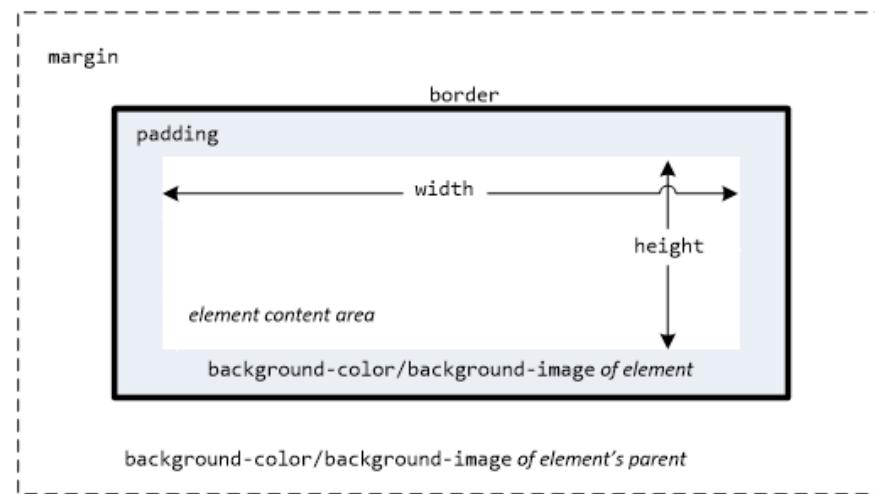
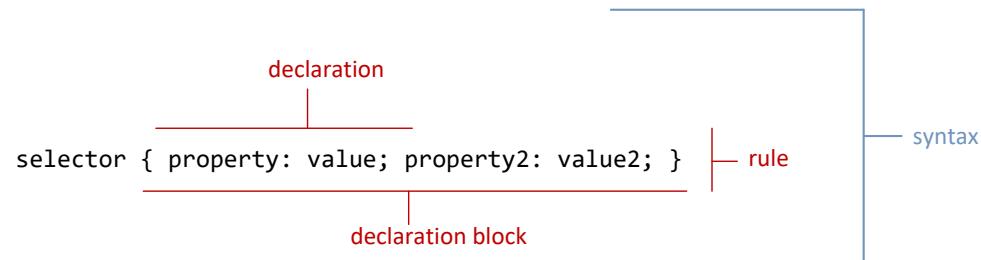


HTML Tables and Forms

Chapter 4

Last Week: CSS Introduction

- Syntax
- Selector
 - Element, Group
 - Class, Id
 - Attribute
 - Pseudo, Con-textual, Descent Selectors
- Box Model
- Text Styling



Objectives of this Chapter 4

1. Introducing Tables
2. Styling Tables
3. Introducing Forms
4. Form Control Elements
5. Table and Form Accessibility
6. Microformats

Introducing Tables

Section [1](#) of 6

HTML Tables

A grid of cells

A **table** in HTML is created using the **<table>** element

Tables can be used to display:

- Many types of content
 - Calendars, financial data, lists, etc...
- Any type of data
 - Images
 - Text
 - Links
 - Other tables

HTML Tables

Example usages

	Free	Basic	Premium
Upload Space	50MB	200MB	Unlimited
Daily Uploads	1	10	Unlimited
Total Uploads	20	100	Unlimited
Social Sharing	✓	✓	✓
Analytics			✓
Price per year	Free	\$ 9.99	\$ 19.99

Artist	Work Details		
	Title	Year	Home
 Jacques-Louis David		<i>The Death of Marat</i>	1793 Royal Museums of Fine Arts of Belgium
		<i>The Intervention of the Sabine Women</i>	1793 Royal Museums of Fine Arts of Belgium

October 2014						
S	M	T	W	T	F	S
			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	

Paintings				
	Title	Artist	Year	Genre
	<i>Death of Marat</i>	David, Jacques-Louis	1793	Romanticism
	<i>Lictors Bearing to Brutus the Bodies of his Sons</i>	David, Jacques-Louis	1789	Romanticism
	<i>Liberty Leading the People</i>	Delacroix, Eugene	1830	Romanticism
	<i>Arrangement in Grey and Black</i>	Whistler, James Abbott	1871	Realism
	<i>Mademoiselle Caroline Riviere</i>	Ingres, Jean-Auguste	1806	Neo-Classicism

Tables Basics

Rows and cells

- an HTML **<table>** contains any number of rows (**<tr>**)
- each row contains any number of table data cells (**<td>**)
- Content goes inside of **<td></td>** tags

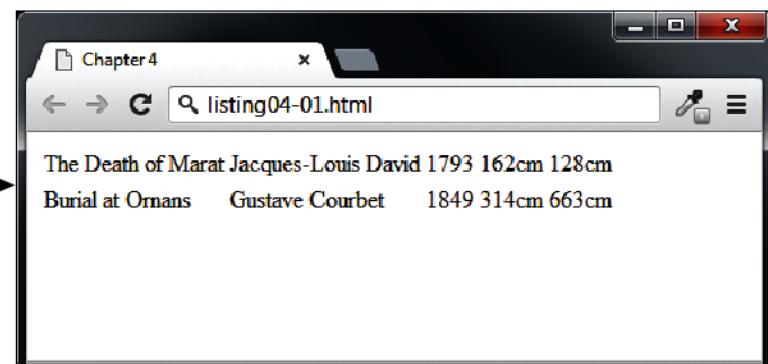
```
<table>
    <tr>
        <td>The Death of Marat</td>
    </tr>
</table>
```



A basic Example

<table>				
The Death of Marat	Jacques-Louis David	1793	162cm	128cm
<td>	<td>	<td>	<td>	<td>

```
<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>
```



