ADVANCED PROGRAMMING FOR HTML5&CSS

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Images in html5


```
1    <!DOCTYPE html>
2  ▼ <html>
3  ▼ <head>
4        <title> The Views</title>
5        <!-- <link rel="stylesheet" href="ex-0401-style.css"> -->
6    </head>
7
8  ▼ <body>
9  ▼  <center>
10       <h2>HTML Image</h2>
11        <img src="./photos/v1.jpg" title="The view is ......
12           "alt="The photo is gone!" width="500" height="333">
13     </center>
14   </body>
15   </html>
```


HTML Image

The photo is gone!

ex-0401.html

week 6

<img>: title and alt

- HTML img title 與 img alt 的差別在於 " 使用的目的與呈現效果 " 兩方面，簡單來說 img title 與 img alt 是兩個不同的東西，img title 是圖片標題，有點類似網頁標題的意思，用來標示圖片的說明文字，當滑鼠移到圖片上就會自動顯示出來，而 img alt 可就完全不同囉！img alt 是圖片的替代文字，所謂替代文字的意思就是在圖片失效的時候所要呈現的文字，如果圖片可以正常顯示，則 img alt 就不會有任何的功能。

Image Size

```
1   <!DOCTYPE html>
2 ▼ <html>
3 ▼ <head>
4 ▼   <style>
5       /* This stylesheet sets the width of all images to 100%: */
6 ▼     img {
7         width: 100%;
8       }
9     </style>
10
11  </head>
12
13 ▼ <body>
14    <h2>Styling Images</h2>
15    <p>The image below has the width attribute set to 128 pixels,
16       but the stylesheet overrides it, and sets the width to 100%.</p>
17    <img src="./photos/b.jpg"  width="128" height="128">
18
19    <p>The image below uses the style attribute, where the width
20       is set to 128 pixels which overrides the stylesheet:</p>
21    <img src="./photos/b.jpg"  style="width:128px;height:128px;">
22
23  </body>
24  </html>
```

ex-0402.html

Path used

- Absolute path in html5
- Relative path in html5

Image Maps

- The `<map>` tag defines an image-map. An image-map is an image with clickable areas.

- In the image below, click on the computer, the phone, or the cup of coffee:

- The name attribute of the `<map>` tag is associated with the `<img>`'s `usemap` attribute and creates a relationship between the image and the map.

- The `<map>` element contains a number of `<area>` tags, that define the clickable areas in the image-map.

Example

An image-map, with clickable areas:

```
<img src="planets.gif" width="145" height="126" alt="Planets" usemap="#planetmap">

<map name="planetmap">
  <area shape="rect" coords="0,0,82,126" href="sun.htm" alt="Sun">
  <area shape="circle" coords="90,58,3" href="mercur.htm" alt="Mercury">
  <area shape="circle" coords="124,58,8" href="venus.htm" alt="Venus">
</map>
```

Image Maps

Click on the computer, the phone, or the cup of coffee to go to a ne

Image maps - syntax

HTML Image Map 影像地圖語法規則

```
<img src="背景圖片網址" width="圖片寬度" height="圖片高度" usemap="#影像地圖名稱">

<map name="影像地圖名稱">

    <area shape="圖形的形狀" coords="圖形座標" href="超連結">

</map>
```
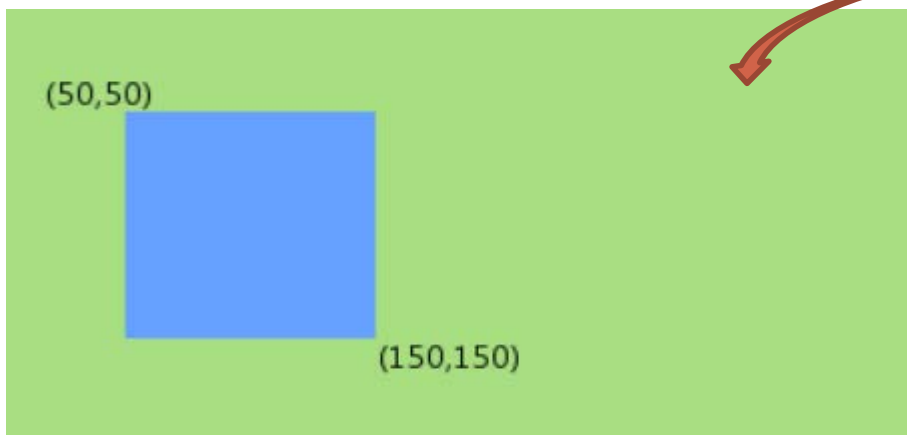
Image Maps

- Used shapes:
  - 方形影像地圖的 <area> 設定範例：
    <area shape="rect" coords="X1,Y1,X2,Y2" href="超連結">
  - 圓形影像地圖的 <area> 設定範例：
    <area shape="circle" coords="圓心 X,圓心 Y, 半徑" href="超連結">
  - 不規則影像地圖 <area> 設定範例：
    <area shape="polygon" coords="點座標 1,點座標 2, ..." href="超連結">
- FYI:

(50,50)

(150,150)

Where is the (0, 0) in map area?

