Working with Tables and Columns

Creating a Radio Program Schedule

- Kyle Mitchell is the program director at KPAF, a public radio station broadcasting out of Bismarck, North Dakota. To remain viable, it's important for the station to continue to have a presence on the Web. With this in mind, Kyle has begun upgrading the KPAF Web site. He envisions a site in which listeners have quick and easy access to information about the station and its programs.
- The Web site includes pages listing the KPAF morning, afternoon, and evening schedules. Kyle decides that this information is best conveyed to the listener in a table, with each column of the table displaying one day's program schedule and each row displaying the broadcast times for the various KPAF programs. Kyle has never created a Web table, so he's come to you for help in designing a Web page describing the KPAF evening schedule. Kyle wants the table you create to be easy to read and informative. He also wants you to add table styles that will enhance the appearance of the Web page.





KPAF Nightly Schedule

KPAF airs listener-supported public radio in Bismarck, North Dakota from 5:00 a.m. to 10:30 p.m.

You can <u>Listen Live</u> to streaming audio of our broadcast. Please refer below for our current nightly schedule.

Time	Monday		Wednesday	Thursday	Friday	Saturday	Sunday				
6:00	National News										
6:30	Local News										
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest				
7:30					Brain Stew	Bismarck Forum					
8:00	The Classical M	lusic Connection			Old Time Radio	Saturday Nite Jazz	The Indie Connection				
8:30					The Inner Mind						
9:00					Open Mike Nite						
9:30											
10:00	World News Fee	ed			,						

All Times Central

On the Air Now

Folk Fest

Featuring the best of traditional and contemporary folk music

Coming Up on KPAF

April 11-14 The Classical Music Connection

Peter Thiesen shares his eclectic selection from the world of classical music

April 11 Opera Fest

Excerpts from Turandot by Giacomo Puccini

April 12 Radio U

Novelist Karen Graves reads from her latest work, Hellion of Troy

April 13 Science Week

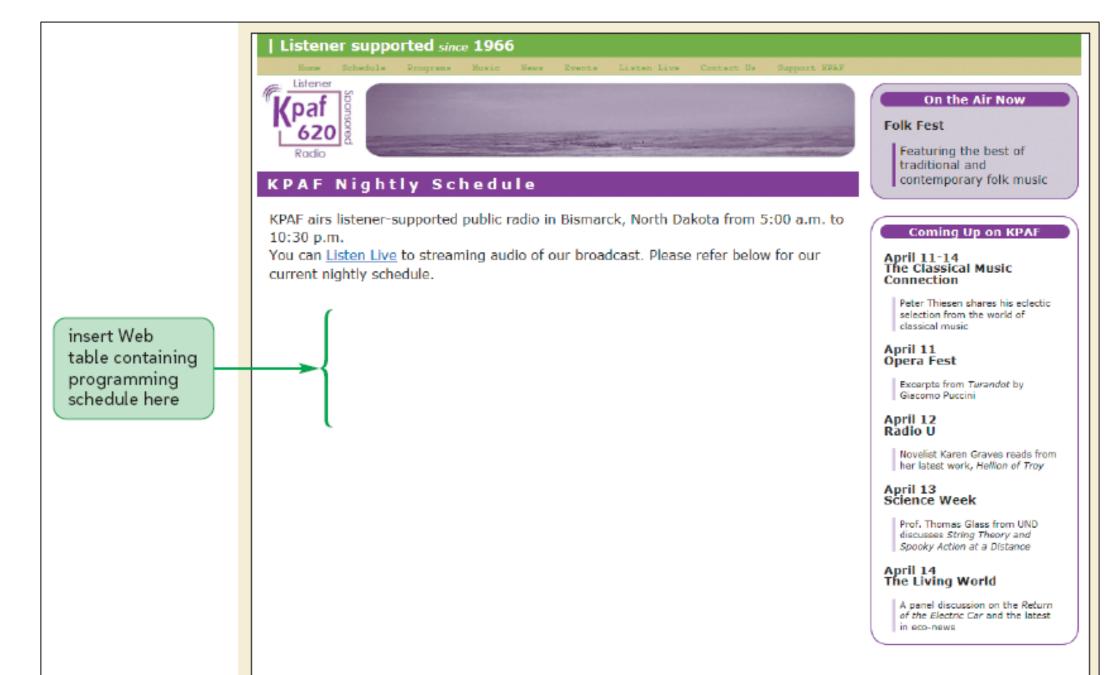
Prof. Thomas Glass from UND discusses String Theory and Spooky Action at a Distance

