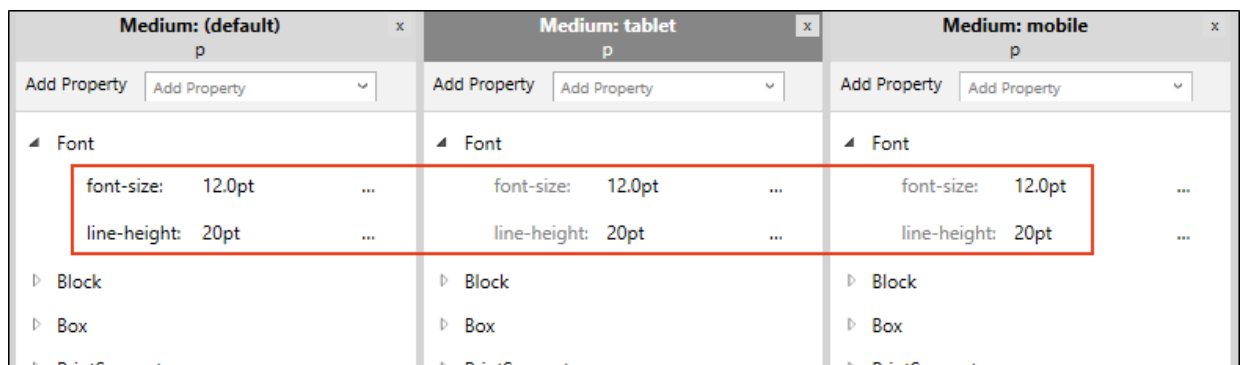
- Click the check box next to the **Medium: tablet** item. The media query opens in a new window pane next to the default medium in the editor.



- Select the drop-down again, and click the check box next to the **Medium: mobile** item. It opens in the editor.



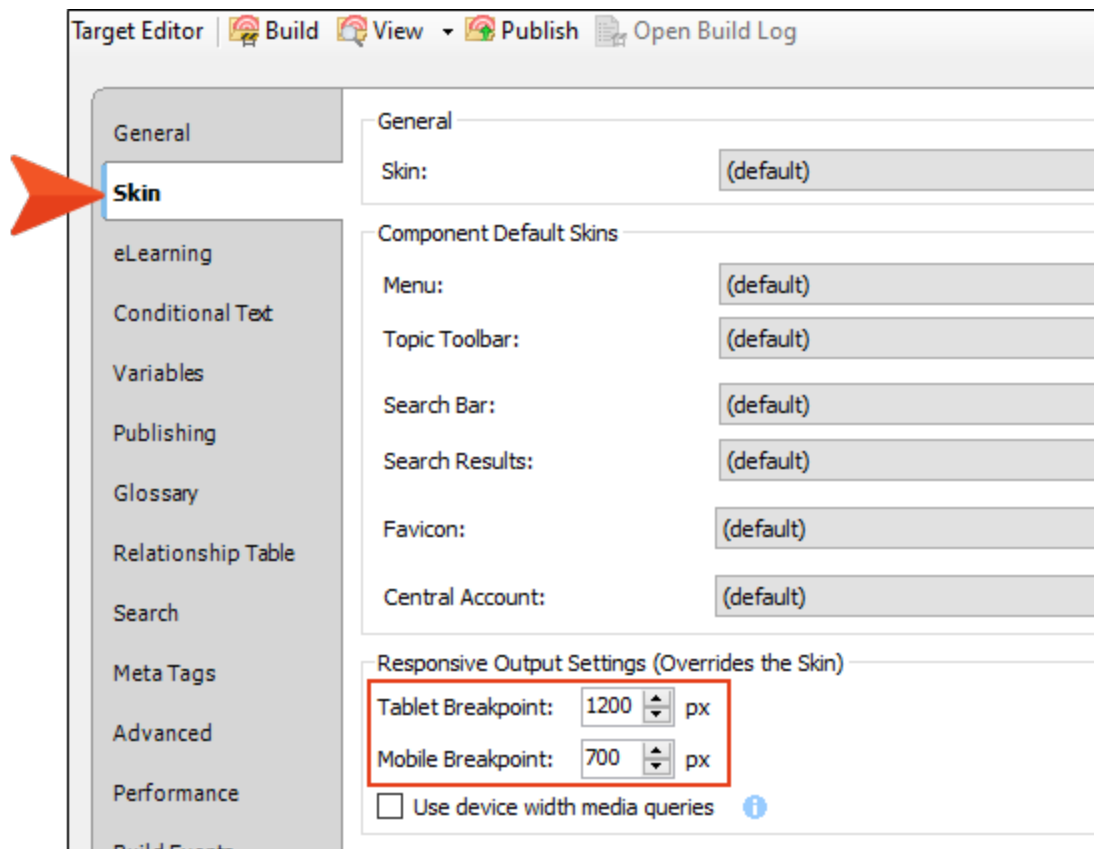
- Expand different property groups in the media query window panes. Notice how the styles are initially inherited from the default medium.




I How to Edit Tablet and Mobile Breakpoints


The tablet and mobile media queries are tied to the responsive output settings on the Skin tab of the Target Editor for HTML5 targets. The breakpoints provided in the target determine the point at which your media queries will become active in displaying the different style settings.

