Tables

Agenda

- Tables in HTML
- Styling Tables with CSS

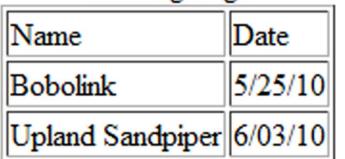AARHUS
UNIVERSITY
SCHOOL OF ENGINEERING

HTML Table

- Tables are used on web pages to organize tabular information
  - Composed of rows and columns - similar to a spreadsheet

- `<table>`
  Contains the table

- `<tr>`
  Contains a table row

- `<td>`
  Contains the data for a table cell.
  Are containers and can contain all sorts of HTML elements like text, images, lists, etc.

- `<caption>`
  Configures a description of the table

Bird Sightings

Name	Date
Bobolink	5/25/10
Upland Sandpiper	6/03/10

HTML Table Example

Use css!

```
<table border="1">
    <caption>Students</caption>
    <tr>
        <td>Casper</td>
        <td>Andersen</td>
        <td>20103276</td>
    </tr>
    <tr>
        <td>Benjamin</td>
        <td>Blankholm</td>
        <td>201206087</td>
    </tr>
    <tr>
        <td>Jens</td>
        <td>Brendstrup</td>
        <td>201270480</td>
    </tr>
</table>
```

Students

Casper	Andersen	20103276
Benjamin	Blankholm	201206087
Jens	Brendstrup	201270480

HTML Table - \<th\>

```
<table border="1">
    <caption>Students</caption>
    <tr>
        <th>Name</th>
        <th>Family name</th>
        <th>Id</th>
    </tr>
    <tr>
        <td>Casper</td>
        <td>Andersen</td>
        <td>20103276</td>
    </tr>
    <tr>
        <td>Benjamin</td>
        <td>Blankholm</td>
        <td>201206087</td>
    </tr>
    . . .
</table>
```

Students

Name	Family name	Id
Casper	Andersen	20103276
Benjamin	Blankholm	201206087
Jens	Brendstrup	201270480

HTML Common Table Cell Attributes

- colspan

- rowspan

Use CSS to configure most table cell characteristics instead of HTML attributes

HTML colspan Attribute

```html
<table border="1">
    <caption>Students</caption>
    <tr>
        <th colspan="2">Name</th>
        <th>Id</th>
    </tr>
    <tr>
        <td>Casper</td>
        <td>Andersen</td>
        <td>20103276</td>
    </tr>
    <tr>
        <td>Benjamin</td>
        <td>Blankholm</td>
        <td>201206087</td>
    </tr>
    . . .
</table>
```

Students

Name		Id
Casper	Andersen	20103276
Benjamin	Blankholm	201206087
Jens	Brendstrup	201270480

Accessibility and Tables

- Use table header elements (<th> tags) to indicate column or row headings

- Use the caption element to provide a text title or caption for the table

- Complex tables:
  Associate table cell values with their corresponding headers
  - <th> tag id attribute
  - <td> tag headers attribute

Table Accessibility Example

```html
<table border="1">
    <caption>Students</caption>
    <tr>
        <th id="name">Name</th>
        <th id="famName">Family name</th>
        <th id="id">Id</th>
    </tr>
    <tr>
        <td headers="name">Casper</td>
        <td headers="famName">Andersen</td>
        <td headers="id">20103276</td>
    </tr>
    <tr>
        <td headers="name">Benjamin</td>
        <td headers="famName">Blankholm</td>
        <td headers="id">201206087</td>
    </tr>
...
```

STYLING TABLES WITH CSS

Using CSS to Style a Table

HTML Attribute	CSS Property
align	Align a table: table { width: 75%; margin: auto; } Align within a table cell: text-align
bgcolor	background-color
cellpadding	padding
cellspacing	border-spacing or border-collapse
height	height
valign	vertical-align
width	width
border	border, border-style, border-spacing and border-collapse
--	background-image

Simple Style Example

```css
table, th, td {
    border: 1px solid black;
    border-collapse: collapse;
}
```

Students

Name	Family name	Id
Casper	Andersen	20103276
Benjamin	Blankholm	201206087
Jens	Brendstrup	201270480

```css
table, th, td {
    border: 1px solid black;
    border-collapse: collapse;
}
th, td {
    padding: 5px;
}
th {
    text-align: left;
}
```

Students

Name	Family name	Id
Casper	Andersen	20103276
Benjamin	Blankholm	201206087
Jens	Brendstrup	201270480

CSS Structural Pseudo-classes

Pseudo-class	Purpose
:first-of-type	Applies to the first element of the specified type
:first-child	Applies to the first child of an element (CSS2 selector)
:last-of-type	Applies to the last element of the specified type
:last-child	Applies to the last child of an element
:nth-of-type(n)	Applies to the "nth" element of the specified type Values: a number, odd, or even

Zebra Stripe a Table

tr:nth-of-type(even) { background-color: #eaeaea; }

Table Row Groups

<thead>
      table head rows

<tbody >
      table body rows

<tfoot>
      table footer rows

Time Sheet

Day	Hours
Monday	4
Tuesday	8
Wednesday	8
Thursday	5
Friday	3
Total	28

```
<table> <caption>Time Sheet</caption>
  <thead>
    <tr>
      <th id="day">Day</th>
      <th id="hours">Hours</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td headers="day">Monday</td>
      <td headers="hours">4</td>
    </tr>
<tr>
…
</tbody>
  <tfoot>
    <tr>
      <td headers="day">Total</td>
      <td headers="hours">18</td>
    </tr>
  </tfoot> </table>
```

Table Row Groups - CSS

Time Sheet

Day	Hours
Monday	4
Tuesday	8
Wednesday	8
Thursday	5
Friday	3
Total	28

```css
th {
    text-align: left;
}

table caption {
    font-weight: bold;
    font-size: larger;
}

table thead tr {
    background-color: #0026ff;
    font-size: larger;
}

table tfoot tr {
    background-color: #0026ff;
    font-size: larger;
    font-weight: bold;
}

table tr:nth-of-type(even) {
    background-color: #d4d9f3;
}
```