April 14 The Living World

A panel discussion on the Return of the Electric Car and the latest in eco-news

Open the KPAF Web page

- In your text editor, open the schedtxt.htm and kpaftxt.css files, located in the tutorial.05\tutorial folder. Enter your name and the date in the comment section of each file. Save the files as schedule.htm and kpaf.css, respectively, in the same folder.
- Review the schedule.htm file in your text editor to become familiar with its content and structure. Insert the following link element directly above the closing </head> tag:
 - <link href="kpaf.css" rel="stylesheet" type="text/css" />
- Save your changes to the file and then open the schedule.htm file in your Web browser.
- Go to the kpaf.css style sheet in your text editor. Review the styles and compare them to the elements contained within the schedule.htm file to fully understand Kyle's design for the schedule page.



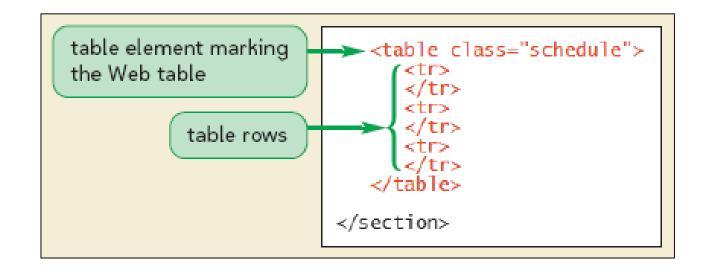
KPAF nightly schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
6:00	National News	National News	National News	National News	National News	National News	National News	
6:30	Local News	Local News	Local News	Local News	Local News	Local News	Local News	
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest	
7:30					Brain Stew	Bismarck Forum		
8:00	The Classi	cal Music Cor	nnection		Old Time Radio	Saturday The Indie Nite Connection		
8:30					The Inner Mind	3422		
9:00					Open Mike Nite			
9:30								
10:00	World News Feed	World News Feed	World News Feed	World News Feed	World News Feed	World News Feed	World News Feed	

Insert the Web table

- Return to the **schedule.htm** file in your text editor.
- Directly above the closing </section> tag, insert the following code:

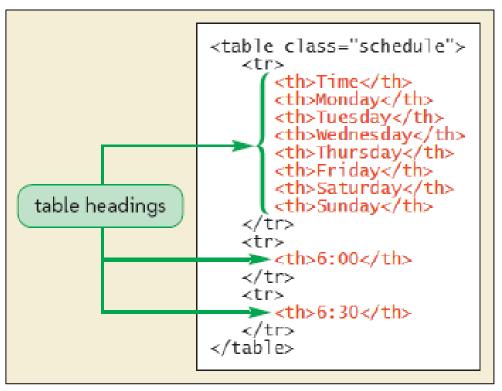
```
<tr>
<tr>
<tr>
```



Insert the table headings

• In the first table row of the Web table you just created in the **schedule.htm** file, insert the following **th** elements:

```
Time
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
```



- In the second row of the table, insert the following heading: 6:00
- In the third table row, insert the following heading: 6:30