1. From the Project Organizer, expand **Targets**, and double-click **All-About-Austin-HTML5**.
2. In the Target Editor, select the **Skin** tab.
3. The default tablet breakpoint is 1279px, and the default mobile breakpoint is 767px. Let's round those numbers down respectively, type 1200 pixels (tablet), and type 700 pixels (mobile).



4. Click  to save your work.

 **NOTE** Notice the option for **Use device width media queries**. This means that the responsive nature of the skin depends on the device being used to view the output (browser, tablet, or mobile phone), rather than on merely the width of the screen.

 **NOTE** HTML5 Side and Top Navigation skins are always enabled for responsive output. If you prefer using Tripane HTML5 output, you can set breakpoints in the skin.

Editing Styles for Media Queries

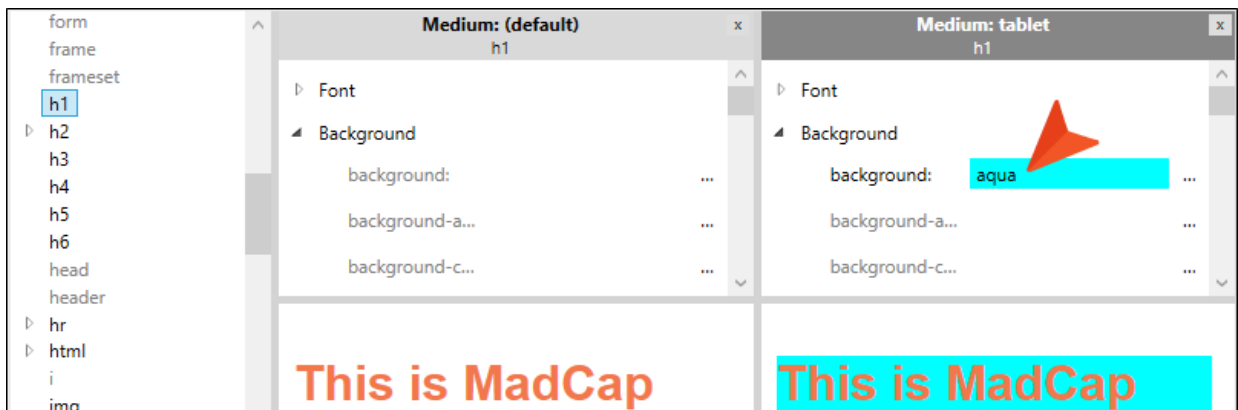
Let's view the output to see the results of how media queries work. But first, let's edit the h1 styles for each media query by giving them a vibrant background, so the breakpoints are easy to identify in the web browser.

This chapter discusses the following:

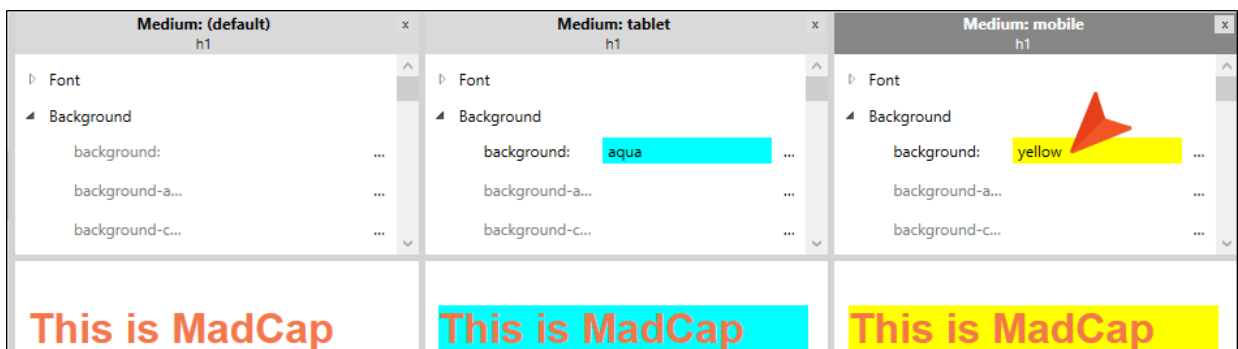
How to Edit a Media Query Style	14
How to View Screen Sizes With a Web Browser	16

I How to Edit a Media Query Style


1. Go back to the `Styles.css` file.
2. In the left pane tree structure, select the `h1` style.
3. In the local toolbar, select the **Show** drop-down, and choose **Show: All Properties**.
4. In the Medium: tablet window pane, expand the **Background** property group. (The media query you give focus to becomes editable.)
5. Next to the top **Background** property, type `aqua`, and press **ENTER**. Notice the property is no longer inheriting its style from the default medium.



6. In the Medium: mobile window pane, locate the same **Background** property.
7. Type `yellow`, and press **ENTER**. Notice the property is no longer inheriting its style from the default medium or from the tablet media query.




8. Click  to save your work.

 **NOTE** When working with media queries, the following is applicable regarding inheritance. When a screen is larger than a tablet, then styles associated with the default medium are used. Tablet-sized screens inherit from the default medium, but if there are any conflicts between files, then the styles from the tablet media query will win. Mobile-sized screens inherit from the default medium and the tablet media query. If there are any conflicts, then the mobile media query will win.

