# Chapter 3

# Working with Tables and Frames

## Activity 3.1: Creating a Table

### Problem Statement

ShowOnWheels wants to add the details and the show timings of the movies to be screened in the upcoming months on the website. This will help the customers in booking the shows of their choice. Steve is a Web developer with WebCreator Inc. He has been assigned this task. The Web page should incorporate the following features:

* It should display the details of the movies in a tabular format.
* The table should have the following columns:
  + Movie Category
  + Movie Title
  + Starring
  + Director
  + Release Date
  + Certificate
  + Online Bookings
* More than one movie can belong to a particular movie category.
* The Starring column should contain some space to display three starring names.
* The Web page should have a heading as Upcoming Movies.
* The table should have a border in the dark green color.
* The background of the table headings should be dark green.
* The text color of rows should be dark green.

**Prerequisite**: You need to use the solution of **ShowOnWheels** that you have created in Activity 2.2 to perform this activity. Ask your faculty to provide you the same.

### Solution

To create a table on a Web page, you need to perform the following tasks:

1. Create a table.
2. Apply internal styles.
3. View the home page.

#### Task 1: Creating a Table

To create a table, you need to perform the following steps:

1. Open the **upcomingmovies.html** file.
2. Add the following code snippet after the overflow: hidden; background-color:white;"> line of code:

<H4><B><I><CENTER>Upcoming Movies</CENTER></I></B></H4>

The preceding code snippet creates the heading for the table.

1. Add the following code snippet after the <H4><B><I><CENTER>Upcoming Movies</CENTER></I></B></H4> line of code:

<TABLE>

<TR>

<TH>Movie Category</TH>

<TH>Movie Title</TH>

<TH colspan="3">Starring</TH>

<TH>Director</TH>

<TH>Release Date</TH>

<TH>Certificate</TH>

<TH>Online Bookings</TH>

</TR>

The preceding code snippet creates the header for the table. The colspan attribute creates three column space for the Starring header.

1. Add the following code snippet after the <TH>Online Bookings</TH></TR> line of code:

<TR>

<TD rowspan="2">Thriller</TD>

<TD>A Dame to kill for</TD>

<TD>Jennifer Lawrence</TD>

<TD>Patrick</TD>

<TD>Evan</TD>

<TD>Freddie Highmoree</TD>

<TD>12 Jan, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

The preceding code snippet creates the rows for the category, Thriller.

1. Add the following code snippet after the <TD> <A href="">BookYourShow</A></TD></TR> lines of code:

<TR>

<TD>Prisoners</TD>

<TD>Evan Rachel Wood</TD>

<TD>Rachel Wood</TD>

<TD></TD>

<TD>Victoria A.</TD>

<TD>19 Jan, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD rowspan="3">Romantic</TD>

<TD>A Walk to remember-II</TD>

<TD>Ellen Page</TD>

<TD>Rachel Wood</TD>

<TD>Victoria</TD>

<TD>Freddie Highmoree</TD>

<TD>27 Feb, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD>Twilight Saga</TD>

<TD>Patrick</TD>

<TD>Wood A. Han</TD>

<TD>Victoria</TD>

<TD>Victoria A.</TD>

<TD>17 May, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD>If Only\_II</TD>

<TD>Ellina Smith</TD>

<TD>Rachel Wood</TD>

<TD></TD>

<TD>Robert Vann</TD>

<TD>23 June, 2013</TD>

<TD>A</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD rowspan="4">Action</TD>

<TD>Star Wars</TD>

<TD>Robert</TD>

<TD>Logan Lerman</TD>

<TD></TD>

<TD>Ariana Grande</TD>

<TD>23 June, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD>Man of Steel</TD>

<TD>Patrick</TD>

<TD>Rachel Wood</TD>

<TD></TD>

<TD>Victoria A.</TD>

<TD>17 May, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD>Area 52</TD>

<TD>Dianna</TD>

<TD>Alice</TD>

<TD></TD>

<TD>Robert S. Vann</TD>

<TD>28 Sep, 2013</TD>

<TD>A</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD>2 Guns</TD>

<TD>Illiana</TD>

<TD>John Park</TD>

<TD>William</TD>

<TD>Josh Hutcherson</TD>

<TD>23 Oct, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

</TABLE>

The preceding code snippet creates the other rows for the table.