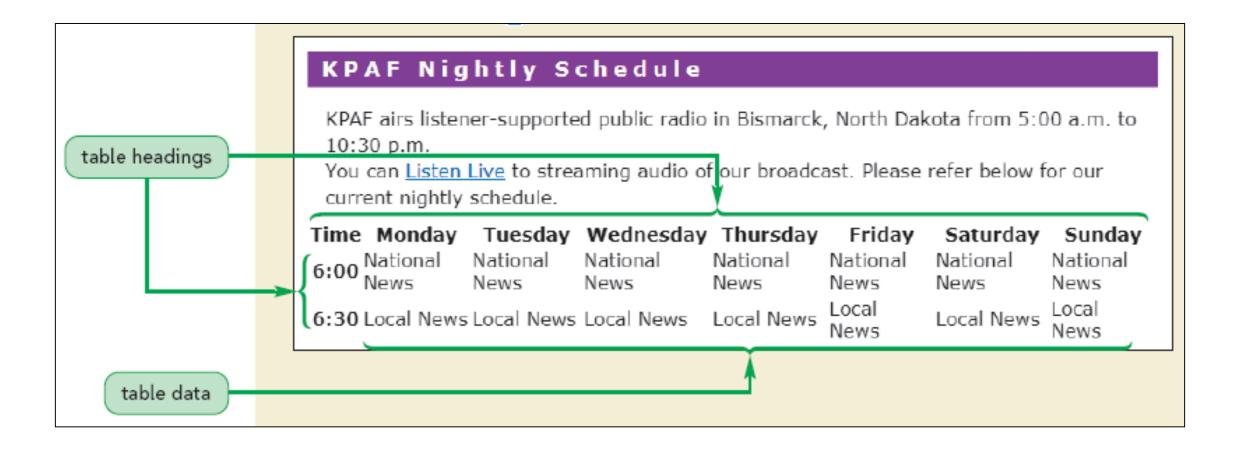
Insert table data for the next two rows of the table

 Within the second table row, add the following seven td elements after the initial th element:

• Within the third table row, insert another seven td elements after the initial **th** element:

 Save your changes to the file, and then refresh the schedule.htm file in your Web browser. The headings are in bold and centered, and the table data is in a normal font and leftaligned.

Viewing the Web table



Add a border to the schedule

- Return to the **schedule.htm** file in your text editor and add the attribute *border="1"* in **table** tag.
- Save your changes to the file, and then reload the schedule.htm file in your Web browser.

KPAF Nightly Schedule

KPAF airs listener-supported public radio in Bismarck, North Dakota from 5:00 a.m. to 10:30 p.m.

You can <u>Listen Live</u> to streaming audio of our broadcast. Please refer below for our current nightly schedule.

	 Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00						National News
6:30	Local News	Local News	Local News	Local News		Local News

Create cells that span several columns

- Return to the **schedule.htm** file in your text editor and add the attribute *colspan="7"* to the second table cell in both the second and third rows of the table.
- Delete the remaining six table cells in both the second and third table rows.
- Save your changes to the file, and then refresh the **schedule.htm** file in your Web browser.



	e Monday Tuesday Wednesday Thursday Friday Saturday Sunday
6:0	0 National News
6:3	0 Local News

Span several table rows

 Return to the schedule.htm file in your text editor and add the following row to the bottom of the schedule table:

```
<tr>
 7:00
 Opera Fest
 Radio U
 Science Week
 The Living World
 Word Play
 Agri-Week
 Folk Fest
```

• Add the following code for the next row, which adds table cells only for the two programs that start at 7:30:

• Save your changes to the file, and then refresh the schedule.htm file in your Web browser. The Sunday through Thursday 7:00 p.m. programs span two table rows, indicating that they last an hour.

```
>
   6:30
   Local News
 >
   7:00
   Opera Fest
   Radio U
   Science Week
   The Living World
   Word Play
   Agri-Week
   Folk Fest
 7:30
   Brain Stew
   Bismarck Forum
```

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday		
6:00	National News								
6:30	Local News								
7:00	Opera	Radio U	Science	The Living	Word Play	Agri-Week	Folk		
7:30	Fest	Kaulo o	Week	World	Brain Stew	Bismarck Forum	Fest		
	cells span two rows								