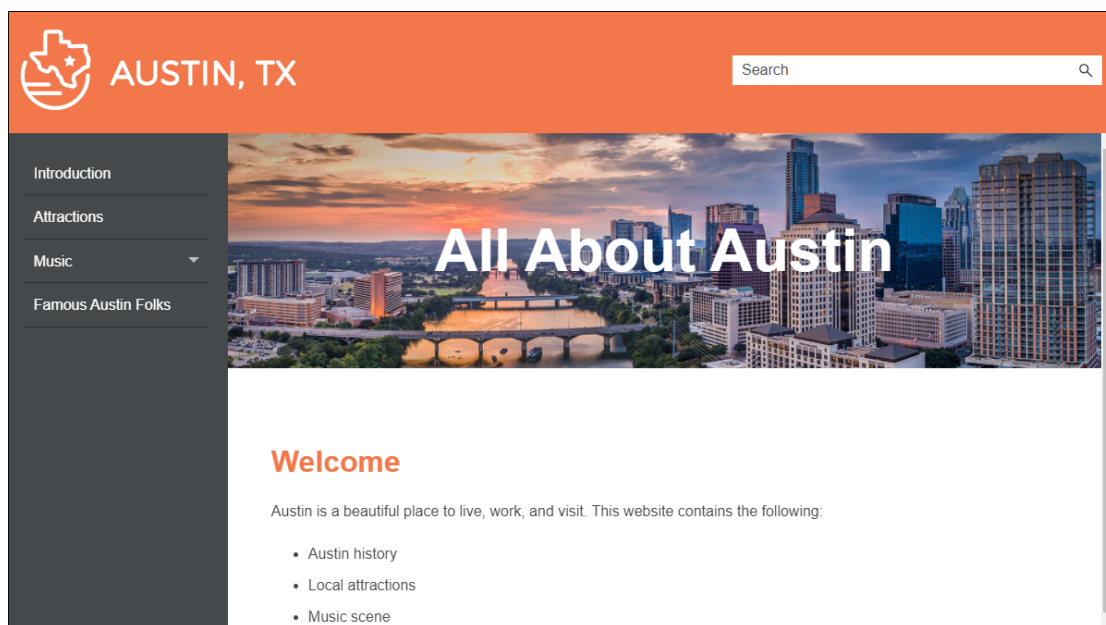
Even though you may not see the inheritance reflected in the stylesheet when editing mediums and media queries, it is happening.

How to View Screen Sizes With a Web Browser

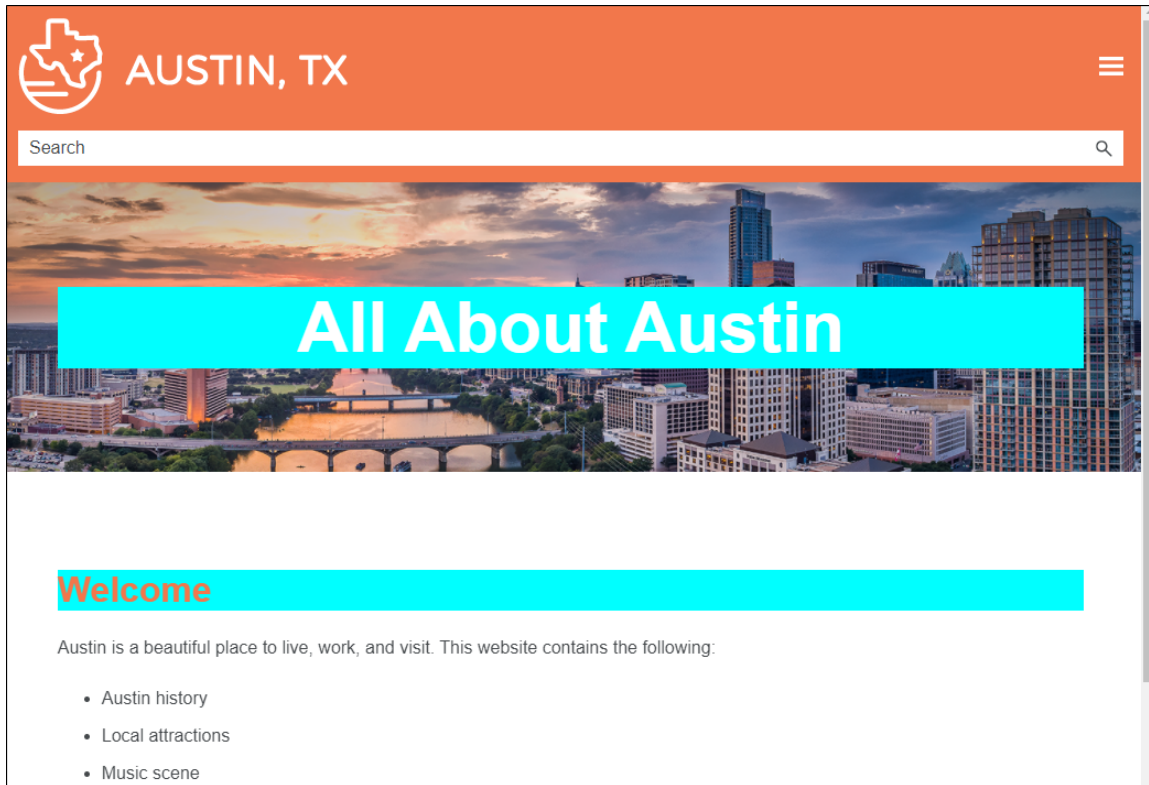
Let's build the HTML5 output to view the responsive output as it displays for the default web medium, and for the tablet and mobile media query breakpoint screen settings.