With Table Headings

```
<table>
<tr>    Title <th> Artist <th> Year <th> Width <th> Height <th>
<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>
```

th

```
<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>
```

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

Why Table Headings

A table heading <th>

- Browsers tend to make the content within a <th> element bold
- <th> element for accessibility (it helps those using screen readers)
- Provides some semantic info about the row being a row of headers

Spanning Rows and Columns

Each row must have the same number of `<td>` or `<th>` containers. If you want a given cell to cover several columns or rows,

use the
colspan or **rowspan**
attributes



Title	Artist	Year	Size (width x height)	
The Death of Marat	Jacques-Louis David	1793	162cm	128cm
Burial at Ornans	Gustave Courbet	1849	314cm	663cm

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>
```

Using Tables for Layout

<table>

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

<tr>

<tr>

<tr>

<tr>

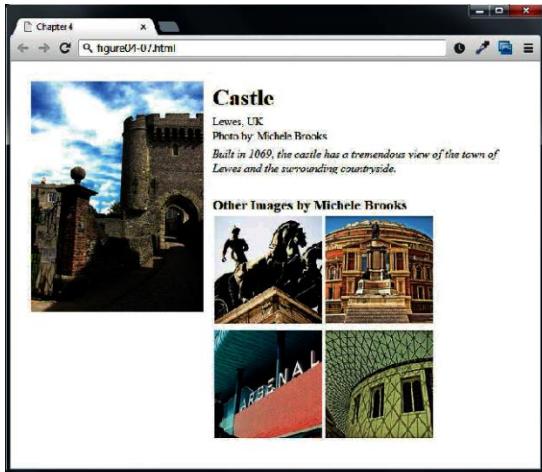
- Popular in 1990s
- Results in table bloat
- Not semantic
- Larger HTML pages
- Browser quirks

```
<table>
  <tr>
    <th>Artist</th>
    <th>Title</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>
```

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



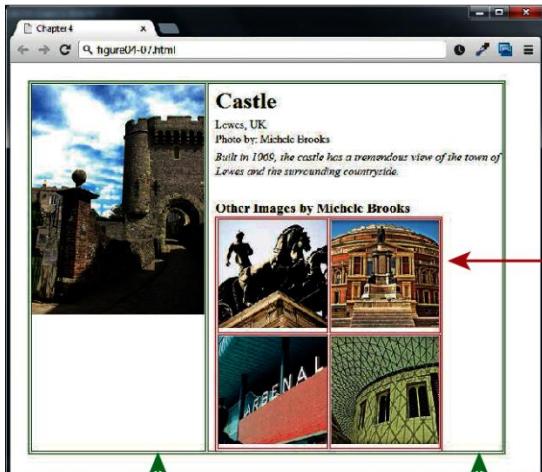
Example Table layouts



```
<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>
```

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

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



Additional table tags

- **<caption>**
- **<col>,<colgroup>**
- **<thead>**
- **<tfoot>**
- **<tbody>**

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.

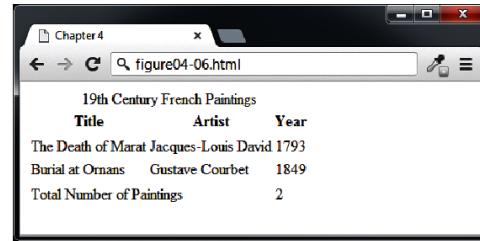
```
<table>
  <caption>19th Century French Paintings</caption>
  <col class="artistName" />
  <colgroup id="paintingColumns">
    <col />
    <col />
  </colgroup>
```

```
  <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>
```



Styling Tables

Section [2](#) of 6

Styling Tables

In HTML5 it is left to CSS, However legacy support for deprecated HTML attributes still exist

- **width, height**—for setting the width and height of cells
- **cellspacing**—for adding space between every cell in the table
- **cellpadding**—for adding space between the content of the cell and its border
- **bgcolor**—for changing the background color of any table element
- **background**—for adding a background image to any table element
- **align**—for indicating the alignment of a table in relation to the surrounding container

Styling Tables

Borders

A screenshot of a web browser window titled "Chapter 4" displaying a table titled "19th Century French Paintings". The table has a solid black border around the entire structure. It contains five rows: four data rows with columns for Title, Artist, and Year, and one summary row "Total Number of Paintings" with a single value "4".

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;  
}
```

A screenshot of a web browser window titled "Chapter 4" displaying a table titled "19th Century French Paintings". The table has a solid black border around the entire structure. It contains five rows: four data rows with columns for Title, Artist, and Year, and one summary row "Total Number of Paintings" with a single value "4".

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;  
}
```

A screenshot of a web browser window titled "Chapter 4" displaying a table titled "19th Century French Paintings". The table has a single solid black border around the entire structure. It contains five rows: four data rows with columns for Title, Artist, and Year, and one summary row "Total Number of Paintings" with a single value "4".

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

Padding and spacing

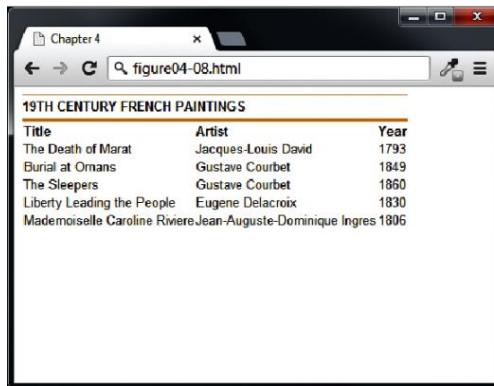
The screenshot displays two versions of a table titled "19th Century French Paintings". The top version illustrates padding (padding: 10pt) applied to the `td` elements, resulting in a 10px gap between the text content and the cell borders. The bottom version illustrates border spacing (border-spacing: 10pt) applied to the `table` element, resulting in a 10px gap between the entire rows.

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

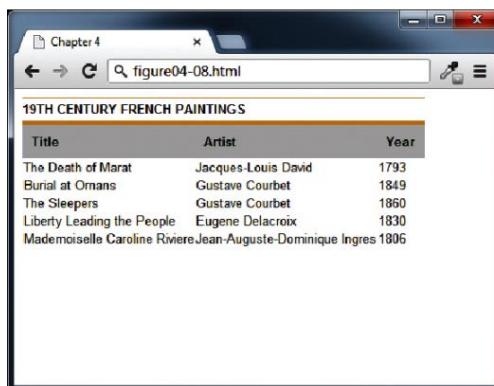
```
table {  
    border: solid 1pt black;  
    border-collapse: collapse;  
}  
td {  
    border: solid 1pt black;  
    padding: 10pt;  
}
```

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

Styling Tables