Add the remaining KPAF evening programs

• Return to the schedule.htm file in your text editor and enter the following table row for programs airing starting at 8:00:

```
8:00
8:00
> (th) 8:00
>
```

• The Inner Mind is the only program that starts at 8:30 during the week. Add the 8:30 starting time and the program listing to the table using the following row:

```
8:30
The Inner Mind
```

• The only program that starts at 9:00 is Open Mike Nite. Add the following row to the table to display this program in the schedule:

```
9:00
Open Mike Nite
```

• There are no programs that start at 9:30, so you'll add the table row but without any programs listed. Add the following row:

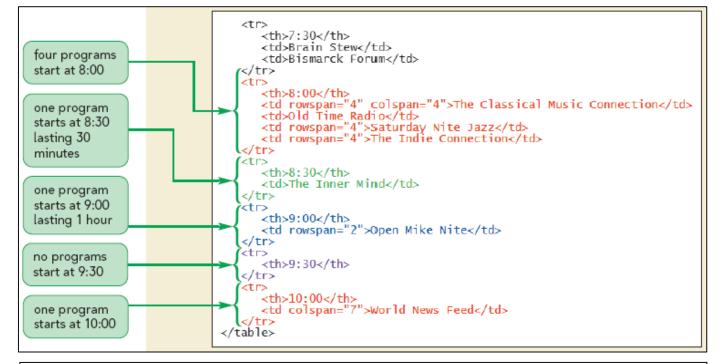
```
  9:30
```

 Complete the schedule table by adding the last table row for the World News Feed occurring every night from 10:00 to 10:30. This single program occupies a single row and spans seven columns. Add the following row:

```
10:00

World News Feed
```

• Save your changes to the file, and then reload the schedule.htm file in your Web browser.



Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday				
6:00	National News										
6:30	Local Nev	Local News									
7:00	Opera	Radio U	Science	The Living	Word Play	Agri-Week	Folk Fest				
7:30	Fest	Raulo 0	Week	1	Brain Stew	Bismarck Forum	I OIK I ESC				
8:00					Old Time Radio		The Indie Connection				
8:30	The Class	sical Music	Connection		The Inner Mind						
9:00					Open Mike						
9:30					Nite						
10:00	World Ne	ws Feed									

Create a caption for the program schedule

• Return to the **schedule.htm** file in your text editor and insert the following caption element directly below the opening tag:

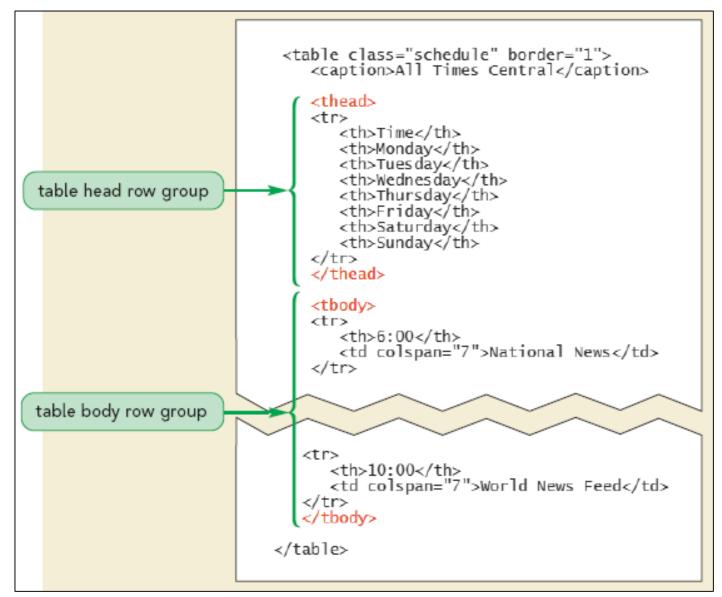
<caption>All Times Central</caption>

• Save your changes to the file and refresh the **schedule.htm** file in your Web browser.