 **NOTE** You don't need to have a tablet or a mobile device on hand to test responsive output. It can all be simulated using the generated output in your web browser.

1. Select the **Project** ribbon. Then from the **Build Primary** drop-down, select **Build All-About-Austin-HTML5**. The Builds window pane opens at the bottom of the Flare interface, and the target begins to generate. When the build finishes successfully, the Build Progress cell turns dark green.
2. Double-click the row to open the HTML5 output, and view it in a regular browser with the window maximized. You will see the settings for the default web medium.

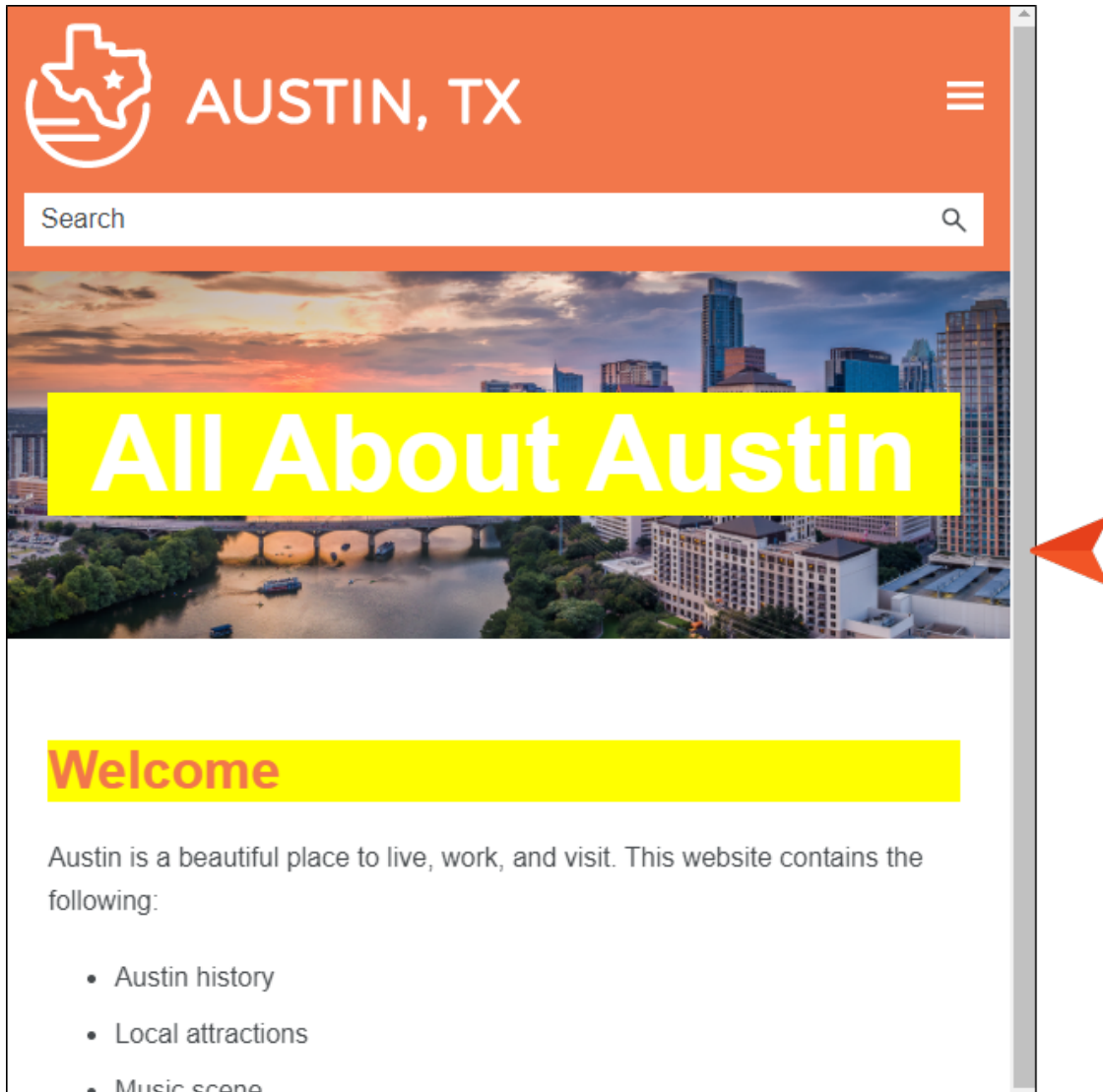



3. Click and drag the browser window to reduce it. Once the width of the browser window reaches 1200 pixels of width, the display changes to show the tablet media query (with a bright aqua background for the h1 style element).



