

CSE 686 Internet Programming

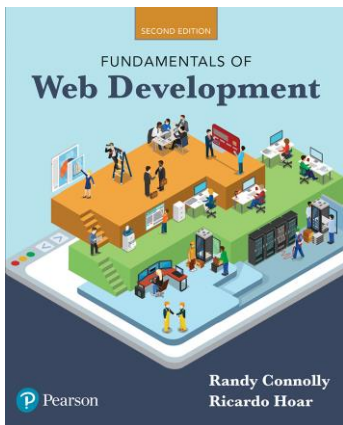
Week 10: HTML Tables and Forms

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Basic Table Structure

- ❖ HTML tables, like their real-world counterparts, can be used to display calendars, financial data, pricing tables, and many other types of data, that include not just numbers, but text, images, forms, even other tables.

The image displays four browser windows illustrating various HTML table structures:

- Pricing Table:** A table with 4 rows and 4 columns. The first column lists features (Upload Space, Daily Uploads, Total Uploads, Social Sharing, Analytics, Price per year). The next three columns represent different plans: Free, Basic, and Premium. The 'Price per year' row is highlighted in red.
- Artist Inventory Table:** A table with 3 rows and 4 columns. The first column shows an artist's portrait and name (Jacques-Louis David). The next three columns show work details: Title, Year, and Home. The table lists two works by David.
- Paintings List Table:** A table with 6 rows and 5 columns. The first column contains checkboxes. The next four columns are Title, Artist, Year, and Genre. The last column has an 'Edit' button. The table lists five paintings.
- Calendar:** A calendar for October 2014, showing days of the week (S, M, T, W, T, F, S) and dates (1-31). The date 14 is highlighted.

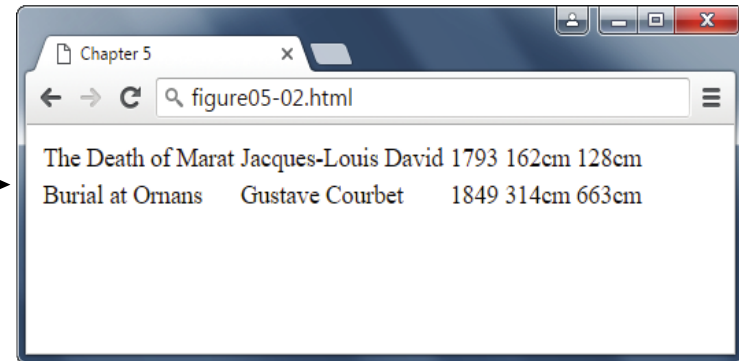
Basic Table Structure

- ❖ A table in HTML is created using the **<table>** element and can be used to represent information that exists in a two-dimensional grid.

<table>

<i><tr></i> The Death of Marat <i><td></i>	Jacques-Louis David <i><td></i>	1793 <i><td></i>	162cm <i><td></i>	128cm <i><td></i>
<i><tr></i> Burial at Ornans <i><td></i>	Gustave Courbet <i><td></i>	1849 <i><td></i>	314cm <i><td></i>	663cm <i><td></i>

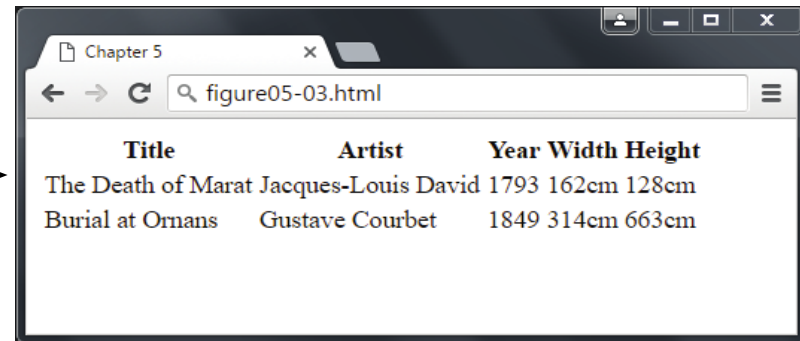
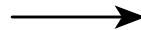
```
<table>
  <tr>
    <td>The Death of Marat</td>
    <td>Jacques-Louis David</td>
    <td>1793</td>
    <td>162cm</td>
    <td>128cm</td>
  </tr>
  <tr>
    <td>Burial at Ornans</td>
    <td>Gustave Courbet</td>
    <td>1849</td>
    <td>314cm</td>
    <td>663cm</td>
  </tr>
</table>
```



Adding Headings

Title	Artist	Year	Width	Height
The Death of Marat	Jacques-Louis David	1793	162cm	128cm
Burial at Ornans	Gustave Courbet	1849	314cm	663cm

```
<table>
  <tr>
    <th>Title</th>
    <th>Artist</th>
    <th>Year</th>
    <th>Width</th>
    <th>Height</th>
  </tr>
  <tr>
    <td>The Death of Marat</td>
    <td>Jacques-Louis David</td>
    <td>1793</td>
    <td>162cm</td>
    <td>128cm</td>
  </tr>
  <tr>
    <td>Burial at Ornans</td>
    <td>Gustave Courbet</td>
    <td>1849</td>
    <td>314cm</td>
    <td>663cm</td>
  </tr>
</table>
```



Spanning Columns

<tr>	Title <th>	Artist <th>	Year <th>	Size (width x height) <th colspan=2>	
<tr>	The Death of Marat <td>	Jacques-Louis David <td>	1793 <td>	162cm <td>	128cm <td>
<tr>	Burial at Ornans <td>	Gustave Courbet <td>	1849 <td>	314cm <td>	663cm <td>

Notice that this row
now only has four
cell elements.

```
<table>
<tr>
  <th>Title</th>
  <th>Artist</th>
  <th>Year</th>
  <th colspan="2">Size (width x height)</th>
</tr>
<tr>
  <td>The Death of Marat</td>
  <td>Jacques-Louis David</td>
  <td>1793</td>
  <td>162cm</td>
  <td>128cm</td>
</tr>
...
</table>
```

Spanning Rows

<table>

Artist <i><th></i>	Title <i><th></i>	Year <i><th></i>	<i><tr></i>
Jacques-Louis David	The Death of Marat <i><td></i>	1793 <i><td></i>	<i><tr></i>
	The Intervention of the Sabine Women <i><td></i>	1799 <i><td></i>	<i><tr></i>
	Napoleon Crossing the Alps <i><td></i>	1800 <i><td></i>	<i><tr></i>

Notice that these two rows now only have two cell elements.

```
<table>
  <tr>
    <th>Title</th>
    <th>Artist</th>
    <th>Year</th>
  </tr>
  <tr>
    <td rowspan="3">Jacques-Louis David</td>
    <td>The Death of Marat</td>
    <td>1793</td>
  </tr>
  <tr>
    <td>The Intervention of the Sabine Women</td>
    <td>1799</td>
  </tr>
  <tr>
    <td>Napoleon Crossing the Alps</td>
    <td>1800</td>
  </tr>
</table>
```

Additional Table Elements

A title for the table is good for accessibility.

These describe our columns, and can be used to aid in styling.

Table header could potentially also include other `<tr>` elements.

Yes, the table footer comes *before* the body.