	All Times Central									
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday			
6:00	National	National News								
6:30	Local Nev	NS								
7:00	Opera	Radio U	Science	The Living	Word Play	Agri-Week	Folk Fest			
7:30	Fest	Raulo 0	Week World	World	Brain Stew	Bismarck Forum	- Fork rest			
8:00					Old Time Radio					
8:30	The Class	sical Music	Connection		The Inner Mind	Saturday Nite Jazz	The Indie Connection			
9:00 9:30					Open Mike Nite					
10:00	World Ne	ws Feed					18			

Mark the row groups

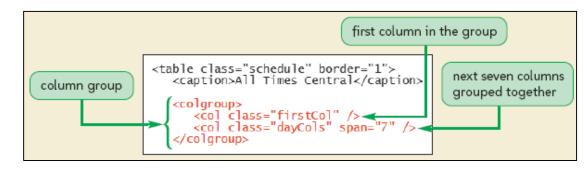
- Return to the schedule.htm file in your text editor and enclose the first row of the table within an opening and closing set of <thead> tags.
- Enclose the remaining rows of the table within an opening and closing set of tags.



Mark the column groups

- Return to the **schedule.htm** file in your text editor.
- Directly below the caption element, insert the following colgroup element:

```
<colgroup>
<col class="firstCol" />
<col class="dayCols" span="7" />
</colgroup>
```



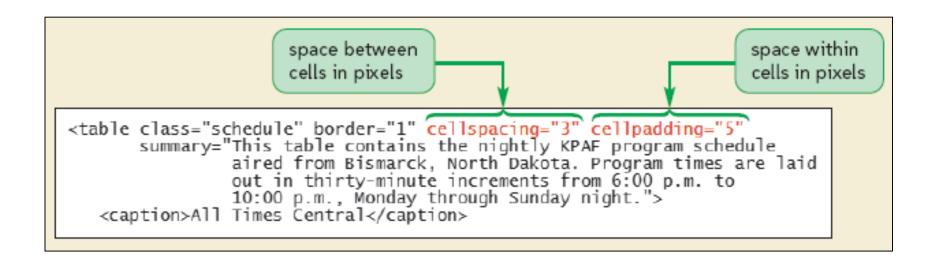
- Save your changes to the file.
- Creating row groups and column groups defines the table's structure but should not alter its appearance. To confirm that the row and column groups have not modified the table's appearance, refresh the **schedule.htm** file in your browser.

Add a summary to the table

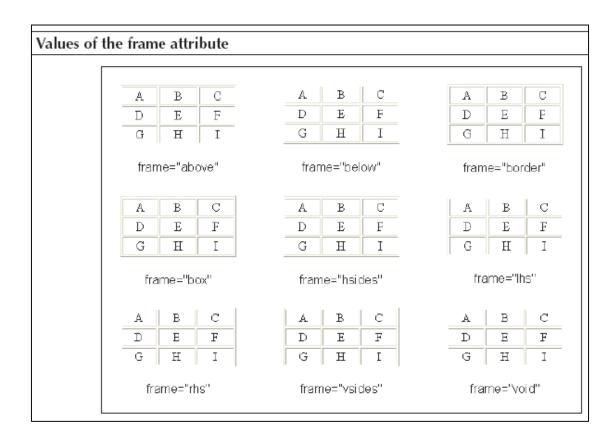
- Nonvisual browsers, such as aural browsers that often are used by visually impaired people, can't display tables, and it's cumbersome for users to listen to each cell being read. For these situations, it is useful to include a summary of a table's contents. Return to the **schedule.htm** file in your text editor.
- Within the opening tag, insert the following attribute:
 summary="This table contains the nightly KPAF program schedule aired
 from Bismarck, North Dakota. Program times are laid out in thirty-minute
 increments from 6:00 p.m. to 10:00 p.m., Monday through Sunday night."
- Save your changes to the file and then reload the **schedule.htm** file in your Web browser. Verify that the summary description does not appear in the browser.