Image Maps

```
1    <!DOCTYPE html>
2  ▼ <html>
3  ▼ <body>
4
5    <h2>Image Maps</h2>
6  ▼ <p>Click on the computer, the phone, or
7       the cup of coffee to go to a new page and
8       read more about the topic:</p>
9
10      <img src="./photos/workplace.jpg" alt="Workplace"
11       usemap="#workmap" width="400" height="379">
12
13 ▼    <map name="workmap">
14       <area shape="rect" coords="34,44,270,350"
15             href="./photos/a.jpg">
16       <area shape="rect" coords="290,172,333,250"
17             href="http://www.ksu.edu.tw/">
18       <area shape="circle" coords="337,300,44"
19             href="./photos/c.jpg">
20      </map>
21
22   </body>
23   </html>
```

ex-0403.html

Background Image in <body>

```
1    <!DOCTYPE html>
2 ▼  <html>
3 ▼  <head>
4 ▼    <style>
5        /* This stylesheet sets the width of all images to 100%: */
6 ▼      h2, p {
7          color: red;
8          }
9      </style>
10
11   </head>
12
13 ▼ <body style="background-image:url('./photos/i.jpg');">
14
15   <h2>Background Image</h2>
16
17 ▼ <p>By default the background image will repeat itself <br>
18       if it is smaller than the element where it is specified, <br>
19       in this case the BODY element.</p>
20
21   </body>
22   </html>
```

ex-0404.html

Image Floating

- Use the CSS float property to let the image float to the right or to the left of a text:

```
 1  <!DOCTYPE html>
 2  <html>
 3  <body>
 4
 5  <h2>Floating Images</h2>
 6
 7  <p>
 8  <img src="./photos/programmer6.gif" alt="Smiley face" style="float:right;width:42px;height:42px;">
 9  A paragraph with a floating image on the RHS.
10  </p>
11
12  <p>
13  <img src="./photos/programmer6.gif" alt="Smiley face" style="float:left;width:42px;height:42px;">
14  A paragraph with a floating image on the LHS.
15  </p>
16
17  </body>
18  </html>
19
```

Floating Images

A paragraph with a floating image on the RHS.

A paragraph with a floating image on the LHS.

ex-0406.html

Background Image in <p>

```
1    <!DOCTYPE html>
2 ▼  <html>
3 ▼  <body>
4
5    <h2>Background Image</h2>
6
7 ▼  <p style="background-image:url('./photos/g.jpg');">
8    You can specify background images<br>
9    for any visible HTML element.<br>
10   In this example, the background image<br>
11   is specified for this paragraph.<br>
12   By default, the background-image<br>
13   will repeat itself in the direction(s)<br>
14   where it is smaller than the element<br>
15   where it is specified. (Try resizing the<br>
16   browser window to see how the<br>
17   background image behaves.
18   </p>
19
20   </body>
21   </html>
```
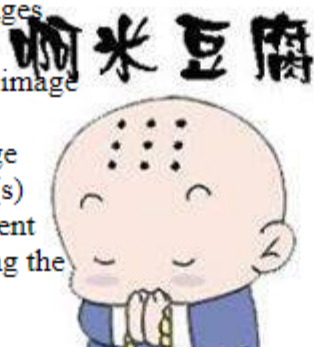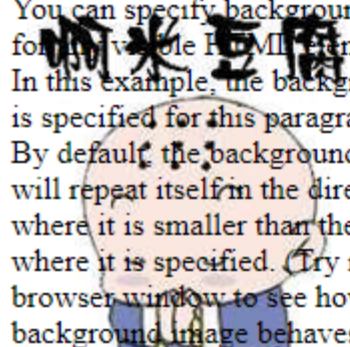
Background Image

You can specify background images
for any visible HTML element.
In this example, the background image
is specified for this paragraph.
By default, the background-image
will repeat itself in the direction(s)
where it is smaller than the element
where it is specified. (Try resizing the
browser window to see how the
background image behaves.

ex-0408.html

Tables in html5

Defining an HTML Table

- An HTML table is defined with the <table> tag.

- Each table row is defined with the <tr> tag.

- A table header is defined with the <th> tag. By default, table headings are bold and centered.

- A table data/cell is defined with the <td> tag.