1. Delete the following code:

<DIV style="width: 300px; margin-top: 80px; margin-left: 200px; margin-right: auto">

<IMG src="images\Underconstruction.png" width="600" height="300"> </DIV>

#### Task 2: Applying Internal Styles

To apply internal styles on the table, you need to perform the following steps:

1. Add the following code snippet after the <HEAD> tag:

<STYLE>

table

{

position:absolute;

top:140px;

left:10px;

right:120px;

border:solid 4px green;

}

The preceding code snippet applies style to the <TABLE> tag.

1. Add the following code snippet after the border:solid 4px green;} line of code:

td

{

text-align:center;

border:solid 1px green;

padding:3px;

}

th

{

background-color:green;

color:white;

border:solid 1px green;

}

tr{

color:green;

}

</STYLE>

The preceding code snippet applies styles to the <TD>,<TH>, and <TR> tags.

1. Save the **upcomingmovies.html** file.

#### Task 3: Viewing the Home Page

To view the home page, you need to perform the following steps:

1. Open Google Chrome.
2. Type **D:\HTML\ShowOnWheels\home.html** in the address bar.
3. Press the **Enter** key.
4. Click the **Upcoming Movies** link. The **UPCOMING MOVIES** page appears, as shown in the following figure.

*The UPCOMING MOVIES Page*

1. Close the Web browser.

## Activity 3.2: Accessing Multiple Web Pages Using Frames

### Problem Statement

ShowOnWheels wants the home page to be modified in such a way that once a user clicks a link, the corresponding Web page should be displayed in a section of the home page. Therefore, all the pages should be displayed in a single window. Steve has been asked to implement this functionality. The home page should be divided according to the structure shown in the following figure.

*The Structure of the Home Page*

The following guidelines need to be followed while designing the home page:

* The sections should not display any border.
* The header section should display the name and logo of the company.
* There should be a separate section for the navigation links.
* When the user clicks any link, the corresponding page should be displayed in a section of the home page.

**Prerequisite**: You need to use the solution of **ShowOnWheels** that you have created in Activity 3.1 to perform this activity. Ask your faculty to provide you the same.

### Solution

To divide a Web page into different sections, you need to perform the following tasks:

1. Create frames.
2. Create the logo.html file.
3. Create the nav.html file.
4. Create the background.html file.
5. Update the home.html file.
6. Update the aboutus.html file.
7. Update the contactus.html file.
8. Update the upcomingmovies.html file.
9. Update the homestylesheet.css file.
10. View the main frame.

#### Task 1: Creating Frames

To create frames, you need to perform the following steps:

1. Open Notepad.
2. Add the following code snippet in Notepad:

<!DOCTYPE HTML>

<HTML><HEAD><TITLE>Home Page of ShowOnWheels</TITLE>

<STYLE>

  #frm1 {

float: left;

border:0px;

}

  #frm2 {

float: right;

border:0px;

}

#frm3 {

float: middle;

border:0px;

}

</STYLE>

</HEAD>

<BODY>

<IFRAME ID="frm1" src="background.html" height=1000 width=17% name="frame2"></IFRAME>

<IFRAME ID="frm2" src="background.html" width=18% height=1000 name="frame3"></IFRAME>

<IFRAME ID="frm3" src="logo.html" width=65% height=200 name="frame1"></IFRAME>

<IFRAME ID="frm3" src="nav.html" width=65% height=40 name="frame4"></IFRAME>

<IFRAME ID="frm3" src="home.html" width=65% height=750 name="frame5"></IFRAME>

</BODY>

</HTML>

The preceding code snippet creates five frames named frame1, frame2, frame3, frame4, and frame5 in the home page.

1. Save the file with the name, **mainframe.html**, in the **ShowOnWheels** folder.

#### Task 2: Creating the logo.html File

To create the **logo.html** file, you need to perform the following steps:

1. Open Notepad.
2. Add the following code snippet in Notepad:

<HTML><HEAD></TITLE>Home Page of ShowOnWheels</TITLE>

<LINK type="text/css" rel="stylesheet" href="ExternalStylesheet\homestylesheet.css" />

<STYLE>

body{

background-color:D51165;

background-image:url('background.gif');

background-repeat:repeat-x;

margin-bottom:0px;

}

</STYLE>

</HEAD>

<BODY>

<IMG id="logo" src= "images\Logo.png" width="500"

height="78">

<H5>For Enquiry<BR>Call Us 9225648543</H5>

<IMG id="callus" src="images\callus.png" width="60"

height="60">

</DIV>

<DIV style="width:500px; height:10px; margin-left:100px; margin-top:0px;text-align:left;">

<SPAN class="auto-style1"><B>The Ultimate Way For Booking Movie

Tickets</I></B></SPAN>

</DIV>

</BODY>

</HEAD>

</HTML>

The preceding code snippet displays the images of logo and phone in frame1.