```
table {  
    font-size: 0.8em;  
    font-family: Arial, Helvetica, sans-serif;  
    border-collapse: collapse;  
    border-top: 4px solid #DCA806;  
    border-bottom: 1px solid white;  
    text-align: left;  
}  
  
caption {  
    font-weight: bold;  
    padding: 0.25em 0 0.25em 0;  
    text-align: left;  
    text-transform: uppercase;  
    border-top: 1px solid #DCA806;  
}
```



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



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

Nth-Child

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

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:nth-child(odd) {  
    background-color: white;  
}
```

Introducing Forms

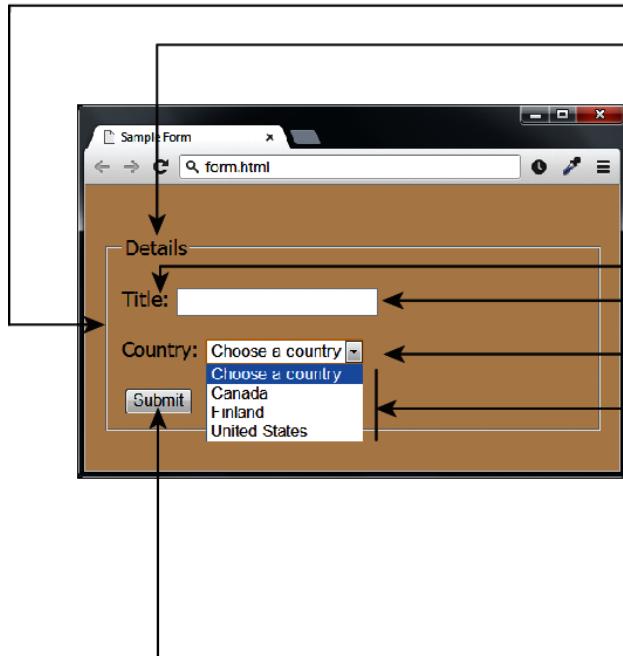
Section [3](#) of 6

HTML Forms

Forms provide the user with an alternative way to interact with a web server.

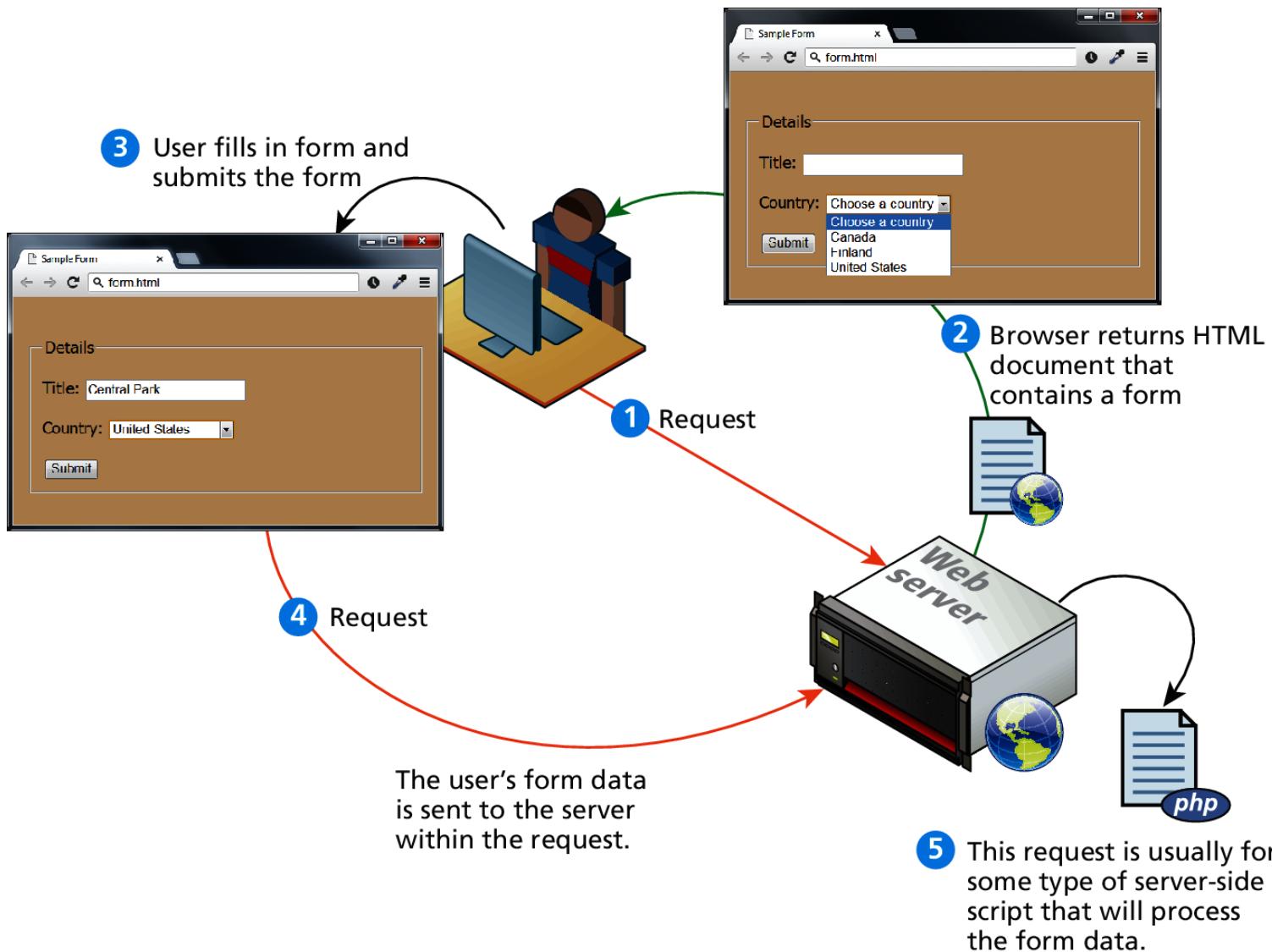
- Forms provide rich mechanisms like:
 - Text input
 - Password input
 - Options Lists
 - Radio and check boxes