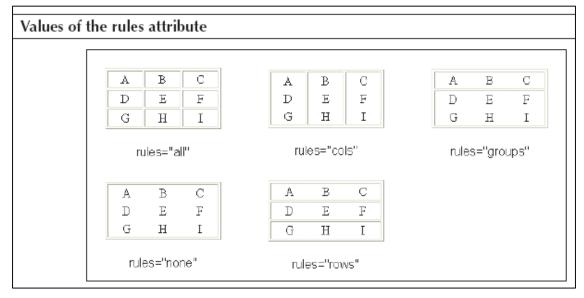
Set the cell spacing and cell padding

- Return to the **schedule.htm** file in your text editor.
- Within the opening tag, insert the following attributes:
- cellspacing="3" cellpadding="5"
- Save your changes to the file and then reopen schedule.htm in your Web browser. The spaces between and within the table cells have increased from their default values.



Formatting Table Borders with HTML

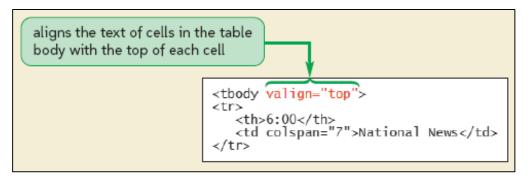


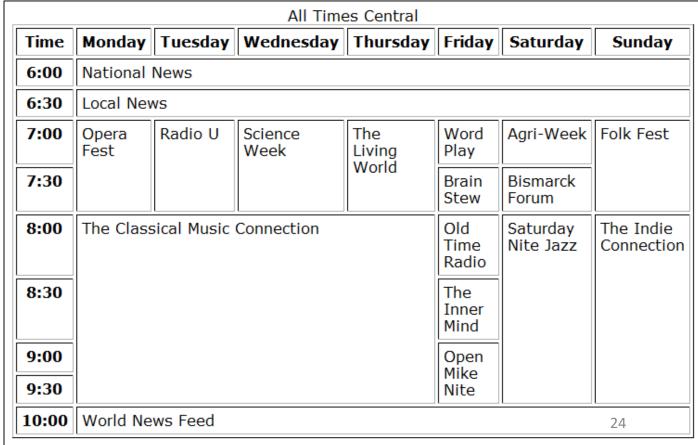


Vertically align the text in the table

- Return to the schedule.htm file in your text editor.
- Within the opening tag, insert the following attribute:

 Save your changes to the file and then reload or refresh the schedule.htm file in your Web browser.





Formatting Tables with CSS: create the style sheet

- Open the **tablestxt.css** file from the tutorial.05\tutorial folder. Enter your name and the date in the comment section of the file. Save the file as **tables.css** in the same folder.
- Return to the schedule.htm file in your text editor and insert the following link element directly above the closing </head> tag:
 - <link href="tables.css" rel="stylesheet" type="text/css" />
- Because you'll be replacing the HTML attributes with CSS styles, delete the border, cellpadding, and cellspacing attributes from the opening tag.
- Delete the valign attribute from the opening tag.
- Save your changes to the file.

Add the table border styles

• Return to the **tables.css** file in your text editor. Add the following style to apply a border to the entire Web table:

```
/* Styles for the schedule table */
table.schedule {
   border: 10px outset rgb(153, 0, 153);
}
```

Add the following style to apply borders to each table cell:

```
table.schedule th, table.schedule td {
    border: 1px solid gray;
}
```

- Notice that the style sheet uses contextual selectors to apply these styles only to the schedule table and not to other tables that might exist on the KPAF We
- Save your changes to the style sheet and then reload the schedule.htm file in your Web browser. Borders have been added to the entire table and to each table cell.b site.