 **NOTE** If you are working the styles tutorials in a sequential order without creating a new project each time, keep in mind that the background color and text do not respond as nicely as they do when working this tutorial individually.

- Click and drag the browser window to reduce it further. Once the width of the browser window reaches 700 pixels, the display changes to show the mobile media query (with a yellow background for the h1 style element).



 **NOTE** As you reduce the size of the browser window, look for other differences as well. Noticeably, the table of contents disappears from the left side (and appears as a flyout menu in the upper-right corner), and the repositioning of the search bar.

- Close the HTML5 output.

Viewing Media Queries in Editors

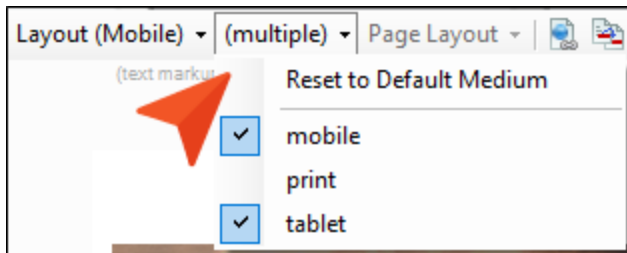
Let's take a closer look at media queries in Flare's XML Editor and Internal Text Editor.

This chapter discusses the following:

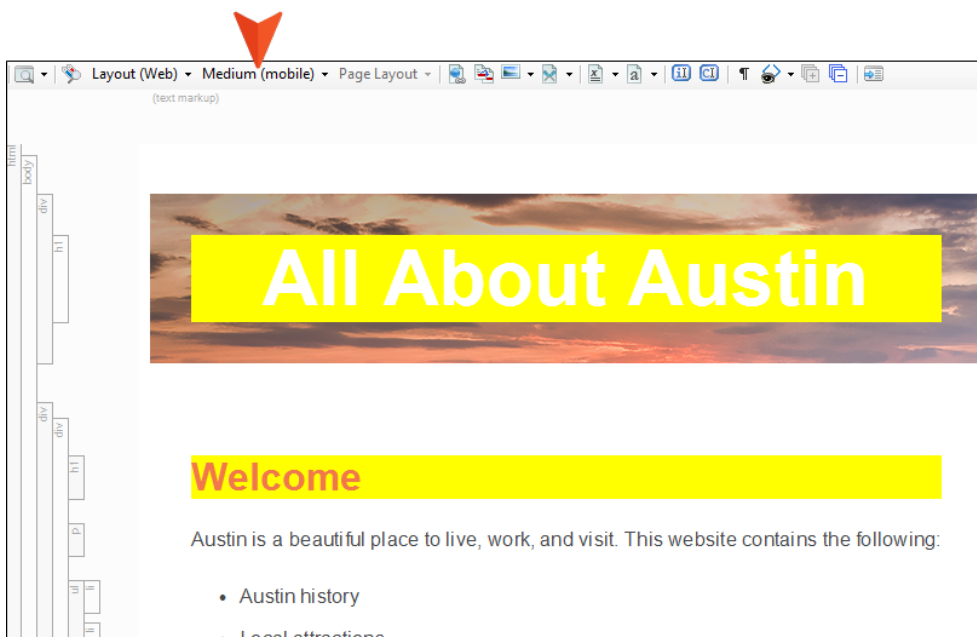
How to View Media Queries in the XML Editor	20
How to View Media Queries in the Internal Text Editor	21

I How to View Media Queries in the XML Editor

1. From the Content Explorer, double-click the **Home.htm** topic.
2. In the local toolbar, select the **Medium** drop-down. Notice that **(multiple)** displays to indicate multiple styles are applicable (i.e., tablet and mobile).



You can work in a topic with your preferred media query styles set. This enables you to see what content will look like before building the output.

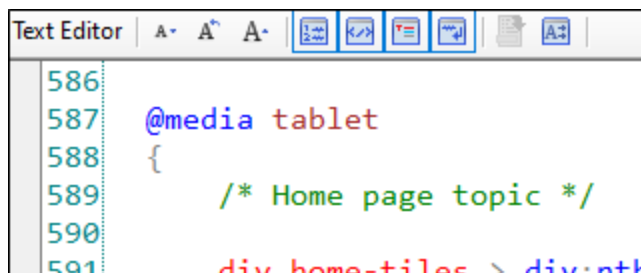


3. Cycle through the mediums to see what they look like in the editor. From the **Medium** drop-down, select **Reset to Default Medium**, and then select **Tablet**, and then select **Mobile** (to end on).


I How to View Media Queries in the Internal Text Editor

Let's see how a media query looks in CSS code in the Text Editor.