Form Structure



```
<form method="get" 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>
```

How forms interact with servers



Query Strings

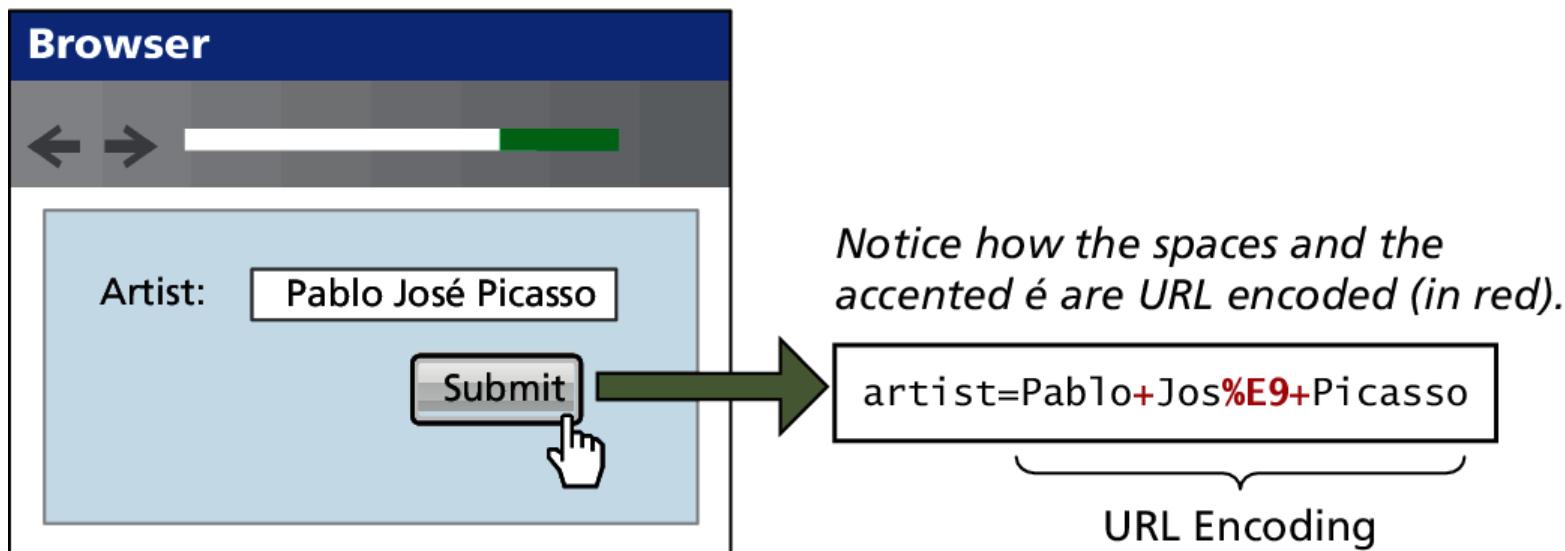
```
<input type="text" name="title" />
```

A screenshot of a web browser window titled "Sample Form". The address bar shows "form.html". The page contains a form with a title "Details". It has two text input fields: "Title" containing "Central Park" and "Country" containing "United States". Below the inputs is a "Submit" button.