Potentially, with styling the browser can scroll this information, while keeping the header and footer fixed in place.

```
<table>
  <caption>19th Century French Paintings</caption>
  <col class="artistName" />
  <colgroup id="paintingColumns">
    <col />
    <col />
  </colgroup>

  <thead>
    <tr>
      <th>Title</th>
      <th>Artist</th>
      <th>Year</th>
    </tr>
  </thead>

  <tfoot>
    <tr>
      <td colspan="2">Total Number of Paintings</td>
      <td>2</td>
    </tr>
  </tfoot>

  <tbody>
    <tr>
      <td>The Death of Marat</td>
      <td>Jacques-Louis David</td>
      <td>1793</td>
    </tr>
    <tr>
      <td>Burial at Ornans</td>
      <td>Gustave Courbet</td>
      <td>1849</td>
    </tr>
  </tbody>
</table>
```



The screenshot shows a web browser window titled 'Chapter 5' with the address bar displaying 'figure05-06.html'. The rendered table is titled '19th Century French Paintings' and has three columns: 'Title', 'Artist', and 'Year'. The table content is as follows:

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
Total Number of Paintings		2

- HTML HOME
- HTML Introduction
- HTML Editors
- HTML Basic
- HTML Elements
- HTML Attributes
- HTML Headings
- HTML Paragraphs
- HTML Styles
- HTML Formatting
- HTML Quotations
- HTML Comments
- HTML Colors
- HTML CSS
- HTML Links
- HTML Images
- HTML Tables
- HTML Lists
- HTML Blocks
- HTML Classes
- HTML Iframes
- HTML JavaScript
- HTML File Paths
- HTML Head
- HTML Layout
- HTML Responsive
- HTML Computercode
- HTML Entities

BUBBLES THAT WON'T BURST IN 2018

Calories Per Can

Grapefruit, 11.5 fl oz, 12 count

★★★★☆ 1,693

\$23.88 prime

Add to Cart

HTML Tables

Previous

Next

HTML Table Example

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Centro comercial Moctezuma	Francisco Chang	Mexico
Ernst Handel	Roland Mendel	Austria
Island Trading	Helen Bennett	UK
Laughing Bacchus Winecellars	Yoshi Tannamuri	Canada
Magazzini Alimentari Riuniti	Giovanni Rovelli	Italy

Try it Yourself »



Mold Testing

Do It Yourself
Test Kits for
Mold



EMSL Analytical, Inc.

COLOR PICKER

Using Tables for Layout



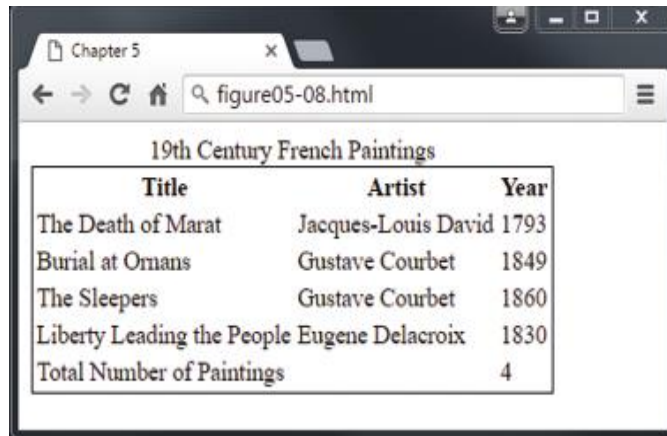
```
<table>
  <tr>
    <td>
      
    </td>
    <td>
      <h2>Castle</h2>
      <p>Lewes, UK</p>
      <p>Photo by: Michele Brooks</p>
      <p>Built in 1069, the castle has a tremendous
        view of the town of Lewes and the
        surrounding countryside.
      </p>
    </td>
  </tr>
</table>
```



```
<h3>Other Images by Michele Brooks</h3>
```

```
<table>
  <tr>
    <td></td>
    <td></td>
  </tr>
  <tr>
    <td></td>
    <td></td>
  </tr>
</table>
```

Styling Tables: Borders



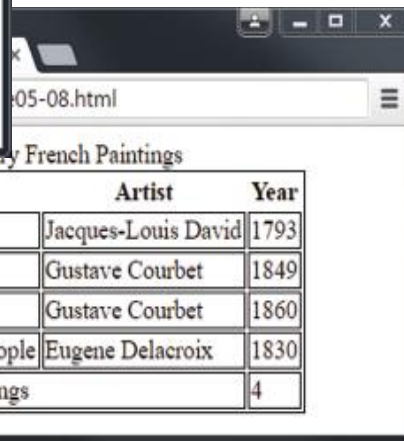
Chapter 5

figure05-08.html

19th Century French Paintings

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
The Sleepers	Gustave Courbet	1860
Liberty Leading the People	Eugene Delacroix	1830
Total Number of Paintings		4

```
table {  
    border: solid 1pt black;  
}
```



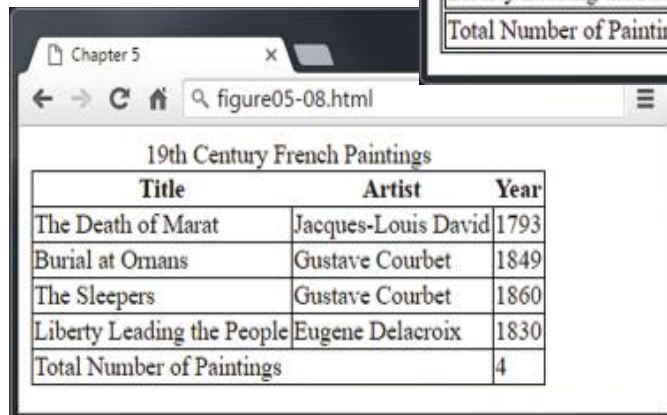
Chapter 5

figure05-08.html

19th Century French Paintings

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
The Sleepers	Gustave Courbet	1860
Liberty Leading the People	Eugene Delacroix	1830
Total Number of Paintings		4

```
table {  
    border: solid 1pt black;  
}  
td {  
    border: solid 1pt black;  
}
```



Chapter 5

figure05-08.html

19th Century French Paintings

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
The Sleepers	Gustave Courbet	1860
Liberty Leading the People	Eugene Delacroix	1830
Total Number of Paintings		4

```
table {  
    border: solid 1pt black;  
    border-collapse: collapse;  
}  
td {  
    border: solid 1pt black;  
}
```

Styling Tables: Borders

Chapter 5 x

figure05-08.html

19th Century French Paintings

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Omans	Gustave Courbet	1849
The Sleepers	Gustave Courbet	1860
Liberty Leading the People	Eugene Delacroix	1830
Total Number of Paintings		4

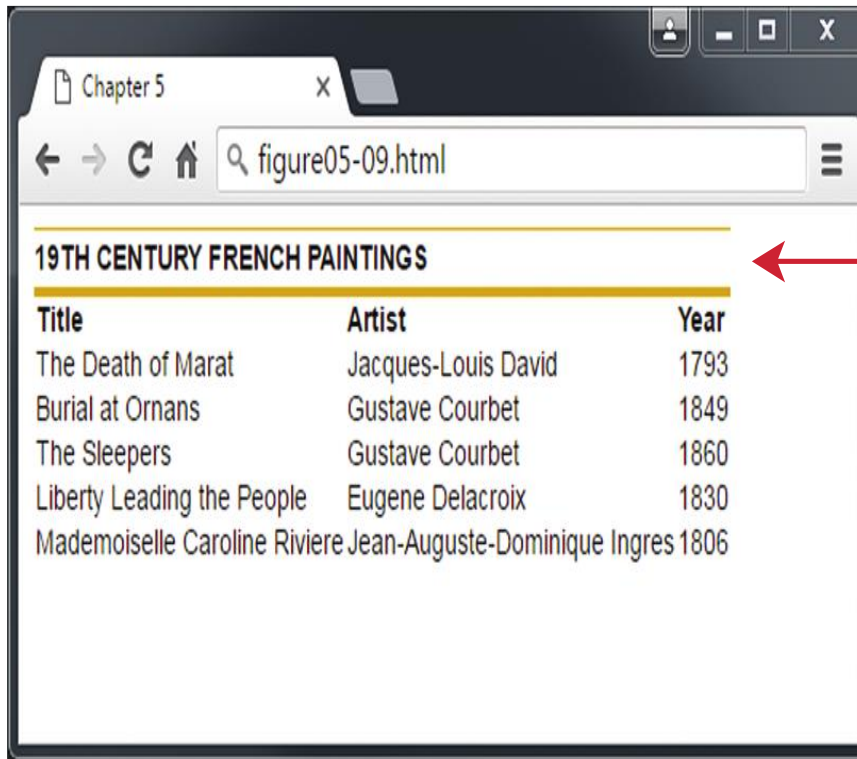
```
table {  
    border: solid 1pt black;  
    border-collapse: collapse;  
}  
td {  
    border: solid 1pt black;  
    padding: 10pt;  
}
```

19th Century French Paintings

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Omans	Gustave Courbet	1849
The Sleepers	Gustave Courbet	1860
Liberty Leading the People	Eugene Delacroix	1830
Total Number of Paintings		4

```
table {  
    border: solid 1pt black;  
    border-spacing: 10pt;  
}  
td {  
    border: solid 1pt black;  
}
```

Styling Tables: Boxes



Chapter 5 x

← → ↻ 🏠 🔍 figure05-09.html ☰

19TH CENTURY FRENCH PAINTINGS

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
The Sleepers	Gustave Courbet	1860
Liberty Leading the People	Eugene Delacroix	1830
Mademoiselle Caroline Riviere	Jean-Auguste-Dominique Ingres	1806

```
caption {
  font-weight: bold;
  padding: 0.25em 0 0.25em 0;
  text-align: left;
  text-transform: uppercase;
  border-top: 1px solid #DCA806;
}

table {
  font-size: 0.8em;
  font-family: Arial, sans-serif;
  border-collapse: collapse;
  border-top: 4px solid #DCA806;
  border-bottom: 1px solid white;
  text-align: left;
}
```

Additional Table Elements

A title for the table is good for accessibility.