1. From the Content Explorer, expand **Resources > Stylesheets**, and right-click the **Styles.css** file.
2. From the context menu, select **Open with**, and then select **Internal Text Editor**. All the styles and properties from the Stylesheet Editor are displayed to the right in the Text Editor.
3. In the Text Editor, all the default styles are in the upper region of the editor. As you scroll down to roughly line 587, you'll see a line that starts with `@media`. This means the style is either a medium or a media query. The styles underneath the media entry are indented to make them easier to read and distinguish from the default medium styles.



```
Text Editor | A· A· A· | [Icons] | [Icons] | [Icons] | [Icons] | [Icons] | [Icons] |
586
587 @media tablet
588 {
589     /* Home page topic */
590
591     div.home-tiles > div:nth
```

 **NOTE** If you are working the styles tutorials in a sequential order, the line number outlined in the step and image may not match what you see in the editor. Scroll down in the Text Editor until you see the `@media tablet` item.

- Continue to scroll down to roughly lines 650 and 710. You will see the h1 background colors for the tablet and mobile media queries respectively.

```
649  
650     h1  
651     {  
652         background: aqua;  
653     }  
654 }
```

```
707  
708     h1  
709     {  
710         background: yellow;  
711     }  
712 }
```

- Close the file.

Creating Custom Media Queries

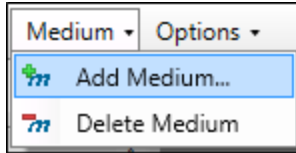
As mentioned before, most authors will be able to do everything they need with just the tablet and mobile media queries. However, there are situations where content might look better if you create a custom media query. For example, a custom query might come in handy if you want content to display a certain way in between the tablet and mobile breakpoints, or if you want content to be narrower than the mobile width.

This chapter discusses the following:

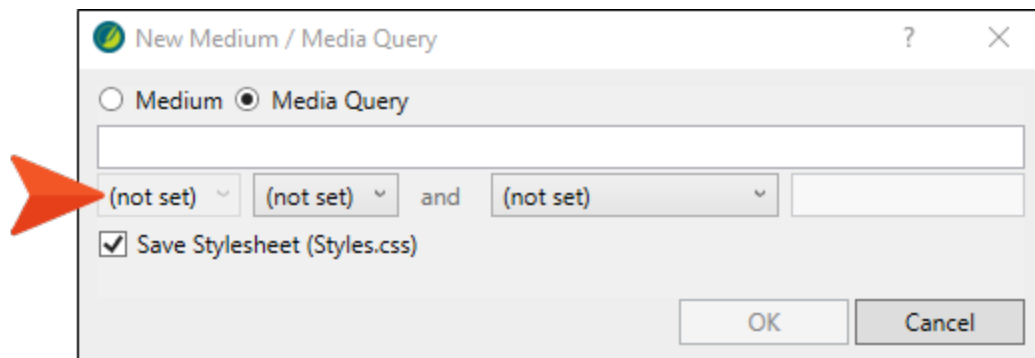
How to Create a New Media Query	24
How to View Media Query Precedence	27


I How to Create a New Media Query

1. Open the `Styles.css` file.
2. In the local toolbar of the Stylesheet Editor, click the **Medium** drop-down, and select **Add Medium**. The New Medium / Media Query dialog opens.



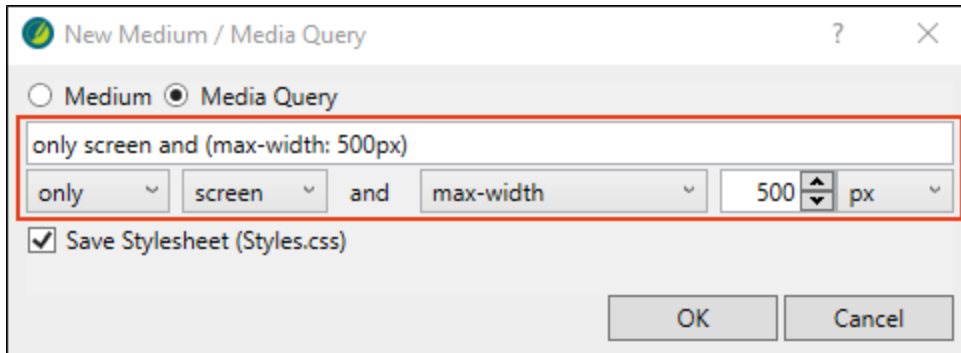
3. Select **Media Query**. Extra fields are shown in the dialog.



 **NOTE** Media queries are written as logical expressions that check for specified media conditions. You can enter your media query directly in the text field (as long as you use valid media query syntax). Alternatively, you can use the fields below it to choose criteria for the media query; the text field is populated accordingly. For more information about creating custom media queries and the options available in the New Medium / Media Query dialog, see:

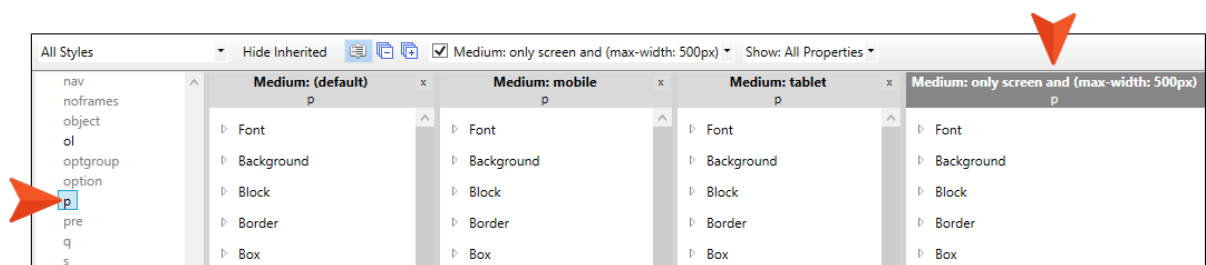
<http://www.w3.org/TR/css3-mediaqueries/>

- Set the fields in the dialog as follows, and then click **OK**. (The first drop-down is disabled, so just start at the second drop-down, and go back to the other when it is enabled.)