1. Save the file with the name, **logo.html**, in the **ShowOnWheels** folder.

#### Task 3: Creating the nav.html File

To create the **nav.html** file, you need to perform the following steps:

1. Open Notepad.
2. Add the following code snippet in Notepad:

<HTML>

<HEAD>

<LINK type="text/css" rel="stylesheet" href="ExternalStylesheet\homestylesheet.css" />

<STYLE>

body{

background-color:black;

margin-left:50px;

}

</STYLE>

</HEAD>

<BODY>

<NAV>

<A href="home.html" target="frame5">Home</A> |

<A href="aboutus.html" target="frame5">About Us</A> |

<A href="contactus.html" target="frame5">Contact Us</A> |

<A href="upcomingMovies.html" target="frame5">Upcoming Movies</A> |

</NAV>

</BODY></HTML>

The preceding code snippet displays the navigational links in frame4 and opens them in frame5.

1. Save the file with the name, **nav.html**, in the **ShowOnWheels** folder.

#### Task 4: Creating the background.html File

To create the **background.html** file, you need to perform the following steps:

1. Open Notepad.
2. Add the following code snippet in Notepad:

<HTML>

<HEAD>

<STYLE>

body{

background-color:D51165;

background-image:url('background.gif');

background-repeat:repeat-x;

}

</STYLE>

</HEAD>

<BODY>

</BODY></HTML>

The preceding code snippet applies styles on the frame2 and frame3 frames.

1. Save the file with the name, **background.html**, in the **ShowOnWheels** folder.

#### Task 5: Updating the home.html File

To update the **home.html** file, you need to perform the following steps:

1. Open the **home.html** file.
2. Replace the existing code with the following code:

<HTML>

<HEAD>

<TITLE>Home Page of ShowOnWheels</TITLE>

<LINK type="text/css" rel="stylesheet" href="ExternalStylesheet/homestylesheet.css"/>

</HEAD>

<BODY>

<DIV style="width: 960px; height: auto; position: relative; margin:0px; padding-left: 29px; overflow: hidden; background-color: white;">

    <H4>Currently, showing...</H4>

     <IMG src="images\movieimage1\_bee.png" width="185" height="200">

     <IMG src="images\movieimage2\_alvin.jpg" width="185" height="200">

     <IMG src="images\movieimage3\_amy.jpg" width="185" height="200">

     <IMG src="images\movieimage4\_bolt.jpg" width="185" height="200">

     <IMG src="images\movieimage5\_wolf.jpg" width="185" height="200">

     <ARTICLE>

        <P>

                      ShowOnWheels is an emerging entertainment company in the field of booking online movie tickets in US.

We pioneered cinema halls in US by establishing the first multiplex cinema in 2001 and the largest 9-screen multiplex cinema in 2007.

With its head office in Los Angeles, ShowOnWheels is now serving the viewers of major US cities.

        </P>

        <P>

         Waiting in queues to book tickets for your favorite movie is now a matter of past.

ShowOnWheels empowers you by offering a platform to book movie tickets anywhere, anytime. Whether shopping in a mall, enjoying a vacation at a Miami Beach, partying in a discotheque, attending a conference, or taking your pet for a walk, ShowOnWheels is there to reserve your hot seat in your favorite cinema.

        </P>

     </ARTICLE><BR><BR><BR><BR>

     <DETAILS>

     <SUMMARY><B>Currently, operating in:</B></SUMMARY>

        <UL>

         <LI>

            Los Angeles

         <LI>

         Chicago

         <LI>Houston </LI>

        </UL>

     With an annual turnover of US $12 million, ShowOnWheels is expanding its wings. We are launching three new screens in South Africa, shortly.

     </DETAILS>

     <H1>

      <BR>

        <SPAN class="auto-style2"> Hurry Up!</SPAN> Heavy Discounts on weekends....</H1>

     <ASIDE>

        <P>

         <I><B>ShowOnWheels values its customers. We keep you updated with our new discounts and offers.

