

24. Go to the Page Break Styles section and add the following style rules to
 - a. insert page breaks after every `aside` element.
 - b. never allow a page break within an `ol`, `ul`, or `img` element.
 - c. set the size of widows and orphans within paragraphs to 3 lines each.
25. Save your changes to the file.
26. Reload the `tf_tips.html` file in your browser and preview its printed version. Verify that your pages resemble those shown in Figure 5–62 (there may be differences depending on your browser and your printer).

APPLY

Case Problem 1

Data Files needed for this Case Problem: `gp_cover_txt.html`, `gp_page1_txt.html`, `gp_page2_txt.html`, `gp_page3_txt.html`, `gp_layout_txt.css`, `gp_print_txt.css`, 2 CSS files, 21 PNG files

Golden Pulps Devan Ryan manages the website *Golden Pulps*, where he shares tips on collecting and fun stories from the “golden age of comic books”—a period of time covering 1938 through the early 1950s. Devan wants to provide online versions of several classic comic books, which are now in the public domain.

He’s scanned the images from the golden age comic book, *America’s Greatest Comics 001*, published in March, 1941, by Fawcett Comics and featuring Captain Marvel. He’s written the code for the HTML file and wants you to help him develop a layout design that will be compatible with mobile and desktop devices. Figure 5–63 shows a preview of the mobile and desktop version of a page you’ll create.

Figure 5–63 Golden Pulps sample page



Complete the following:

1. Using your editor, open the **gp_cover_txt.html**, **gp_page1_txt.html**, **gp_page2_txt.html**, **gp_page3_txt.html**, **gp_layout_txt.css**, and **gp_print_txt.css** files from the **html05 ▶ case1** folder. Enter *your name* and *the date* in the comment section of each file, and save them as **gp_cover.html**, **gp_page1.html**, **gp_page2.html**, **gp_page3.html**, **gp_layout.css**, and **gp_print.css** respectively.
2. Go to the **gp_cover.html** file in your editor. Add a viewport `meta` tag to the document head, setting the width of the layout viewport to the device width and setting the initial scale of the viewport to 1.0.
3. Create links to the following style sheets: a) the **gp_reset.css** file to be used with all devices, b) the **gp_layout.css** file to be used with screen devices, and c) the **gp_print.css** file to be used for printed output.
4. Take some time to study the contents and structure of the file. Note each panel from the comic book is stored as a separate inline image with the class name *panel* along with class names of *size1* to *size4* indicating the size of the panel. Size1 is the largest panel down to size4, which is the smallest panel. Close the file, saving your changes.
5. Repeat Steps 2 through 4 for the **gp_page1.html**, **gp_page2.html**, and **gp_page3.html** files.
6. Go to the **gp_layout.css** file in your editor. In this style sheet, you'll create the layout styles for mobile and desktop devices. Note that Devan has used the `@import` rule to import the **gp_designs.css** file, which contains several graphical and typographical style rules.
7. Go to the Flex Layout Styles section and insert a style rule to display the `body` element as a flexbox oriented as rows with wrapping.
8. The page body content has two main elements. The `section` element with the ID *sheet* contains the panels from the comic book page. The `article` element contains information about the comic book industry during the Golden Age. Devan wants more of the page width to be given to the comic book sheet. Add a style rule that sets the flex growth and shrink rate of the `section#sheet` selector to 3 and 1 respectively and set its flex basis size to 301 pixels.
9. Less page width will be given to the `article` element. Create a style rule to set its flex growth and shrink values to 1 and 3 respectively and set its flex basis size to 180 pixels.
10. Go to the Mobile Devices section and create a media query for screen devices with a maximum width of 480 pixels.
11. With mobile devices, Devan wants each comic book panel image to occupy a single row. Create a style rule that sets the width of `img` elements belonging to the `panel` class to 100%.
12. For mobile devices, Devan wants the horizontal navigation links to other pages on the Golden Pulp website to be displayed near the bottom of the page. Within the media query, set the flex order of the `nav.horizontal` selector to 99.
13. Create a style rule to set the flex order of the `body > footer` selector to 100.
14. Go to the Tablet and Desktop Devices: Greater than 480 pixels section and create a media query that matches screen devices with widths greater than 480 pixels.
15. For tablet and desktop devices, you'll lay out the horizontal navigation list as a single row of links. Within the media query, create a style rule for the `nav.horizontal ul` selector that displays that element as a flexbox, oriented in the row direction with no wrapping. Set the height of the element to 40 pixels.
16. For the `nav.horizontal ul li` selector set the flex growth shrink, and basis size values to 1, 1, and auto respectively so that each list items grows and shrinks at the same rate.
17. With wider screens, Devan does not want the panels to occupy their own rows as is the case with mobile devices. Instead, within the media query create style rules, define the width of the different classes of comic book panel images as follows:
 - a. Set the width of `size1 img` elements to 100%.
 - b. Set the width of `size2 img` elements to 60%.
 - c. Set the width of `size3 img` elements to 40%.
 - d. Set the width of `size4 img` elements to 30%.
18. Save your changes to the file and then open the **gp_cover.html** file in your browser or device emulator. Click the navigation links to view the contents of the cover and first three pages. Verify

that with a narrow screen the panels occupy their own rows and with a wider screen the sheets are laid out with several panels per row. Further verify that the horizontal navigation list is placed at the bottom of the page for mobile devices.

19. Devan also wants a print style that displays each comic book sheet on its own page and with none of the navigation links. Go to the **gp_print.css** style sheet in your editor. Add style rules to
 - a. hide the `nav`, `footer`, and `article` elements.
 - b. set the width of the element referenced by the `section#sheet` selector to 6 inches. Set the top/bottom margin of that element to 0 inches and the left/right margin to `auto` in order to center it within the printed page.
 - c. set the width of `img` elements belong to the `size1` class to 5 inches, `size2` images to 3 inches, `size3` images to 2 inches, and `size4` images to 1.5 inches.
20. Save your changes to the file and then reload the contents of the comic book pages in your browser and preview the printed pages. Verify that the printed page displays only the website logo, the name of the comic book, and the comic book panels.

Case Problem 2

Data Files needed for this Case Problem: `cw_home_txt.html`, `cw_styles_txt.css`, 2 CSS files, 10 PNG files

Cauli-Wood Gallery Sofia Fonte is the manager of the *Cauli-Wood Gallery*, an art gallery and coffee shop located in Sedona, Arizona. She has approached you for help in redesigning the gallery's website to include support for mobile devices and tablets. Your first project will be to redesign the site's home page following the principles of responsive design. A preview of the mobile and desktop versions of the website's home page is shown in Figure 5–64.