These describe our columns, and can be used to aid in styling.

Table header could potentially also include other `<tr>` elements.

Yes, the table footer comes *before* the body.

Potentially, with styling the browser can scroll this information, while keeping the header and footer fixed in place.

```
<table>
  <caption>19th Century French Paintings</caption>
  <col class="artistName" />
  <colgroup id="paintingColumns">
    <col />
    <col />
  </colgroup>

  <thead>
    <tr>
      <th>Title</th>
      <th>Artist</th>
      <th>Year</th>
    </tr>
  </thead>

  <tfoot>
    <tr>
      <td colspan="2">Total Number of Paintings</td>
      <td>2</td>
    </tr>
  </tfoot>

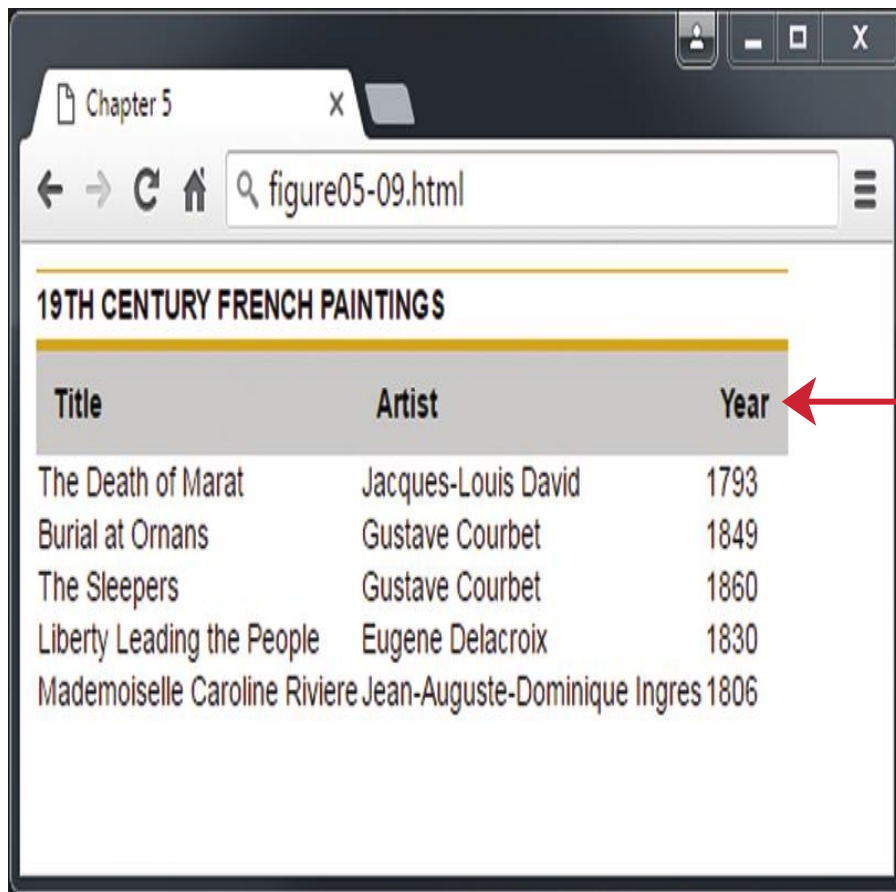
  <tbody>
    <tr>
      <td>The Death of Marat</td>
      <td>Jacques-Louis David</td>
      <td>1793</td>
    </tr>
    <tr>
      <td>Burial at Ornans</td>
      <td>Gustave Courbet</td>
      <td>1849</td>
    </tr>
  </tbody>
</table>
```



The screenshot shows a web browser window titled 'Chapter 5' with the address bar displaying 'figure05-06.html'. The rendered table is titled '19th Century French Paintings' and has three columns: 'Title', 'Artist', and 'Year'. The table content is as follows:

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
Total Number of Paintings		2

Styling Tables: Boxes



Chapter 5

figure05-09.html

19TH CENTURY FRENCH PAINTINGS

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
The Sleepers	Gustave Courbet	1860
Liberty Leading the People	Eugene Delacroix	1830
Mademoiselle Caroline Riviere	Jean-Auguste-Dominique Ingres	1806

```
thead tr {  
    background-color: #CACACA;  
}  
th {  
    padding: 0.75em;  
}
```


Additional Table Elements

A title for the table is good for accessibility.

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Table header could potentially also include other `<tr>` elements.

Yes, the table footer comes *before* the body.

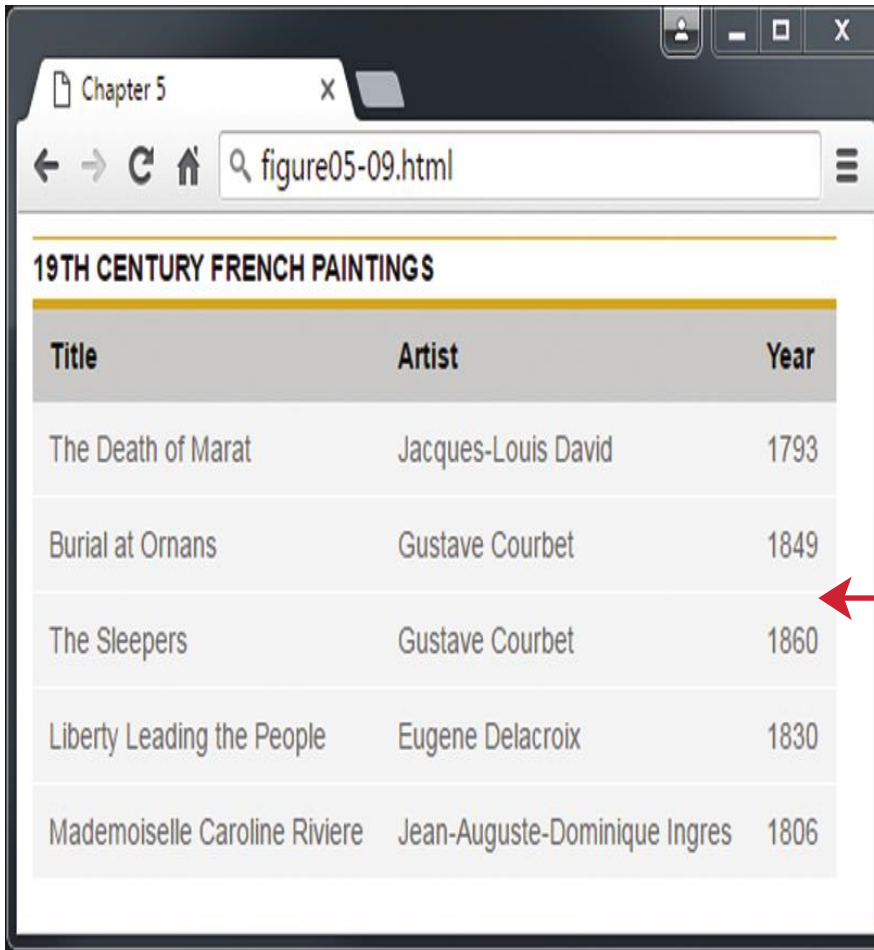
Potentially, with styling the browser can scroll this information, while keeping the header and footer fixed in place.

```
<table>
  <caption>19th Century French Paintings</caption>
  <col class="artistName" />
  <colgroup id="paintingColumns">
    <col />
    <col />
  </colgroup>
  <thead>
    <tr>
      <th>Title</th>
      <th>Artist</th>
      <th>Year</th>
    </tr>
  </thead>
  <tfoot>
    <tr>
      <td colspan="2">Total Number of Paintings</td>
      <td>2</td>
    </tr>
  </tfoot>
  <tbody>
    <tr>
      <td>The Death of Marat</td>
      <td>Jacques-Louis David</td>
      <td>1793</td>
    </tr>
    <tr>
      <td>Burial at Ornans</td>
      <td>Gustave Courbet</td>
      <td>1849</td>
    </tr>
  </tbody>
</table>
```



Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
Total Number of Paintings		2

Styling Tables: Boxes



Chapter 5

figure05-09.html

19TH CENTURY FRENCH PAINTINGS

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
The Sleepers	Gustave Courbet	1860
Liberty Leading the People	Eugene Delacroix	1830
Mademoiselle Caroline Riviere	Jean-Auguste-Dominique Ingres	1806

```
tbody tr {  
    background-color: #F1F1F1;  
    border-bottom: 1px solid white;  
    color: #6E6E6E;  
}  
tbody td {  
    padding: 0.75em;  
}
```


Additional Table Elements

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Table header could potentially also include other `<tr>` elements.

Yes, the table footer comes *before* the body.

Potentially, with styling the browser can scroll this information, while keeping the header and footer fixed in place.

```
<table>
  <caption>19th Century French Paintings</caption>
  <col class="artistName" />
  <colgroup id="paintingColumns">
    <col />
    <col />
  </colgroup>

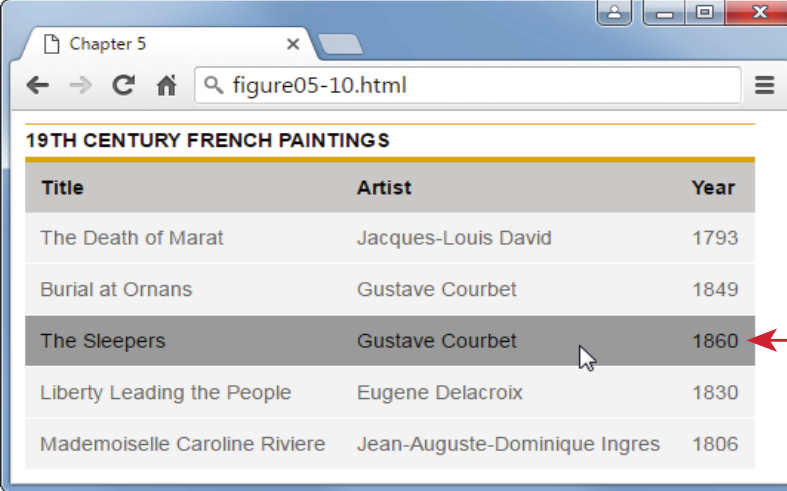
  <thead>
    <tr>
      <th>Title</th>
      <th>Artist</th>
      <th>Year</th>
    </tr>
  </thead>

  <tfoot>
    <tr>
      <td colspan="2">Total Number of Paintings</td>
      <td>2</td>
    </tr>
  </tfoot>

  <tbody>
    <tr>
      <td>The Death of Marat</td>
      <td>Jacques-Louis David</td>
      <td>1793</td>
    </tr>
    <tr>
      <td>Burial at Ornans</td>
      <td>Gustave Courbet</td>
      <td>1849</td>
    </tr>
  </tbody>
</table>
```

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
Total Number of Paintings		2

Hover and Zebras



Chapter 5


figure05-10.html

19TH CENTURY FRENCH PAINTINGS

Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
The Sleepers	Gustave Courbet	1860
Liberty Leading the People	Eugene Delacroix	1830
Mademoiselle Caroline Riviere	Jean-Auguste-Dominique Ingres	1806

figure05-10a.html

```
tbody tr:hover {  
    background-color: #9e9e9e;  
    color: black;  
}
```



Chapter 5

figure05-10.html

19TH CENTURY FRENCH PAINTINGS

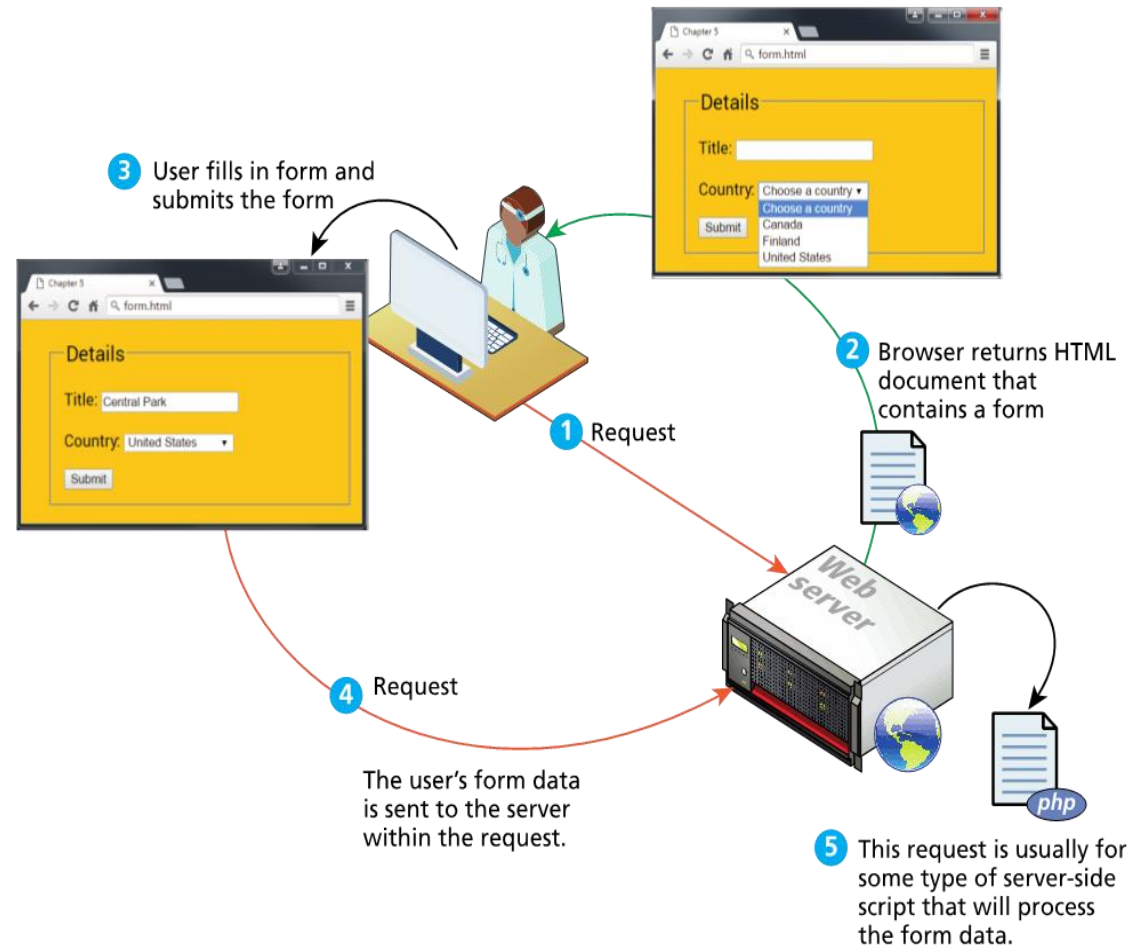
Title	Artist	Year
The Death of Marat	Jacques-Louis David	1793
Burial at Ornans	Gustave Courbet	1849
The Sleepers	Gustave Courbet	1860
Liberty Leading the People	Eugene Delacroix	1830
Mademoiselle Caroline Riviere	Jean-Auguste-Dominique Ingres	1806

figure05-10b.html

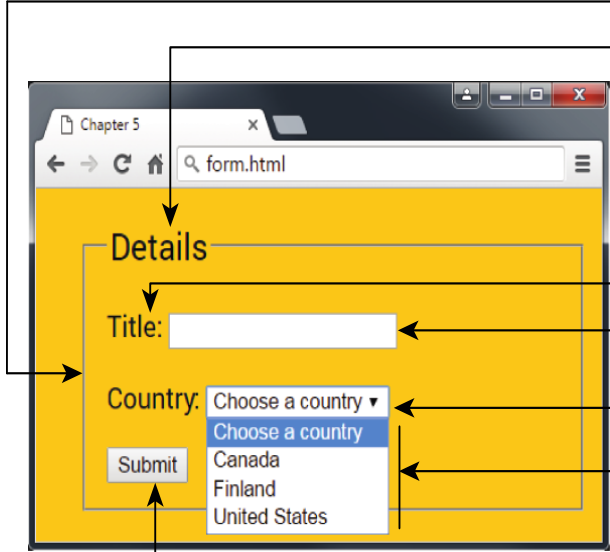
```
tbody tr:nth-child(even) {  
    background-color: lightgray;  
}
```

Introducing Forms

- ❖ Forms provide the user with an alternative way to interact with a web server, which takes the input from HTML forms and do something with it, such as save it in a database, interact with an external web service, or customize subsequent HTML based on that input.