    <BR>

      We appreciate your association!</B></I>

        </P>

     </ASIDE>

     <H3>Latest Hot Offers!!</H3>

     <VIDEO width="380" height="268" controls autoplay="autoplay" loop>

<SOURCE src="video\latestOffers.webm" type="video/mp4" />

        Your browser does not support this audio format.

     </VIDEO>

</DIV>

</BODY>

</HTML>

The preceding code snippet displays the content of the home page in frame5.

1. Save and close the **home.html** file.

#### Task 6: Updating the aboutus.html File

To update the **aboutus.html** file, you need to perform the following steps:

1. Open the **aboutus.html** file.
2. Replace the existing code with the following code:

<HTML>

<HEAD>

<TITLE>Contact Us Page of ShowOnWheels</TITLE>

<LINK type="text/css" rel="stylesheet" href="ExternalStylesheet\homestylesheet.css" />

</HEAD>

<BODY>

       <div style="width: 300px; margin-top: 80px; margin-left: 200px; margin-right: auto">

         <IMG src="images\Underconstruction.png" width="600" height="300">

</DIV>

</BODY>

</HTML>

The preceding code snippet displays the content of the aboutus page.

1. Save and close the **aboutus.html** file.

#### Task 7: Updating the contactus.html File

To update the **contactus.html** file, you need to perform the following steps:

1. Open the **contactus.html** file.
2. Replace the existing code snippet with the following code:

<HTML>

<HEAD>

<TITLE>Contact Us Page of ShowOnWheels</TITLE>

<LINK type="text/css" rel="stylesheet" href="ExternalStylesheet\homestylesheet.css" />

</HEAD>

<BODY>

       <DIV style="width: 300px; margin-top: 80px; margin-left: 200px; margin-right: auto">

         <IMG src="images\Underconstruction.png" width="600" height="300">

</DIV>

</BODY>

</HTML>

The preceding code snippet displays the content of the contactus page.

1. Save and close the **contactus.html** file.

#### Task 8: Updating the upcomingmovies.html File

To update the **upcomingmovies.html** file, you need to perform the following steps:

1. Open the **upcomingmovies.html** file.
2. Replace the existing code with the following code:

<HTML>

<HEAD>

<TITLE>Upcoming Movies Page of ShowOnWheels</TITLE>

<LINK type="text/css" rel="stylesheet" href="ExternalStylesheet\homestylesheet.css" />

<STYLE>

table

{

position:absolute;

top:140px;

left:10px;

right:120px;

border:solid 4px green;

}

td

{

text-align:center;

border:solid 1px green;

padding:3px;

}

th

{

background-color:green;

color:white;

border:solid 1px green;

}

tr{

color:green;

}

</STYLE></HEAD><BODY>

<H4><B><I><CENTER>Upcoming Movies</CENTER></I></B></H4>

<TABLE>

<TR>

<TH>Movie Category</TH>

<TH>Movie Title</TH>

<TH colspan="3">Starring</TH>

<TH>Director</TH>

<TH>Release Date</TH>

<TH>Certificate</TH>

<TH>Online Bookings</TH>

</TR>

<TR>

<TD rowspan="2">Thriller</TD>

<TD>A Dame to kill for</TD>

<TD>Jennifer Lawrence</TD>

<TD>Patrick</TD>

<TD>Evan</TD>

<TD>Freddie Highmoree</TD>

<TD>12 Jan, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD>Prisoners</TD>

<TD>Evan Rachel Wood</TD>

<TD>Rachel Wood</TD>

<TD></TD>

<TD>Victoria A.</TD>

<TD>19 Jan, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD rowspan="3">Romantic</TD>

<TD>A Walk to remember-II</TD>

<TD>Ellen Page</TD>

<TD>Rachel Wood</TD>

<TD>Victoria</TD>

<TD>Freddie Highmoree</TD>

<TD>27 Feb, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD>Twilight Saga</TD>

<TD>Patrick</TD>

<TD>Wood A. Han</TD>

<TD>Victoria</TD>

<TD>Victoria A.</TD>

<TD>17 May, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD>If Only\_II</TD>

<TD>Ellina Smith</TD>

<TD>Rachel Wood</TD>

<TD></TD>

<TD>Robert Vann</TD>

<TD>23 June, 2013</TD>

<TD>A</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD rowspan="4">Action</TD>