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

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

URL encoding

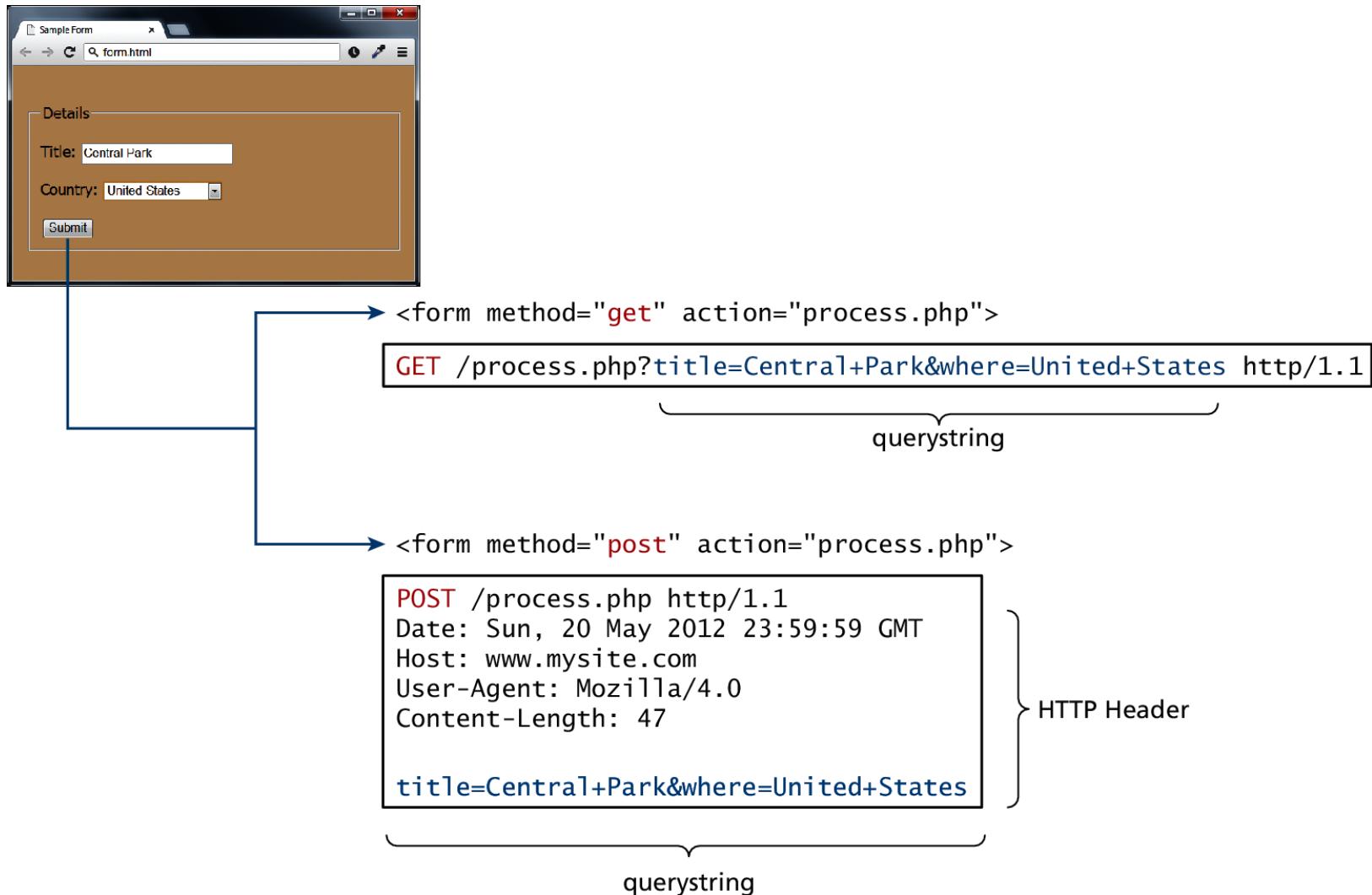


<form> element

Two essential features of any form, namely the **action** and the **method** attributes.

- The **action** attribute specifies the URL of the server-side resource that will process the form data
- The **method** attribute specifies how the query string data will be transmitted from the browser to the server.
 - GET
 - POST

GET vs POST



GET vs POST

Advantages and Disadvantages

GET

- Data can be clearly seen in the address bar.
- Data remains in browser history and cache.
- Data can be bookmarked
- Limit on the number of characters in the form data returned.

POST

- Data can contain binary data.
- Data is hidden from user.
- Submitted data is not stored in cache, history, or bookmarks.

Forms Control Elements

Section [4](#) of 6

Form-Related HTML Elements

Type	Description
<button>	Defines a clickable button.
<datalist>	An HTML5 element form defines lists to be used with other form elements.
<fieldset>	Groups related elements in a form together.
<form>	Defines the form container.
<input>	Defines an input field. HTML5 defines over 20 different types of input.
<label>	Defines a label for a form input element.
<legend>	Defines the label for a fieldset group.
<option>	Defines an option in a multi-item list.
<optgroup>	Defines a group of related options in a multi-item list.
<select>	Defines a multi-item list.
<textarea>	Defines a multiline text entry box.

Text Input Controls

Type	Description
text	Creates a single line text entry box. <input type="text" name="title" />
textarea	Creates a multiline text entry box. <textarea rows="3" ... />
password	Creates a single line text entry box for a password <input type="password" ... />
search	Creates a single-line text entry box suitable for a search string. This is an HTML5 element. <input type="search" ... />
email	Creates a single-line text entry box suitable for entering an email address. This is an HTML5 element. <input type="email" ... />
tel	Creates a single-line text entry box suitable for entering a telephone. This is an HTML5 element. <input type="tel" ... />
url	Creates a single-line text entry box suitable for entering a URL. This is an HTML5 element. <input type="url" ... />

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:

Text Input Controls

HTML5

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

Search:

Search: 

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

Email:

In Opera

Please enter a valid email address

Email:

In Chrome

! Please enter an email address.

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

url:

! Please enter a URL.

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

Tel:

HTML5 advanced controls

Pattern attribute

```
<input type="text" ... placeholder="L#L #L#" pattern="[a-z][0-9][a-z][0-9][a-z][0-9]" />
```

Postal:

Postal:

 Please match the requested format.

datalist

Search City:

```
<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>
```

Select Lists

- **<select>** element is used to create a multiline box for selecting one or more items
 - The options are defined using the **<option>** element
 - can be hidden in a dropdown or multiple rows of the list can be visible
 - Option items can be grouped together via the **<optgroup>** element.