Form Structure



```
<form method="post" action="process.php">
  <fieldset>
    <legend>Details</legend>
    <p>
      <label>Title: </label>
      <input type="text" name="title" />
    </p>
    <p>
      <label>Country: </label>
      <select name="where">
        <option>Choose a country</option>
        <option>Canada</option>
        <option>Finland</option>
        <option>United States</option>
      </select>
    </p>
    <input type="submit" />
  </fieldset>
</form>
```

Query Strings

```
<input type="text" name="title" />
```

The screenshot shows a web browser window with a tab labeled 'Chapter 5' and an address bar containing 'form.html'. The page has a yellow background and a form titled 'Details'. The form contains two text input fields: 'Title' with the value 'Central Park' and 'Country' with the value 'United States'. A 'Submit' button is located below the 'Country' field. Red lines connect the 'title' attribute in the code above to the 'Title' field, and the 'where' attribute in the code below to the 'Country' field. Blue lines connect the values 'Central Park' and 'United States' to the corresponding parts of the query string on the right.

title=Central+Park&where=United+States

```
<select name="where">
```

POST vs GET

Chapter 5
form.html

Details

Title: Central Park

Country: United States

Submit

`<form method="get" action="process.php">`

`GET /process.php?title=Central+Park&where=United+States http/1.1`

query string

`<form method="post" action="process.php">`

`POST /process.php http/1.1
Date: Sun, 21 May 2017 23:59:59 GMT
Host: www.mysite.com
User-Agent: Mozilla/4.0
Content-Length: 47`

HTTP Header

`title=Central+Park&where=United+States`

query string

- HTML Forms
- HTML Form Elements
- HTML Input Types
- HTML Input Attributes

- HTML5
- HTML5 Intro
- HTML5 Support
- HTML5 New Elements
- HTML5 Semantics
- HTML5 Migration
- HTML5 Style Guide

- HTML Graphics
- HTML Canvas
- HTML SVG
- HTML Google Maps

- HTML Media

FreshySites - Local Website Design

Beautiful. Thoughtful. Affordable. Local. freshysites.com/contact-us



HTML Forms

< Previous

Next >

HTML Form Example

First name:

Mickey

Last name:

Mouse

Submit

Try it Yourself »

DOMAIN.COM



SAVE 25%

on .COM and .NET domains, websites, hosting & more.

Use Code: **OHYEAH**

GET STARTED

Table 5.2 Form-Related HTML Elements

Type	Description
<code><button></code>	Defines a clickable button.
<code><datalist></code>	An HTML5 element that defines lists of pre-defined values to use with input fields.
<code><fieldset></code>	Groups related elements in a form together.
<code><form></code>	Defines the form container.
<code><input></code>	Defines an input field. HTML5 defines over 20 different types of input. 
<code><label></code>	Defines a label for a form input element.
<code><legend></code>	Defines the label for a fieldset group.
<code><option></code>	Defines an option in a multi-item list.
<code><optgroup></code>	Defines a group of related options in a multi-item list.
<code><select></code>	Defines a multi-item list.
<code><textarea></code>	Defines a multiline text entry box. 
<code><output></code>	Defines the result of a calculation.

Text Input Controls

```
<input type="text" ... />
```

Text:

```
<textarea>
  enter some text
</textarea>
```

TextArea:

```
<textarea placeholder="enter some text">
</textarea>
```

TextArea:

```
<input type="password" ... />
```

Password:

Password:

```
<input type="search" placeholder="enter search text" ... />
```

Search:

Search:

```
<input type="email" ... />
```

Email:

Please enter a valid email address

In Opera

Email:

Please enter an email address.

In Chrome

```
<input type="url" ... />
```

url:

Please enter a URL.

```
<input type="tel" ... />
```


Tel:

Most forms need to gather text information from the user. Whether it is a search box, or a login form, or a user registration form, some type of text input is usually necessary.

Table 5.3 Text Input Controls

Type	Description
<code>text</code>	<p>Creates a single-line text entry box.</p> <pre><input type="text" name="title" /></pre>
<code>textarea</code>	<p>Creates a multiline text entry box. You can add content text or if using an HTML5 browser, placeholder text (hint text that disappears once user begins typing into the field).</p> <pre><textarea rows="3" ... /></pre>
<code>password</code>	<p>Creates a single-line text entry box for a password (which masks the user entry as bullets or some other character)</p> <pre><input type="password" ... /></pre>
<code>search</code>	<p>Creates a single-line text entry box suitable for a search string. This is an HTML5 element. Some browsers on some platforms will style search elements differently or will provide a clear field icon within the text box.</p> <pre><input type="search" ... /></pre>
<code>email</code>	<p>Creates a single-line text entry box suitable for entering an email address. This is an HTML5 element. Some devices (such as the iPhone) will provide a specialized keyboard for this element. Some browsers will perform validation when form is submitted.</p> <pre><input type="email" ... /></pre>
<code>tel</code>	<p>Creates a single-line text entry box suitable for entering a telephone. This is an HTML5 element. Since telephone numbers have different formats in different parts of the world, current browsers do not perform any special formatting or validation. Some devices may, however, provide a specialized keyboard for this element.</p> <pre><input type="tel" ... /></pre>
<code>url</code>	<p>Creates a single-line text entry box suitable for entering a URL. This is an HTML5 element. Some devices may provide a specialized keyboard for this element. Some browsers also perform validation on submission.</p> <pre><input type="url" ... /></pre>

Table 5.2 Form-Related HTML Elements

Type	Description
<code><button></code>	Defines a clickable button.
<code><datalist></code>	An HTML5 element that defines lists of pre-defined values to use with input fields. 
<code><fieldset></code>	Groups related elements in a form together.
<code><form></code>	Defines the form container.
<code><input></code>	Defines an input field. HTML5 defines over 20 different types of input.
<code><label></code>	Defines a label for a form input element.
<code><legend></code>	Defines the label for a fieldset group.
<code><option></code>	Defines an option in a multi-item list.
<code><optgroup></code>	Defines a group of related options in a multi-item list.
<code><select></code>	Defines a multi-item list.
<code><textarea></code>	Defines a multiline text entry box.
<code><output></code>	Defines the result of a calculation.

Using the <datalist> element

Search City:

Paris
Prague

```
<input type="text" name="city" list="cities" />
```

```
<datalist id="cities">  
  <option>Calcutta</option>  
  <option>Calgary</option>  
  <option>London</option>  
  <option>Los Angeles</option>  
  <option>Paris</option>  
  <option>Prague</option>  
</datalist>
```

-
- Calcutta
 - Calgary
 - London
 - Los Angeles
 - Paris
 - Prague


Table 5.2 Form-Related HTML Elements

Type	Description
<code><button></code>	Defines a clickable button.
<code><datalist></code>	An HTML5 element that defines lists of pre-defined values to use with input fields.
<code><fieldset></code>	Groups related elements in a form together.
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<code><input></code>	Defines an input field. HTML5 defines over 20 different types of input.
<code><label></code>	Defines a label for a form input element.
<code><legend></code>	Defines the label for a fieldset group.
<code><option></code>	Defines an option in a multi-item list.
<code><optgroup></code>	Defines a group of related options in a multi-item list.
<code><select></code>	Defines a multi-item list.
<code><textarea></code>	Defines a multiline text entry box.
<code><output></code>	Defines the result of a calculation.