<table>

```
1    <!DOCTYPE html>
2    <html>
3    <body>
4
5    <h2>Basic HTML Table</h2>
6
7    <table style="width:100%;color: brown;font:20px;">
8      <tr style="color: black;font:30px;">
9        <th>Firstname</th>
10       <th>Lastname</th>
11       <th>Age</th>
12     </tr>
13     <tr>
14       <td>Jill</td>
15       <td>Smith</td>
16       <td>50</td>
17     </tr>
18     <tr>
19       <td>Eve</td>
20       <td>Jackson</td>
21       <td>94</td>
22     </tr>
23     <tr>
24       <td>John</td>
25       <td>Doe</td>
26       <td>80</td>
27     </tr>
28   </table>
29
30   </body>
31   </html>
```

Basic HTML Table

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

How to center the data in <table>

- Not html5 way: **not working in html5**: put align="center" in one of follwings

  <table>、<th> 、 <tr> 、 <td>

  Basic HTML Table

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

- html5 ways: using css settings (style sheet): using one of 3 css ways to set up "center" value in the tag you choose as follows

  style="text-align:center"

  output

  Basic HTML Table

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

ex-0409a.html

Adding a Border

- If you do not specify a border for the table, it will be displayed without borders. Namely, this is a default setting.
- A border is set using the *css* border property:

```
<style>
table, th  {
   border: 5px solid black;
}
td {
   border: 1px solid black;
}

</style>
```

Basic HTML Table

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

ex-0411.html

Adding a Border

- If you do not specify a border for the table, it will be displayed without borders.

- A border is set using the **css** border property.

- CSS border-collapse 屬性的功能是用來將表格欄位邊框合併，讓表格變得更美化

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

th, td {
   text-align: right;
}

</style>
```

Basic HTML Table

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

ex-0413.html

Adding a Border

- **CSS border-collapse property syntax:**
  - ➤ **border-collapse: 參數值;**
- CSS border-collapse 屬性的參數值有三個，分別為 separate、collapse 以及 inherit，寫法如下。
  - ➤border-collapse:separate; //預設值，邊框彼此間分開
  - ➤border-collapse:collapse; //邊框合併為單一邊框
  - ➤border-collapse:inherit; //繼承自父層的 border-collapse 屬性值。
    (p.s.第三種屬性值 inherit 較不受到 IE 瀏覽器的支持，建議不要使用)

ex.

```
<style>
table, th, td  {
  border: 1px solid black;
  border-collapse: separate;
}
th, td {
  text-align: right;
}
</style>
```

Basic HTML Table

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

ex-0413a.html

Adding a Border

```
 4 ▼ <style>
 5 ▼ table, th, td  {
 6      border: 1px solid black;
 7      border-collapse: collapse;
 8    }
 9
10 ▼ th, td {
11      text-align:center;
12    }
13
14  </style>
```

Basic HTML Table

Firstname	Lastname/ age	
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

```
<table style="width:100%;color: brown;font:20px;">
  <tr style="color: black;font:30px;">
    <th>Firstname</th>
    <th  colspan="2">Lastname/ age </th>

  </tr>
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
  <tr>
    <td>John</td>
    <td>Doe</td>
    <td>80</td>
  </tr>
</table>
```

ex-0414.html

Adding a Border

- How about the rows spanned below?

Basic HTML Table

Firstname	Lastname/ age	
Jill	Smith	50
Eve	Jackson	94
	Doe	80

Adding a Caption

```
<table style="width:100%;color:brown;font:20px;">
<caption>  My friends </caption>
  <tr style="color: black;font:30px;">
    <th>Firstname</th>
    <th  colspan="2"> Lastname/ age </th>
  </tr>
```

Basic HTML Table

My friends		
Firstname	**Lastname/ age**	
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

ex-0416.html

Using table name and background color

```
<style>
table#t01, th, td{
    border: 1px solid black;
    border-collapse: collapse;
    background-color: lightblue;
}
th, td {
    text-align:center;
}
</style>
</head>
<body>
<h2>Basic HTML Table</h2>

<table id="t01" style="width:100%;color:brown;font:20px;">
```

Basic HTML Table

My friends		
Firstname	**Lastname/ age**	
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

ex-0417.html

Different colors

```html
<table id="t01" style="width:100%;color:brown;font:20px;">
<caption>  My friends </caption>
  <tr style="color: black;font:30px; background-color: aqua;">
    <th>Firstname</th>
    <th  colspan="2"> Lastname/ age </th>
  </tr>
  <tr style=" background-color:yellow;">
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>
  <tr style=" background-color:yellow;">
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
  <tr  style=" background-color:yellow;">
    <td>John</td>
    <td>Doe</td>
    <td>80</td>
  </tr>
</table>
```

Basic HTML Table

My friends

Firstname	Lastname/ age	
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

ex-0418.html

css in html5

The End