Select Lists

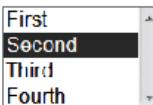
Select: Second

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

Select: Second



Select: First



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

Cities: London

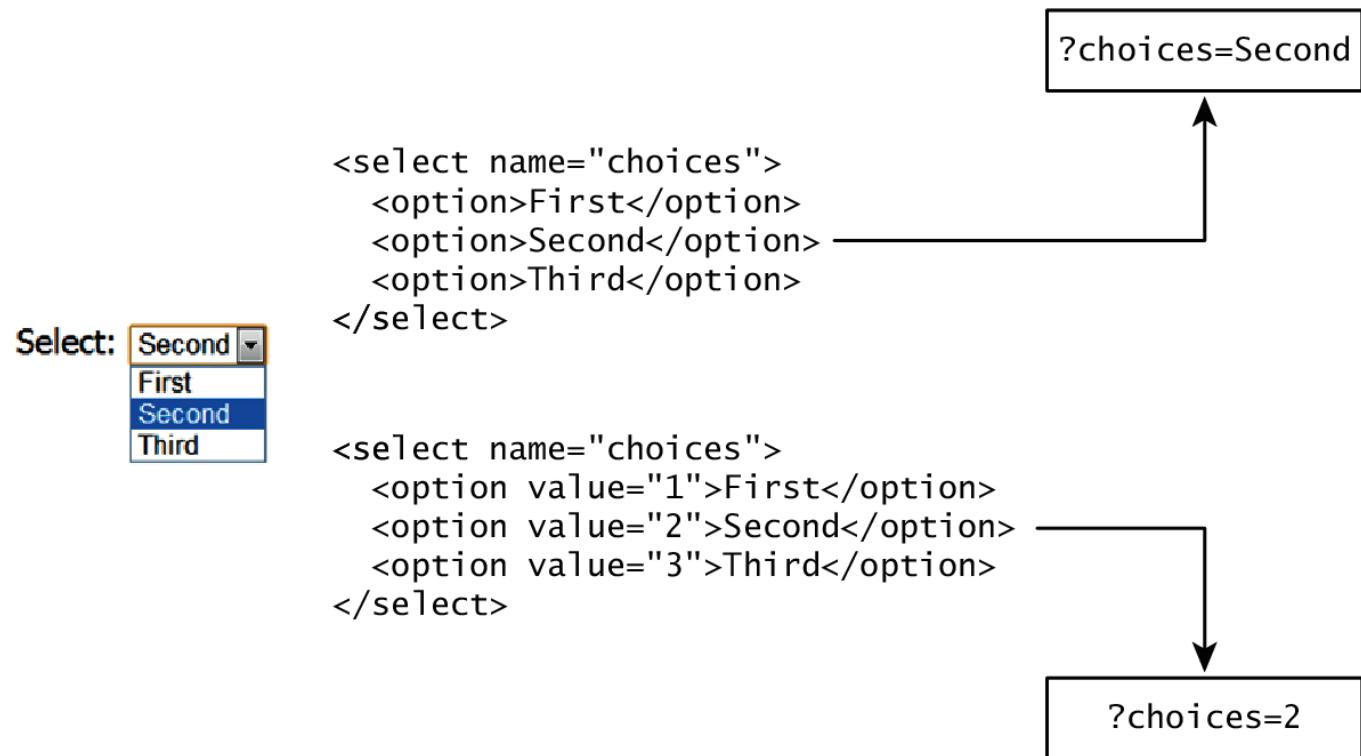


```
<select ... >
<optgroup label="North America">
    <option>Calgary</option>
    <option>Los Angeles</option>
</optgroup>
<optgroup label="Europe">
    <option>London</option>
    <option>Paris</option>
    <option>Prague</option>
</optgroup>
</select>
```

Which Value to send

The **value** attribute of the <option> element is used to specify what value will be sent back to the server.

The value attribute is optional; if it is not specified, then the text within the container is sent instead



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 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
- the value attribute works in the same manner as with the `<option>` element

Radio Buttons

Continent:

- North America
- South America
- Asia

```
<input type="radio" name="where" value="1">North America<br/>
<input type="radio" name="where" value="2" checked>South America<br/>
<input type="radio" name="where" value="3">Asia
```

Checkboxes

Checkboxes are used for getting yes/no or on/off responses from the user.

- checkboxes 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
- Like with radio buttons, the checked attribute can be used to set the default value of a checkbox

Checkboxes

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><br/>
<input type="checkbox" name="visit" value="canada">Canada<br/>
<input type="checkbox" name="visit" value="france">France<br/>
<input type="checkbox" name="visit" value="germany">Germany
```

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

Button Controls

Type	Description
<input type="submit">	Creates a button that submits the form data to the server.
<input type="reset">	Creates a button that clears any of the user's already entered form data.
<input type="button">	Creates a custom button. This button may require JavaScript for it to actually perform any action.
<input type="image">	Creates a custom submit button that uses an image for its display.
<button>	<p>Creates a custom button. The <button> element differs from <input type="button"> 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 type="submit" attribute.</p>

Button Controls

```
<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>
```

Specialized Controls

- **<input type=hidden>**
- **<input type=file>**

Upload a travel photo
 No file chosen



Upload a travel photo
 IMG_0020.JPG

```
<form method="post" enctype="multipart/form-data" ... >
    ...
    <label>Upload a travel photo</label>
    <input type="file" name="photo" />
    ...
</form>
```

Number and Range

Typically input values need be **validated**. Although server side validation is required, optional client side pre-validation is good practice.

The number and range controls Added in HTML5 provide a way to input numeric values that **eliminates the need for JavaScript numeric validation!!!**

Number and Range

Rate this photo:

```
<label>Rate this photo: <br/>
<input type="number" min="1" max="5" name="rate" />
```

Grumpy ————— U — Ecstatic

Grumpy

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

Ecstatic

Rate this photo:

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

Grumpy

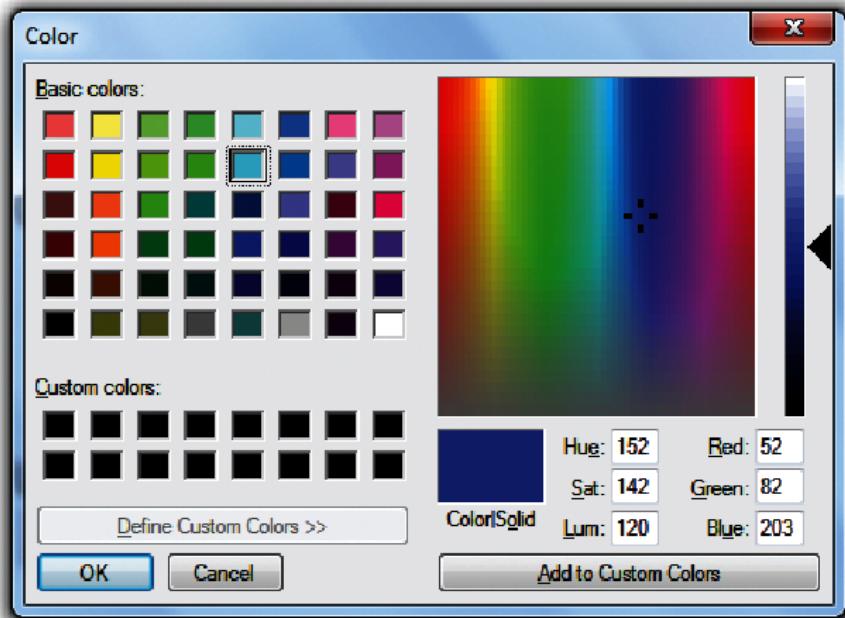
Ecstatic

Color

Background Color:



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



Background Color:



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

Date and Time Controls

Dates and times often need validation when gathering this information from a regular text input control.

From a user's perspective, entering dates can be tricky as well: you probably have wondered at some point in time when entering a date into a web form, what format to enter it in, whether the day comes before the month, whether the month should be entered as an abbreviation or a number, and so on.

HTML5 Date and Time Controls

Date:

A screenshot of a date picker interface for March 2013. The calendar shows days from Monday to Sunday. The date '8' is highlighted with a gray background, indicating it is selected. Other dates are shown in black text. Navigation arrows for the month and year are at the top, and a 'Today' button is at the bottom.

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

Time:

A screenshot of a time picker interface showing '02:02 AM'. There are up and down arrows next to the time display, indicating it can be adjusted.

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

DateTime:

A screenshot of a date-time picker interface showing '2013-03-08 05:46 UTC'. It includes dropdown menus for each field.

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

DateTime Local:

A screenshot of a date-time local picker interface showing '2013-03-13 12:02'. It includes dropdown menus for each field.

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

HTML5 Date and Time Controls

Month:

March, 2013 



A month calendar for March 2013. The days of the week are labeled at the top: Sun, Mon, Tue, Wed, Thu, Fri, Sat. The dates are arranged in a grid. The first two rows show the last few days of February and the first few days of March. The third row shows the 10th through the 16th. The fourth row shows the 17th through the 23rd. The fifth row shows the 24th through the 30th. The last row shows the 31st of February and the 1st through the 6th of March. The date "March, 2013" is displayed above the calendar. Below the calendar are two buttons: "This month" and "Clear".

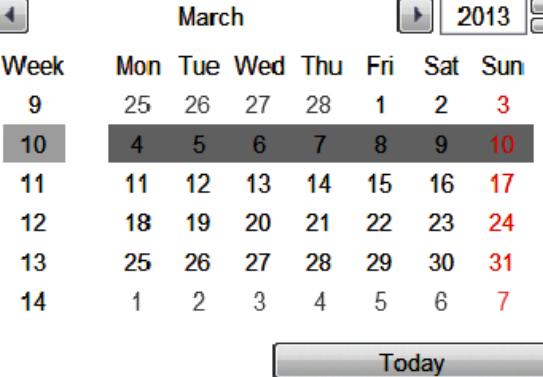
Sun	Mon	Tue	Wed	Thu	Fri	Sat
24	25	26	27	28	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

This month

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

Week:

2013-W10 



A week calendar for week 10 of 2013. The days of the week are labeled at the top: Mon, Tue, Wed, Thu, Fri, Sat, Sun. The weeks are labeled on the left: Week 9, Week 10, Week 11, Week 12, Week 13, Week 14. The dates are arranged in a grid. Week 9 shows the 25th through the 31st. Week 10 shows the 4th through the 10th. Week 11 shows the 11th through the 17th. Week 12 shows the 18th through the 24th. Week 13 shows the 25th through the 31st. Week 14 shows the 1st through the 7th. The date "March 2013" is displayed above the calendar. Below the calendar is a button labeled "Today".

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" ... />
```

HTML Controls

Type	Description
date	Creates a general date input control. The format for the date is "yyyy-mm-dd".
time	Creates a time input control. The format for the time is "HH:MM:SS", for hours: minutes:seconds.
datetime	Creates a control in which the user can enter a date and time.
datetime-local	Creates a control in which the user can enter a date and time without specifying a time zone.
month	Creates a control in which the user can enter a month in a year. The format is "yy yy-mm".
week	Creates a control in which the user can specify a week in a year. The format is "y yy-W##".

Other Controls

- The <progress> and <meter> elements can be used to provide feedback to users,
 - but requires JavaScript to function dynamically.
- The <output> element can be used to hold the output from a calculation.
- The <keygen> element can be used to hold a private key for public-key encryption

Table and form accessibility

Section 5 of 6

Web Accessibility

Not all web users are able to view the content on web pages in the same manner.

The term **web accessibility** refers to the assistive technologies, various features of HTML that work with those technologies, and different coding and design practices that can make a site more usable for people with visual, mobility, auditory, and cognitive disabilities.

