## **Case Problem 2**

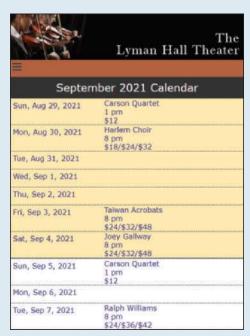
Data Files needed for this Case Problem: lht\_sept\_txt.html, lht\_tables\_txt.css, lht\_columns\_txt.css, 2 CSS files, 3 PNG files, 1 TXT file

**The Lyman Hall Theater** Lewis Kern is an events manager at the Lyman Hall Theater in Brookhaven, Georgia. The theater is in the process of updating its website, and Lewis has asked you to work on the pages detailing events in the upcoming year. He's asked you to create a calendar page that lists the upcoming events for September. A list of the events is stored in the lht\_schedule.txt file.

Lewis wants a responsive design so that the calendar is readable for both mobile and desktop users. In addition to the calendar, Lewis wants the article describing the September events displayed in column layout. He suggests that you set the width of the columns, allowing the number of columns to be determined based on the width of the display screen. Figure 6–54 shows a preview of the page you will create for the theater viewed using mobile and desktop devices.

Figure 6-54

The Lyman Hall Theater September Calendar



 $\begin{tabular}{ll} \textbf{mobile version} \\ \hline \textcircled{$0$ Stokkete/Shutterstock.com, $\textcircled{$0$}$ Studio 10 Artur/Shutterstock.com, $\oef{tabular}$ and $\oef{tabular}$ are also considered as $\oef{tabular}$. } \label{tabular}$ 



desktop version

## Complete the following:

- 1. Using your editor, open the <a href="https://linear.css">lht\_sept\_txt.html</a>, <a href="https://lht.tables\_txt.css">lht\_columns\_txt.css</a> files from the html06 ➤ case2 folder. Enter *your name* and *the date* in the comment section of each file, and save them as <a href="https://lht.tables.css">lht\_sept.html</a>, <a href="https://lht.tables.css">lht\_columns.css</a> respectively.
- 2. Go to the **lht\_sept.html** file in your editor. Add links to the lht\_tables.css and lht\_columns.css files to the document head.
- 3. Directly below the article element, insert a web table using the ID calendar.
- 4. Add a caption with the text **September 2021 Calendar**.
- 5. Add a column group containing two col elements. Give the first col element the class name **weekdays** and have it span five columns. Give the second col element the class name **weekends** and have it span 2 columns.
- 6. Add the table header row group with a single row with seven heading cells containing the three-letter day abbreviations **Sun** through **Sat**.
- 7. Add the table body row group with five rows and seven data cells within each row. Within each table cell, add the following code to create an h1 heading and description list:

```
<h1>day</h1>
<d1>
<dt>event</dt>
<dd>time</dd>
<d>time</d>
<dd>time</d>
<dd>time</d>
<dd>time</d>
<dd>time</dd>
<dd>time</d>
<dd>time</dd>
<dd>time</d>
<dd>time</dd>
<dd>time</d>
<dd>time</dd>
<dd>time</dd>
<dd>time</dd>
<dd>time</dd>
<dd>t
```

where *day* is the day of the month, *event* is the name of an event occurring on that day, *time* is the time of the event, and *price* is the admission price, using the days, events, times, and prices shown in the lht\_schedule.txt file. If there is no event scheduled for the day, insert only the code for the h1 heading. Start your calendar with August 29 and conclude it with October 2.

- **Explore** 8. For each data cell you create in the table body, add an attribute in the opening td tab named **data-date** containing the date associated with the cell. For example, in the first table cell, enter data-date value "Sun, Aug 29, 2021", the second cell will have the data-date value "Mon, Aug 30, 2021" and so forth. (Note: This code will be used to display the date information in the mobile layout.)
- 9. Save your changes to the file and then return to the **lht\_tables.css** file in your editor.
- 10. Within the Mobile Styles section, insert a media query for screen devices with a maximum width of 640 pixels.
- **Explore** 11. You want mobile devices to display the calendar information in two columns. To create this layout, add the style rules that: (a) displays table, tbody, tr, td, th, and caption elements as blocks, (b) does not display the thead h1 element, and (c) displays the table caption in white on a medium gray background with a font size of 1.5em and a line height of 2em.
- 12. Create a style rule for every data cell that: (a) adds a 1-pixel dotted gray border, (b) changes the text color to rgb(11, 12, 145), (c) places the cell using relative positioning, (d) sets the left padding to 40%, and e) sets the minimum height to 40 pixels.
- 13. Create a style rule that uses the nth-of-type pseudo-class to display every odd-numbered table row with a background color of rgb(255, 235, 178) and a 2-pixel solid gray border.
- 14. Create a style rule that inserts the text of the data-date attribute before every data cell. Place the attribute text using absolute positioning at the coordinates (0, 0) with a width of 40% and padding space of 5 pixels.
- 15. Next, you design the layout of the calendar for tablet and desktop devices. Go to the Tablet and Desktop Styles section and insert a media query for screen devices with a minimum width of 641 pixels.
- 16. Create a style rule for the table element that: (a) displays the background image lht\_photo1. png with no tiling in the bottom-right corner of the table with a width of 40%, (b) adds a 6-pixel double border with color value rgb(154, 64, 3), (c) collapses the table borders, (d) centers the

- table by setting the top/bottom margins to 20 pixels and the left/right margins to auto, (e) uses a fixed layout for the table content, and (f) sets the width of the table to 85%.
- 17. For every heading and data cell, create a style rule that: (a) adds a 1-pixel solid gray border, (b) sets the font size to 0.85em and with normal weight, (c) adds a 5-pixel padding space, (d) aligns the cell text with the top of the cell, (e) sets the width to 14.28%, and (f) allows the browser to wrap cell text within individual words. (Hint: Use the word-wrap property.)
- 18. For every data cell, create a style rule that: (a) applies a semi-transparent background color with the value rgba(171, 171, 171, 0.6) and (b) sets the text color to rgb(11, 12, 145).
- **Explore** 19. Lewis wants the September dates to appear in a different format from the August and October dates. Create a style rule for data cells whose data-date attribute contains the text **Sep** that: (a) changes the background color to the semi-transparent value rgba(232, 214, 148, 0.6) and (b) adds a gray inset box shadow with horizontal and vertical offsets of 0 pixels and a blur of 20 pixels. (Hint: See Figure 2-15 for a list of attribute selectors.)
- 20. Create a style rule for the table caption that: (a) displays the caption at the top of the table, (b) centers the caption text, (c) adds 10 pixels to the bottom padding space, and (d) sets the font size to 1.2em and the letter spacing to 3 pixels.
- 21. For heading cells within the table header, create a style rule to change the background color to rgb(154, 64, 3) and the text color to white.
- 22. Save your changes to the style sheet, then go to the **lht\_columns.css** file in your editor and within the Column Styles section, create a style rule for the article element that: (a) sets the column width to 260 pixels, (b) sets the column gap to 20 pixels, (c) adds a 1-pixel solid dividing line between columns with color value rgb(154, 64, 31), and (d) sets the minimum size of widows and orphans to 2 lines.
- 23. Create a style rule for the h1 heading with the article element that extends the heading across all columns.
- 24. Save your changes to the style sheet and then open the **lht\_sept.html** file in your browser. Verify that for desktop widths, the table appears as shown in right image of Figure 6–54 and the number of columns used in the introductory article changes from 2 to 3 based on the page width. Reduce the page width to below 640 pixels and verify that the calendar information is displayed in two columns as shown in the left image in Figure 6–54.