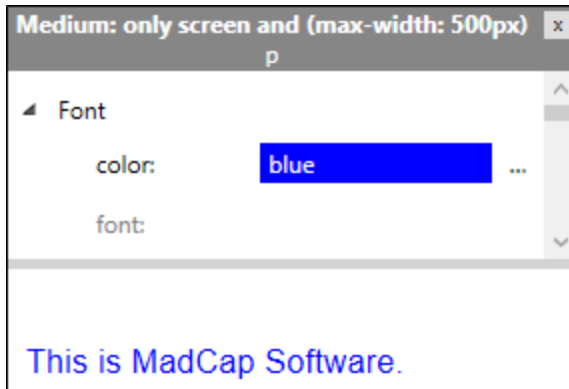
By setting the maximum width, when you reduce the width of the browser to 500px, it takes on a different look with the specific media query style setting for that device size.

- The custom media query, named Medium: only screen and (max-width:500px), displays automatically next to the other mediums in the editor. In the left pane tree structure, select the **p** style.




- In the local toolbar, from the **Show** drop-down, choose **Show: All Properties**.
- In the custom media query window pane, expand the **Font** group.

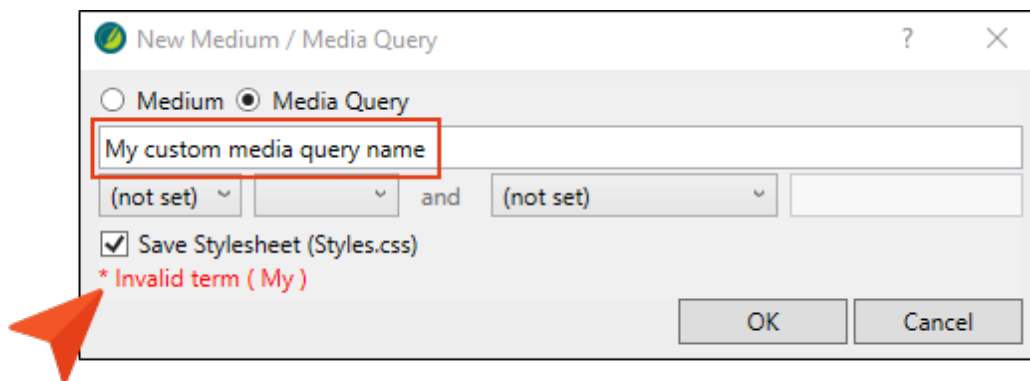
- Next to the **Color** property, type `blue`, and press **ENTER**. The blue font color is not intended to make our project pretty, we just want the change to stand out after the build is generated.



NOTE If you are working the styles tutorials in a sequential order, the paragraph element font color was set to gray. Just update the value to blue.

- Click off the **Color** property.
- Click  to save your work.

NOTE If you want to rename your media query, you can only rename it by making modifications to its settings in the dialog. It must retain valid syntax. Flare will let you know if the syntax is invalid.

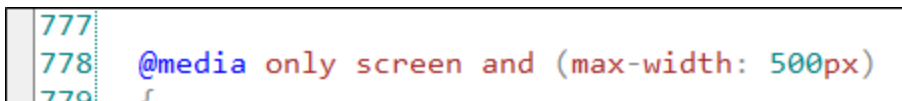


I How to View Media Query Precedence


The order that media queries display in the Text Editor affects how they are used.

What if there is a conflict between your selected medium and a media query, or a conflict between media queries themselves? Media queries will always have precedence over your selected medium. As far as multiple media queries are concerned, the end result depends on the order of the media queries in your stylesheet (when viewing it in the Internal Text Editor). The general rule is that priority is given to whichever media query is listed last (i.e., the one that was added most recently) in the stylesheet. Then the next one above has the next highest priority, and so on. You can always open your stylesheet in the Internal Text Editor and change the order of the media queries.

1. From the Content Explorer, expand **Resources > Stylesheets**, and right-click the **Styles.css** file.
2. From the context menu, select **Open with**, and then select **Internal Text Editor**.
3. In the Text Editor, scroll to the bottom of the file (roughly line 778). The most recently added media query, `@media only screen and (max-width:500px)`, has the highest precedence (it displays lowest in the stylesheet).