Separate and collapsed borders

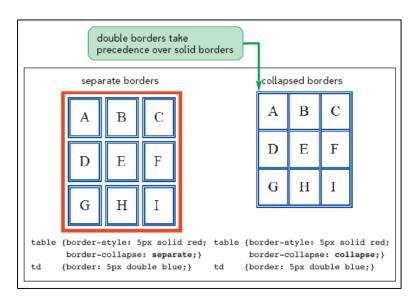
• Return to the **tables.css** file in your text editor. Add the following style to the table element: border-collapse: collapse;

collapses adjacent borders in the table into a single border

table.schedule {
 border: 10px outset rgb(153, 0, 153);
 border-collapse: collapse;
}

 Save your changes to the style sheet and then reload schedule.htm in your Web

browser.



All Times Central												
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday					
6:00	National	National News										
6:30	Local Nev	WS										
7:00	Opera	Radio U	Science	The Living	Word Play	Agri-Week	Folk Fest					
7:30	Fest	Raulo 0	Week	World	Brain Stew	Bismarck Forum	roik rest					
8:00					Old Time Radio	Saturday Nite Jazz	The Indie Connection					
8:30	The Class	sical Musi	c Connection		The Inner Mind							
9:00					Open Mike							
9:30					Nite							
10:00	World Ne	ws Feed					27					

Set the text and background styles in the schedule table

• Return to the **tables.css** file in your text editor. Add the following styles to the style rule for the table.schedule selector:

```
font-family: Arial, Helvetica, sans-serif; font-size: 0.75em;
```

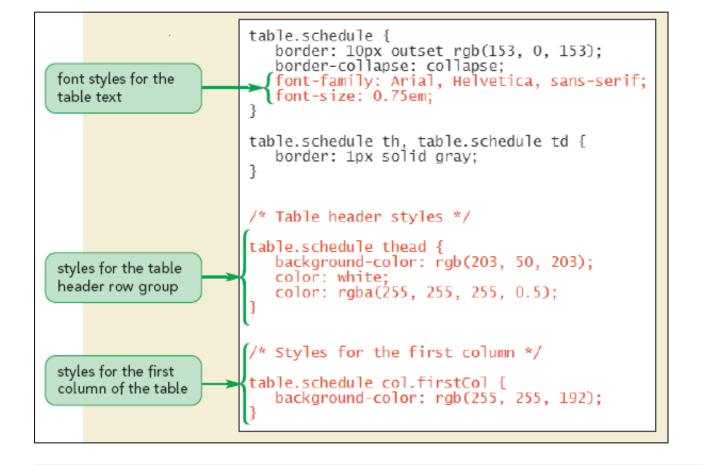
 At the bottom of the file, add the following style rule for the header of the schedule table:

```
/* Table header styles */
table.schedule thead {
  background-color: rgb(203, 50, 203);
  color: white;
  color: rgba(255, 255, 255, 0.5);
}
```

 Finally, add the following style for the first column of the schedule table:

```
/* Styles for the first
column */
table.schedule col.firstCol {
background-color:
rgb(255, 255, 192);
}
```

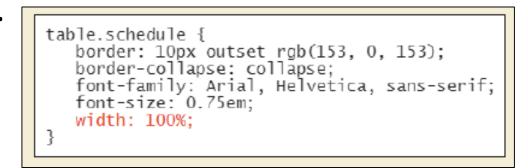
 Save your changes to the style sheet and then reload schedule.htm in your Web browser.



Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday			
6:00	National News									
6:30	Local News									
7:00	Onoro Foot	Padia II	Science Week	The Living World	Word Play	Agri-Week	Folk Fest			
7:30	Opera resi	Raulo O	Science Week	The Living World	Brain Stew	Bismarck Forum	FUILLESI			
8:00					Old Time Radio					
8:30	The Classi	ool Music	Connection		The Inner Mind	Saturday Nite Jazz The Indie Connect				
9:00 9:30	Title Classi	cai wusic	Connection		Open Mike Nite					
10:00	World New	s Feed								

Set the width of the table

- Return to the tables.css file in your text editor.
 Add the following style to the table element: width: 100%;
- Save your changes to the file and then reload schedule.htm in your Web browser.