<TD>Star Wars</TD>

<TD>Robert</TD>

<TD>Logan Lerman</TD>

<TD></TD>

<TD>Ariana Grande</TD>

<TD>23 June, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD>Man of Steel</TD>

<TD>Patrick</TD>

<TD>Rachel Wood</TD>

<TD></TD>

<TD>Victoria A.</TD>

<TD>17 May, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD>Area 52</TD>

<TD>Dianna</TD>

<TD>Alice</TD>

<TD></TD>

<TD>Robert S. Vann</TD>

<TD>28 Sep, 2013</TD>

<TD>A</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

<TR>

<TD>2 Guns</TD>

<TD>Illiana</TD>

<TD>John Park</TD>

<TD>William</TD>

<TD>Josh Hutcherson</TD>

<TD>23 Oct, 2013</TD>

<TD>UA</TD>

<TD> <A href="">BookYourShow</A></TD>

</TR>

</TABLE>

</BODY>

</HTML>

1. Save and close the **upcomingmovies.html** file.

#### Task 9: Updating the homestylesheet.css File

To update the **homestylesheet.css** file, you need to perform the following steps:

1. Move the **background.gif** file from the **ExternalStylesheet** folder to the **ShowOnWheels** folder.
2. Open the **homestylesheet.css** file available in the **ExternalStylesheet** folder.
3. Replace the top: 320px; line of code with the following code snippet:

top: 300px;

1. Replace the top: 380px; line of code with the following code snippet:

top: 350px;

1. Delete the following code snippet:

body {

     background-color: #D51165;

     background-image: url('background.gif');

     background-repeat: repeat-x;

  }

1. Save and close the **homestylesheet.css** file.

#### Task 10: Viewing the Main Frame

To view the main frame, you need to perform the following steps:

1. Open Google Chrome.
2. Type **D:\HTML\ShowOnWheels\mainframe.html** in the address bar.
3. Press the **Enter** key. The main frame appears, as shown in the following figure.

*Displaying the Main Frame*

1. Close the Web browser.

# Exercises

### Exercise 1

The SkyLight University has launched some new courses. It wants that the details of these courses, such as the course title, duration, fees, eligibility criteria, total seats available, and colleges offering the courses, should be listed for the students on its website. To enhance readability, the entire data needs to be arranged in a tabular format. In addition, there should be a link that allows students to enroll for the courses. For this, the following tasks need to be performed:

* Create a Web page named Courses, and a link to this page should be visible along with other links.
* Design a table with the caption, Course Details, and the columns with the headings, Course Title, Course Duration, Eligibility Criteria, Total Seats Available, Fees, College, and Enroll Yourself, in the Courses page.

The Courses page should appear, as shown in the following figure.

*The Courses Page*

How will you create the Courses page?

**Prerequisite**: To perform this exercise, you need to use the solution file created for Exercise 1 of Chapter 2.

### Exercise 2

After creating the table on the Courses page of the SkyLight University website, you need to apply styles as per the following guidelines:

* The table should have a solid blue border of 2px thickness.
* The background color for the table header should be navy blue.

The table after applying styles should appear, as shown in the following figure.

*The Table After Applying Styles*

**Prerequisite**: To perform this exercise, you need to use the solution file created for Exercise 1 of Chapter 3.

### Exercise 3

The home page of the SkyLight University needs to be divided into different sections, as shown in the following figure.

*The Home Page Divided into Different Sections*

The following guidelines need to be followed while designing this page:

* The header section should display the logo and links for the university.
* When the user clicks a link, the corresponding page should be displayed in the target section.

**Prerequisite**: To perform this exercise, you need to use the solution file created for Exercise 1 of Chapter 3.

### Exercise 4

An automobile company decides to build a website for its company to enhance the sales and attract more customers. The home page of the website should show the details of various car companies in a tabular format. Steve, a website designer, has been assigned this task. The table should appear, as shown in the following figure.

*The Table Displaying Names of Car Companies*

### Exercise 5

After designing the Web page for the automobile company, Steve has been assigned the task to enhance the look and feel of the table appearing on the home page. For this, Steve needs to apply styles on the table, as shown in the following figure.

*The Table After Applying Styles*

**Prerequisite**: To perform this exercise, you need to use the solution file created for Exercise 4 of Chapter 3.

### Exercise 6

### Exercise 7