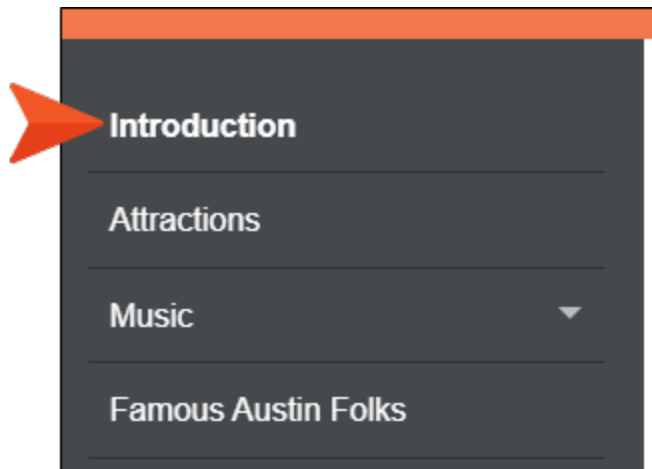


```
777:
778: @media only screen and (max-width: 500px)
779: /
```

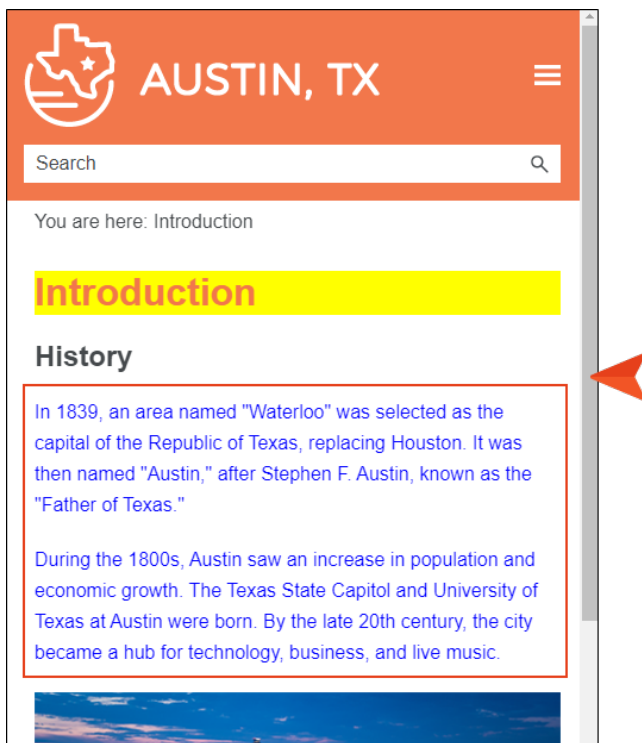
 **NOTE** For more information see the online Help.

4. Select the **Project** ribbon. Then from the **Build Primary** drop-down, select **Build All-About-Austin-HTML5**. The Builds window pane opens at the bottom of the Flare interface, and the target begins to generate. When the build finishes successfully, the Build Progress cell turns dark green.
5. Double-click the row to open the HTML5 output, and view it in a regular browser with the window maximized.

6. From the table of contents, select the **Introduction** topic.



7. Click and drag the browser window to reduce it. Once the width of the browser window reaches 500 pixels, the display changes to show the custom media query (with blue paragraph font).



8. Close the HTML5 output.

9. From the **Window** ribbon, select **Close All Documents**.

APPENDIX

PDFs

The following PDFs are available for download from the online Help.

I Tutorials

Getting Started Tutorial

Autonumbers Tutorial

Back-to-Top Button Tutorial

Context-Sensitive Help Tutorial

Custom Toolbar Tutorial

eLearning Tutorial—Basic

eLearning Tutorial—Advanced

Image Tooltips Tutorial

Lists Tutorial

Meta Tags Tutorial

Micro Content Tutorial—Basic

Micro Content Tutorial—Advanced

Responsive Output Tutorial

Single-Sourcing Tutorial

Snippet Conditions Tutorial

Styles Tutorials

Tables Tutorial

Word Import Tutorial

I Cheat Sheets

Context-Sensitive Help Cheat Sheet

Folders and Files Cheat Sheet

Learning & Development Cheat Sheet

Lists Cheat Sheet

Micro Content Cheat Sheet

Print-Based Output Cheat Sheet

Search Cheat Sheet

Shortcuts Cheat Sheet

Structure Bars Cheat Sheet

Styles Cheat Sheet

I User Guides

Accessibility Guide

Analysis and Reports Guide

Architecture Guide

Autonumbers Guide

Branding Guide

Condition Tags Guide

Context-Sensitive Help Guide

Eclipse Help Guide

eLearning Guide

Getting Started Guide

Global Project Linking Guide

HTML5 Guide

Images Guide

Import Guide

Indexing Guide

Key Features Guide

Lists Guide

*MadCap Central Integration
Guide*

Meta Tags Guide

Micro Content Guide

Navigation Links Guide

Plug-In API Guide

Print-Based Output Guide

Project Creation Guide

QR Codes Guide

*Reviews & Contributions With
Contributor Guide*

Scripting Guide

Search Guide

SharePoint Guide

Skins Guide

Snippets Guide

Source Control Guide: Git

*Source Control Guide:
Perforce Helix Core*

*Source Control Guide:
Subversion*

*Source Control Guide: Team
Foundation Server*

Styles Guide

Tables Guide

Tables of Contents Guide

Targets Guide

Template Pages Guide

Templates Guide

Topics Guide

Touring the Workspace Guide

*Transition From FrameMaker
Guide*

*Translation and Localization
Guide*

Variables Guide

Videos Guide

What's New Guide