In order to improve the accessibility of websites, the W3C created the **Web Accessibility Initiative (WAI)**

- [Web Content Accessibility Guidelines](#)

Web Content Accessibility Guidelines

- Provide text alternatives for any nontext content so that it can be changed into other forms people need, such as large print, braille, speech, symbols, or simpler language.
- Create content that can be presented in different ways (for example simpler layout) without losing information or structure.
- Make all functionality available from a keyboard.
- Provide ways to help users navigate, find content, and determine where they are.

Accessible Tables

1. Describe the table's content using the `<caption>` element
2. Connect the cells with a textual description in the header

```
<table>
  <caption>Famous Paintings</caption>
  <tr>
    <th scope="col">Title</th>
    <th scope="col">Artist</th>
    <th scope="col">Year</th>
    <th scope="col">Width</th>
    <th scope="col">Height</th>
  </tr>
  <tr>
    <td>The Death of Marat</td>
    <td>Jacques-Louis David</td>
    <td>1793</td>
```

Accessible Forms

Recall the <fieldset>, <legend>, and <label> elements.

Each <label> element should be associated with a single input element.

```
<label for="f-title">Title: </label>
<input type="text" name="title" id="f-title"/>
```

```
<label for="f-country">Country: </label>
<select name="where" id="f-country">
    <option>Choose a country</option>
    <option>Canada</option>
    <option>Finland</option>
    <option>United States</option>
</select>
```

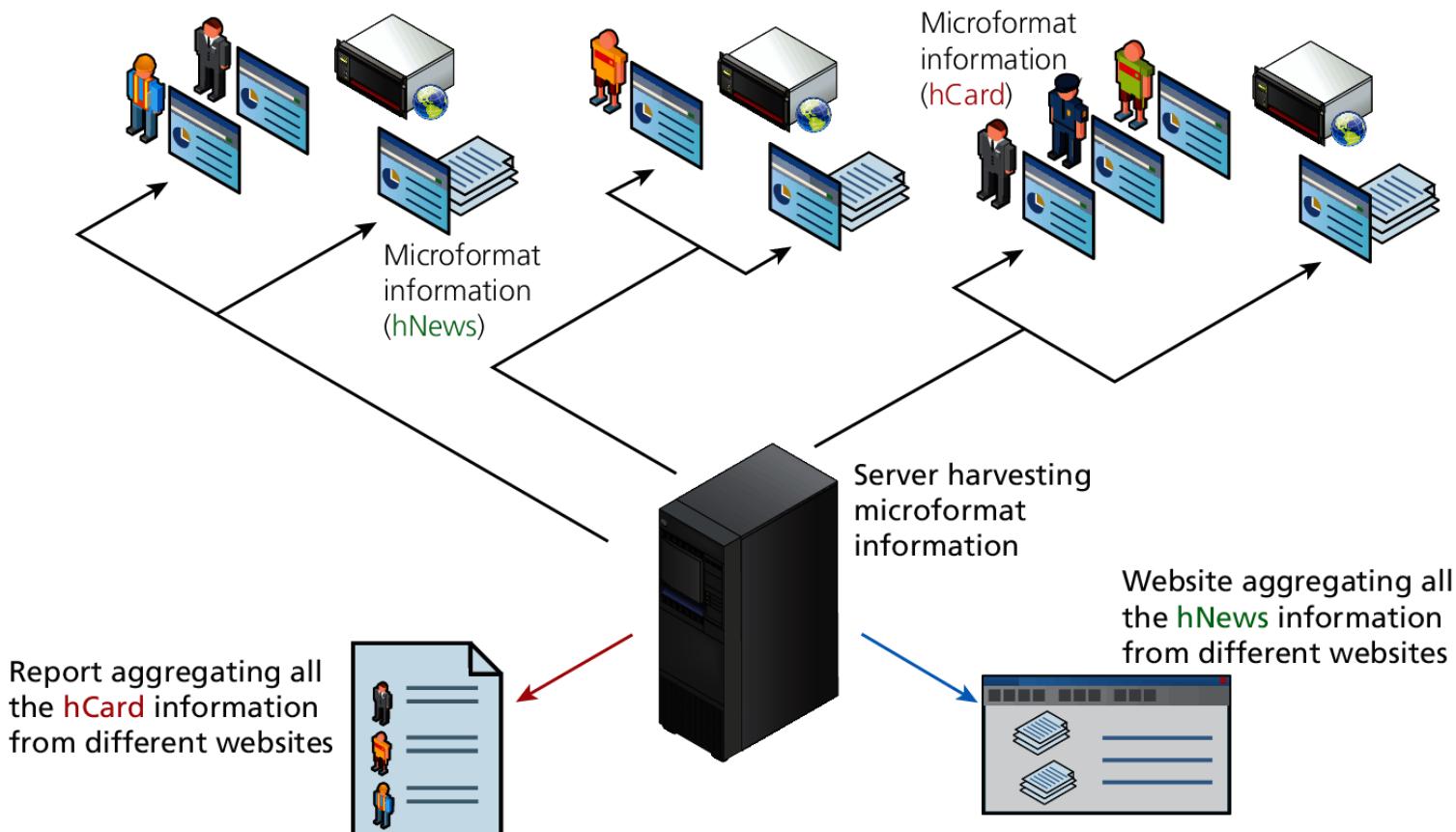
Microformats

Section [6](#) of 6

Microformats

A **microformat** is a small pattern of HTML markup and attributes to represent common blocks of information such as people, events, and news stories so that the information in them can be extracted and indexed by software agents

Microformat



What you've learned

1. Introducing Tables
2. Styling Tables
3. Introducing Forms
4. Form Control Elements
5. Table and Form Accessibility
6. Microformats