Choice Controls: Select Lists

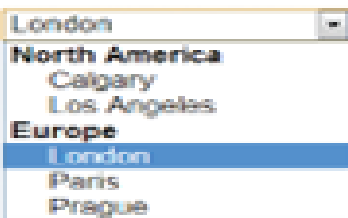
Select: 

```
<select name="choices">  
  <option>First</option>  
  <option selected>Second</option>  
  <option>Third</option>  
</select>
```

Select: 

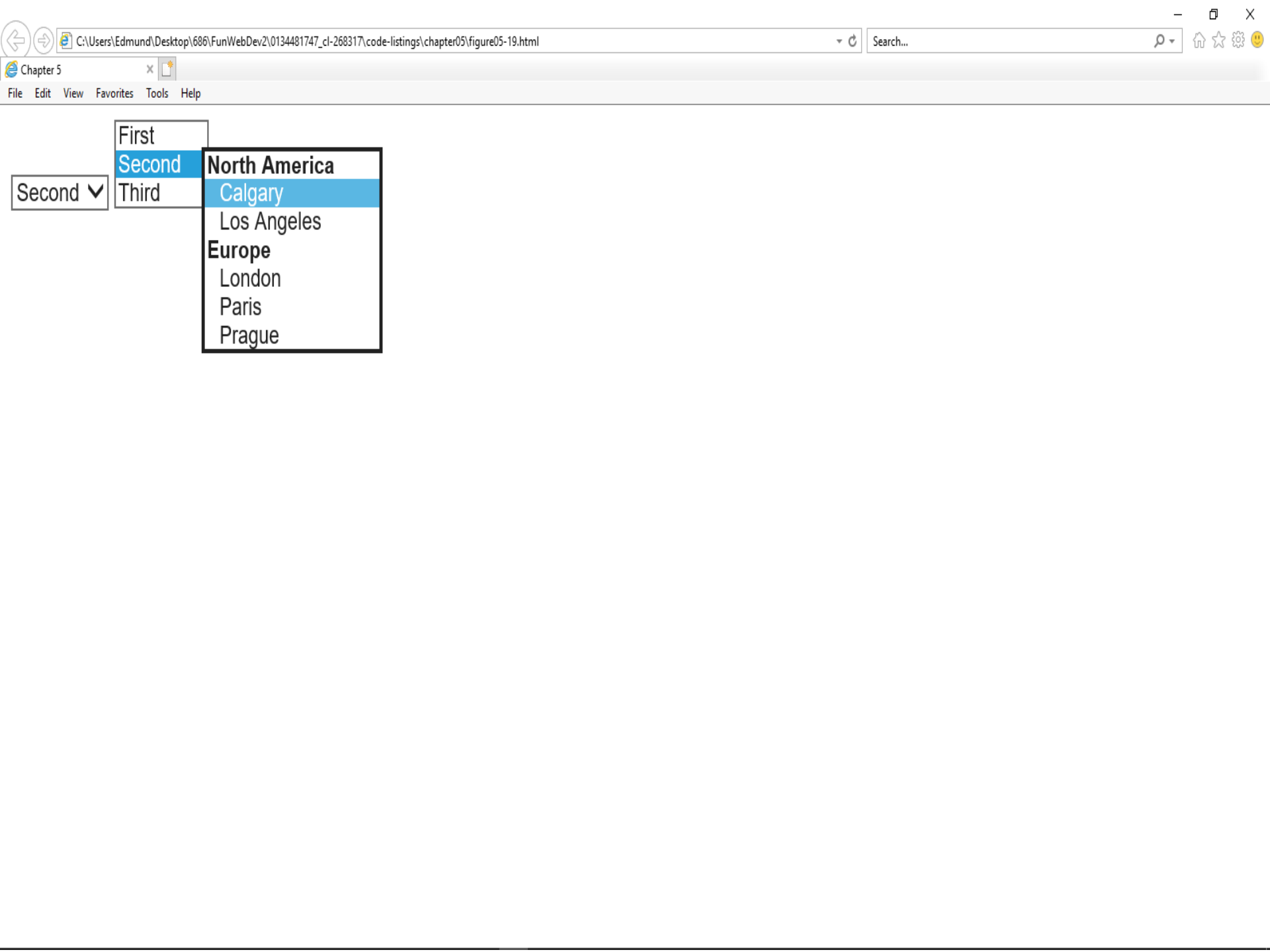
Select: 

```
<select size="3" ... >
```

Cities: 

```
<select ... >  
  <optgroup label="North America">  
    <option>Calgary</option>  
    <option>Los Angeles</option>  
  </optgroup>  
  <optgroup label="Europe">  
    <option>London</option>  
    <option>Paris</option>  
    <option>Prague</option>  
  </optgroup>  
</select>
```

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="utf-8">
5      <title>Chapter 5</title>
6  </head>
7  <body>
8
9  <select name="choices">
10     <option>First</option>
11     <option selected>Second</option>
12     <option>Third</option>
13 </select>
14
15 <select size="3" name="choices">
16     <option>First</option>
17     <option selected>Second</option>
18     <option>Third</option>
19 </select>
20
21 <select name="Cities">
22     <optgroup label="North America">
23         <option>Calgary</option>
24         <option>Los Angeles</option>
25     </optgroup>
26     <optgroup label="Europe">
27         <option>London</option>
28         <option>Paris</option>
29         <option>Prague</option>
30     </optgroup>
31 </select>
32
33 </body>
34 </html>
```

The Value Attribute

Select:

Second	▼
First	
Second	
Third	

```
<select name="choices">  
  <option>First</option>  
  <option>Second</option>  
  <option>Third</option>  
</select>
```

?choices=Second

```
<select name="choices">  
  <option value="1">First</option>  
  <option value="2">Second</option>  
  <option value="3">Third</option>  
</select>
```

?choices=2



figure05-20.html x

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="utf-8">
5      <title>Chapter 5</title>
6  </head>
7  <body>
8
9      <select name="choices">
10         <option>First</option>
11         <option>Second</option>
12         <option>Third</option>
13     </select>
14     <select name="choices">
15         <option value="1">First</option>
16         <option value="2">Second</option>
17         <option value="3">Third</option>
18     </select>
19
20 </body>
21 </html>
```

First ▼ First ▼

Radio Buttons

- ❖ Radio buttons are useful when you want the user to select a single item from a small list of choices and you want all the choices to be visible.
- ❖ Radio buttons are added via the `<input type="radio">` element. The buttons are made mutually exclusive (i.e., only one can be chosen) by sharing the same name attribute.
- ❖ The checked attribute is used to indicate the default choice, while the value attribute works in the same manner as with the element.

Continent:

- | | |
|--|---|
| <input type="radio"/> North America | <code><input type="radio" name="where" value="1">North America
</code> |
| <input checked="" type="radio"/> South America | <code><input type="radio" name="where" value="2" checked="">South America
</code> |
| <input type="radio"/> Asia | <code><input type="radio" name="where" value="3">Asia</code> |

Checkboxes

- ❖ Checkboxes are used for getting yes/no or on/off responses from the user.
- ❖ They are added via the `<input type="checkbox">` element
- ❖ You can also group checkboxes together by having them share the same name attribute. Each checked checkbox will have its value sent to the server.