Set the width of the table columns

- Return to the **tables.css** file in your text editor. Add the following style to the style rule for the **firstCol** selector: *width: 7%;*
- Directly below the style rule for the **firstCol** selector, add the following style rule to set the widths of the columns in the dayCols class to 13%:

```
/* Styles for the remaining columns */
table.schedule col.dayCols {
   width: 13%;
}
```

 Save your changes to the file and then reload schedule.htm in your Web browser.

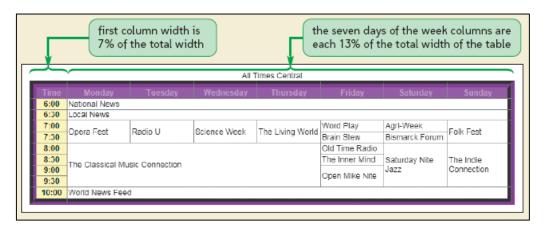
```
/* Styles for the first column */

table.schedule col.firstCol {
 background-color: rgb(255, 255, 192);

{width: 7%;
}

/* Styles for the remaining columns */

table.schedule col.dayCols {
 width: 13%;
}
```



Set the height of the table rows

• Return to the **tables.css** file in your text editor and add the following styles directly below the style rule for the table.schedule thead selector:

```
table.schedule thead tr {
    height: 50px;
}
/* Table body styles */
table.schedule tbody tr {
    height: 40px;
}
```

```
table.schedule thead {
    background-color: rgb(203, 50, 203);
    color: white;
    color: rgba(255, 255, 255, 0.5);
}

table.schedule thead tr {
    height: 50px;
}

/* Table body styles */

table.schedule tbody tr {
    height: 40px;
}
```

• Save your changes to the file and then reload **schedule.htm** in your Web browser. Verify that the heights in the table header and table body have changed. 32

Place the program names at the top of each table cell

 Return to the tables.css file in your text editor and add the following style rule:

```
table.schedule tbody td {
    padding: 5px;
    vertical-align: top;
```

• Save your changes to the file, and then reload **schedule.htm** in your Web browser. The program names now are placed at the top of each cell, and the padding space between the program names and the cell borders has been increased.

```
/* Table body styles */
table.schedule tbody tr {
  height: 40px;
}

table.schedule tbody td {
  padding: 5px;
  vertical-align: top;
}
```



Apply a style to the table caption

Return to the tables.css file in your text editor and add the following style rule to the bottom of the file:
 /* Styles for the table caption */
 table.schedule caption {
 caption-side: bottom;

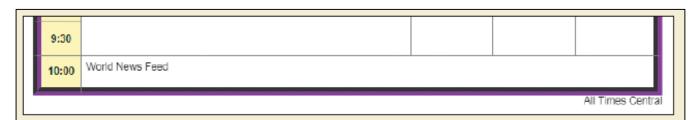
text-align: right;

displays the caption in the bottom-right corner of the table

/* Styles for the table caption */

table.schedule caption {
 caption-side: bottom;
 text-align: right;
}

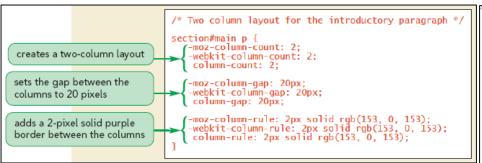
• Save your changes and then reload the **schedule.htm** file in your Web browser. The caption should now appear in the bottom-right corner of the table.



Display the introductory paragraph in two columns

• Return to the **tables.css** file in your text editor and add the following style rule to the bottom of the file:

```
/* Two column layout for the introductory paragraph */
section#main p {
   -moz-column-count: 2;
   -webkit-column-count: 2;
   column-count: 2;
   -moz-column-gap: 20px;
   -webkit-column-gap: 20px;
   column-gap: 20px;
   -moz-column-rule: 2px solid rgb(153, 0, 153);
   -webkit-column-rule: 2px solid rgb(153, 0, 153);
   column-rule: 2px solid rgb(153, 0, 153);
```



Close the file, saving your changes, and then reload the **schedule.htm** file in your Web browser.



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in eco-news