I accept the software license ☒ `<label>I accept the software license</label>
<input type="checkbox" name="accept" >`

Where would you like to visit?
☒ Canada
☐ France
☒ Germany

`<label>Where would you like to visit? </label>

<input type="checkbox" name="visit" value="canada">Canada

<input type="checkbox" name="visit" value="france">France

<input type="checkbox" name="visit" value="germany">Germany`

`?accept=on&visit=canada&visit=germany`

Table 5.4 Button Elements

Type	Description
<code><input type="submit"></code>	Creates a button that submits the form data to the server.
<code><input type="reset"></code>	Creates a button that clears any of the user's already entered form data.
<code><input type="button"></code>	Creates a custom button. This button may require JavaScript for it to actually perform any action.
<code><input type="image"></code>	Creates a custom submit button that uses an image for its display.
<code><button></code>	<p>Creates a custom button. The <code><button></code> element differs from <code><input type="button"></code> in that you can completely customize what appears in the button; using it, you can, for instance, include both images and text, or skip server-side processing entirely by using hyperlinks.</p> <p>You can turn the button into a submit button by using the <code>type="submit"</code> attribute.</p>

Checkboxes

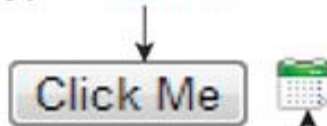
```
<input type="submit" />
```



```
<input type="reset" />
```



```
<input type="button" value="Click Me" />
```

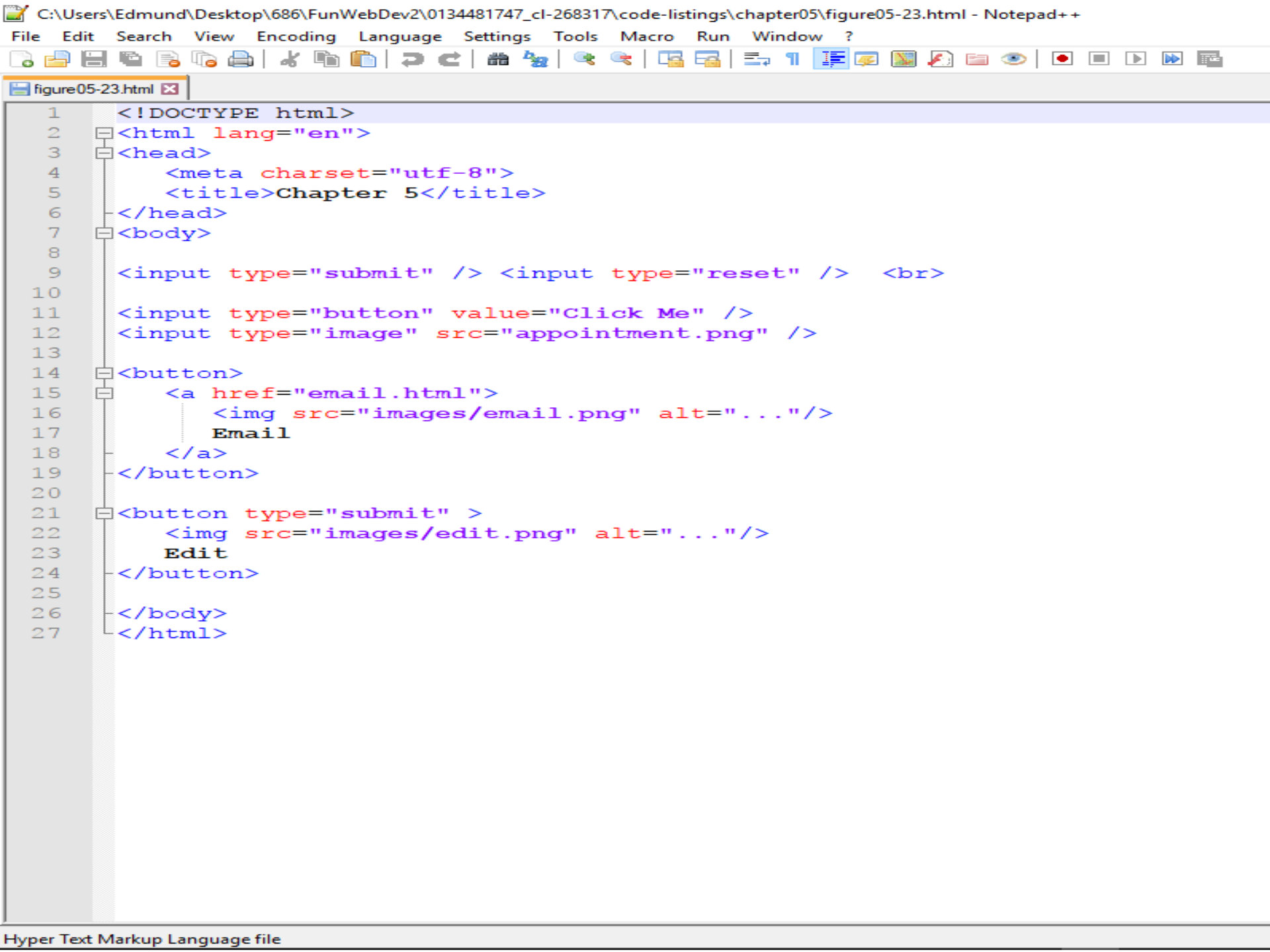


```
<input type="image" src="appointment.png" />
```



```
<button>  
  <a href="email.html">  
      
    Email  
  </a>  
</button>
```

```
<button type="submit" >  
    
  Edit  
</button>
```

Submit

Reset

Click Me



Submit



[Email](#)



Edit

File Upload

Upload a travel photo

Choose File No file chosen



Upload a travel photo

Choose File IMG_0020.JPG

```
<form method="post" enctype="multipart/form-data" ... >
```

```
...
```

```
<label>Upload a travel photo</label>
```

```
<input type="file" name="photo" />
```

```
...
```

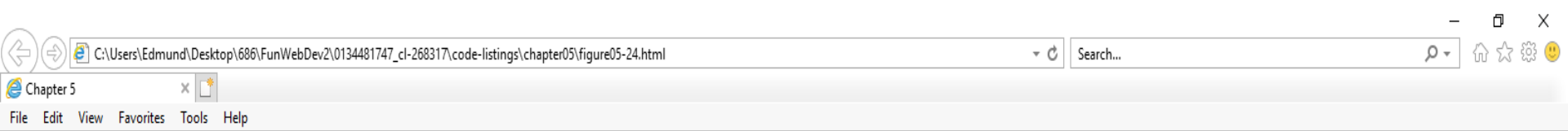
```
</form>
```

Chrome



figure05-24.html

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="utf-8">
5      <title>Chapter 5</title>
6  </head>
7  <body>
8
9  <form method="post" enctype="multipart/form-data" >
10     ...
11     <label>Upload a travel photo</label>
12     <input type="file" name="photo" />
13     ...
14 </form>
15
16 </body>
17 </html>
```



... Upload a travel photo ...

MS IE or Edge

Number and Range

Chrome

Rate this photo:

```
<label>Rate this photo: <br/>
```

```
<input type="number" min="1" max="5" name="rate" />
```

Grumpy  Ecstatic

Grumpy

```
<input type="range" min="0" max="10" step="1" name="happiness" />
```

Ecstatic

Rate this photo:

Grumpy Ecstatic

Controls as they appear in browser
that doesn't support these input types



```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="utf-8">
5      <title>Chapter 5</title>
6  </head>
7  <body>
8
9      <label>Rate this photo: </label><br/>
10     <input type="number" min="1" max="5" name="rate" />
11     Grumpy
12     <input type="range" min="0" max="10" step="1" name="happiness" />
13     Ecstatic
14
15 </body>
16 </html>
```



Rate this photo:



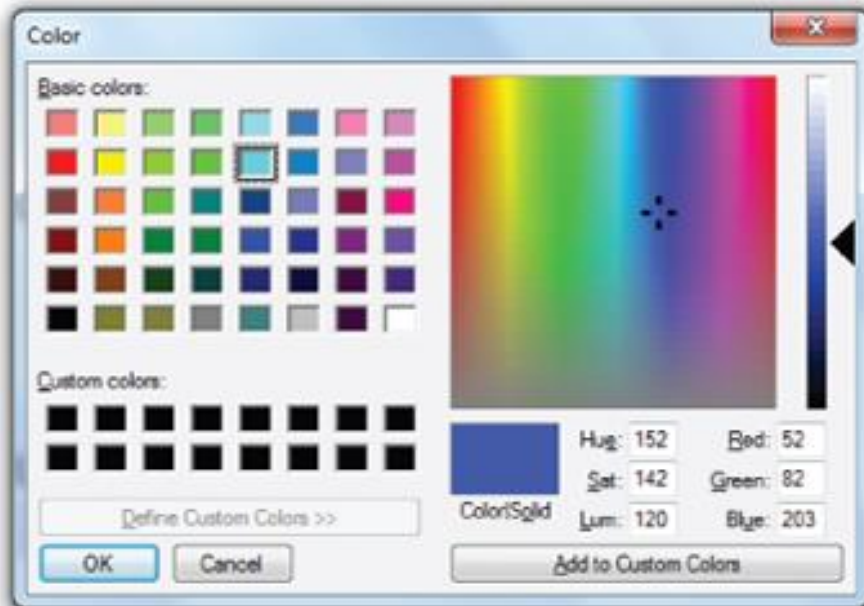
MS IE or Edge

Color

Background Color:



```
<label>Background Color: <br/>
<input type="color" name="back" />
```



Chrome

Background Color:

Control as it appears in browser that
doesn't support this input type

MS IE



figure05-24.html x figure05-25.html x figure05-27.html x

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <meta charset="utf-8">
5     <title>Chapter 5</title>
6 </head>
7 <body>
8
9     <label>Background Color: </label><br/>
10    <input type="color" name="back" >
11
12 </body>
13 </html>
```

Background Color:

Hue

Saturation

Lightness

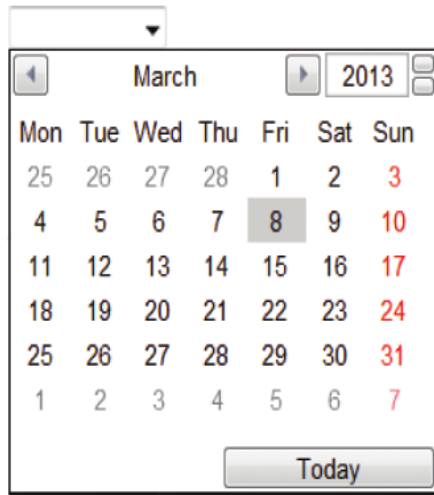
✓

✕

Edge

Date and Time Controls

Date:



Mon	Tue	Wed	Thu	Fri	Sat	Sun
25	26	27	28	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

Today

```
<label>Date: <br />  
<input type="date" ... />
```


Time:



02:02 AM

```
<input type="time" ... />
```

DateTime:



2013-03-08 05:46 UTC

```
<input type="datetime" ... />
```

DateTime Local:

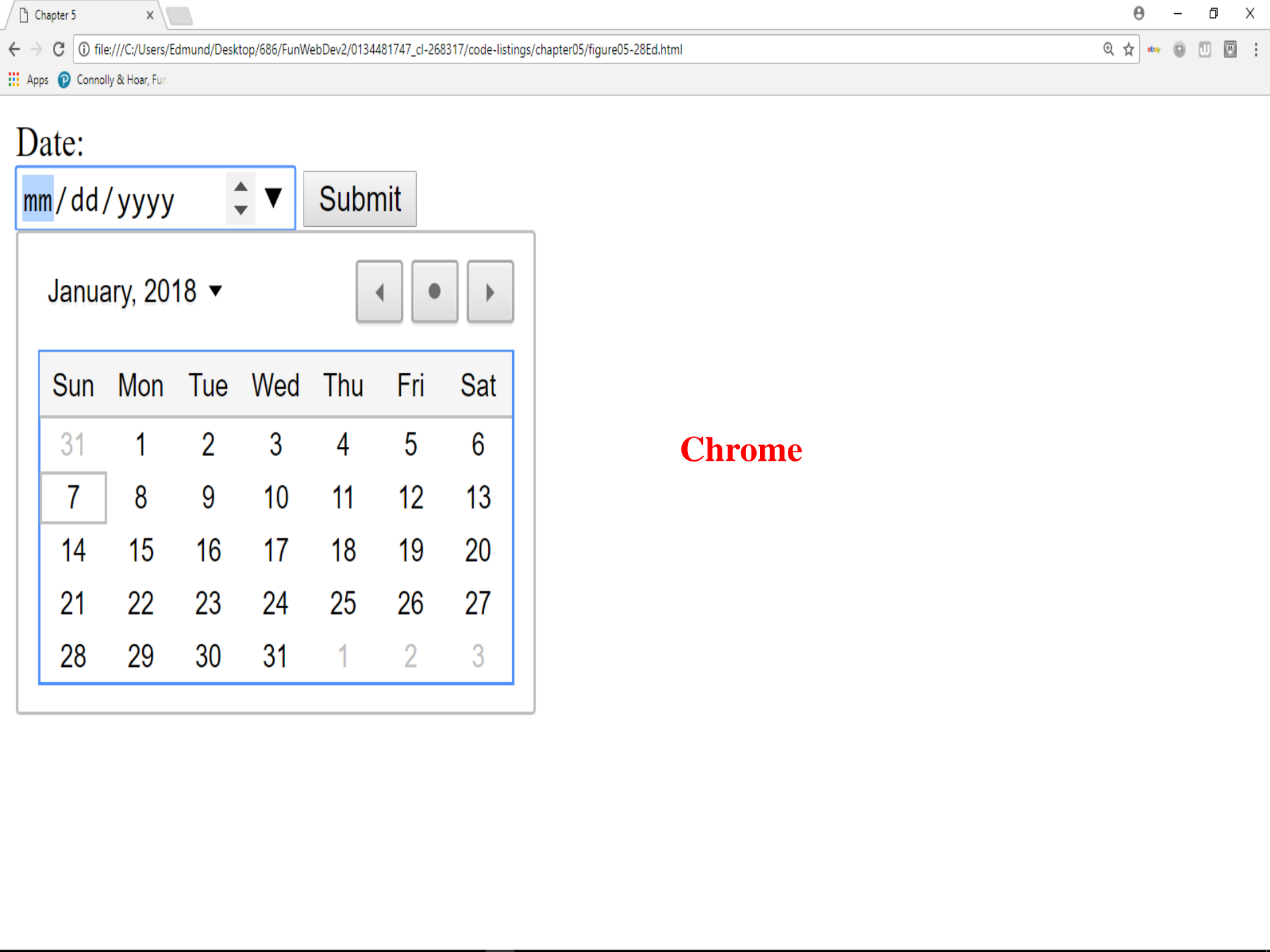


2013-03-13 12:02

```
<input type="datetime-local" ... />
```



```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="utf-8">
5      <title>Chapter 5</title>
6  </head>
7  <body>
8
9      <label>Date: </label><br/>
10     <input type="date" name="date" >
11
12
13     <button type="submit" >
14         Submit
15     </button>
16
17 </body>
18 </html>
```



Date:

mm/dd/yyyy

Submit

January, 2018

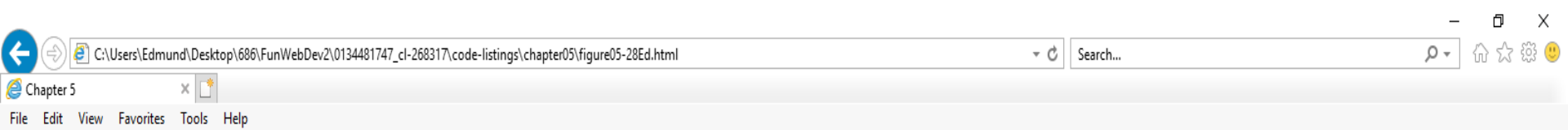
Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

Chrome

Date:

mm/dd/yyyy	Submit	
August	2	2013
September	3	2014
October	4	2015
November	5	2016
December	6	2017
January	7	2018
February	8	2019
March	9	2020
April	10	2021
May	11	2022
June	12	2023
<div>✓ X</div>		

Edge



Date:

Submit

MS IE

Date and Time Controls

Month:

March, 2013

March, 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
24	25	26	27	28	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

This month Clear

```
<input type="month" ... />
```

Week:

2013-W10

March 2013

Week	Mon	Tue	Wed	Thu	Fri	Sat	Sun
9	25	26	27	28	1	2	3
10	4	5	6	7	8	9	10
11	11	12	13	14	15	16	17
12	18	19	20	21	22	23	24
13	25	26	27	28	29	30	31
14	1	2	3	4	5	6	7

Today

```
<input type="week" ... />
```