

HTML⁵ – CSS³

Les futures Standards

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I HTML⁵

- Introduction
- Nouveautés HTML
- Nouveautés Javascript

II CSS³

- Introduction
- Nouveautés Effets visuels
- Nouveautés Sélecteurs
- Nouveautés Utilitaires

III Compliance

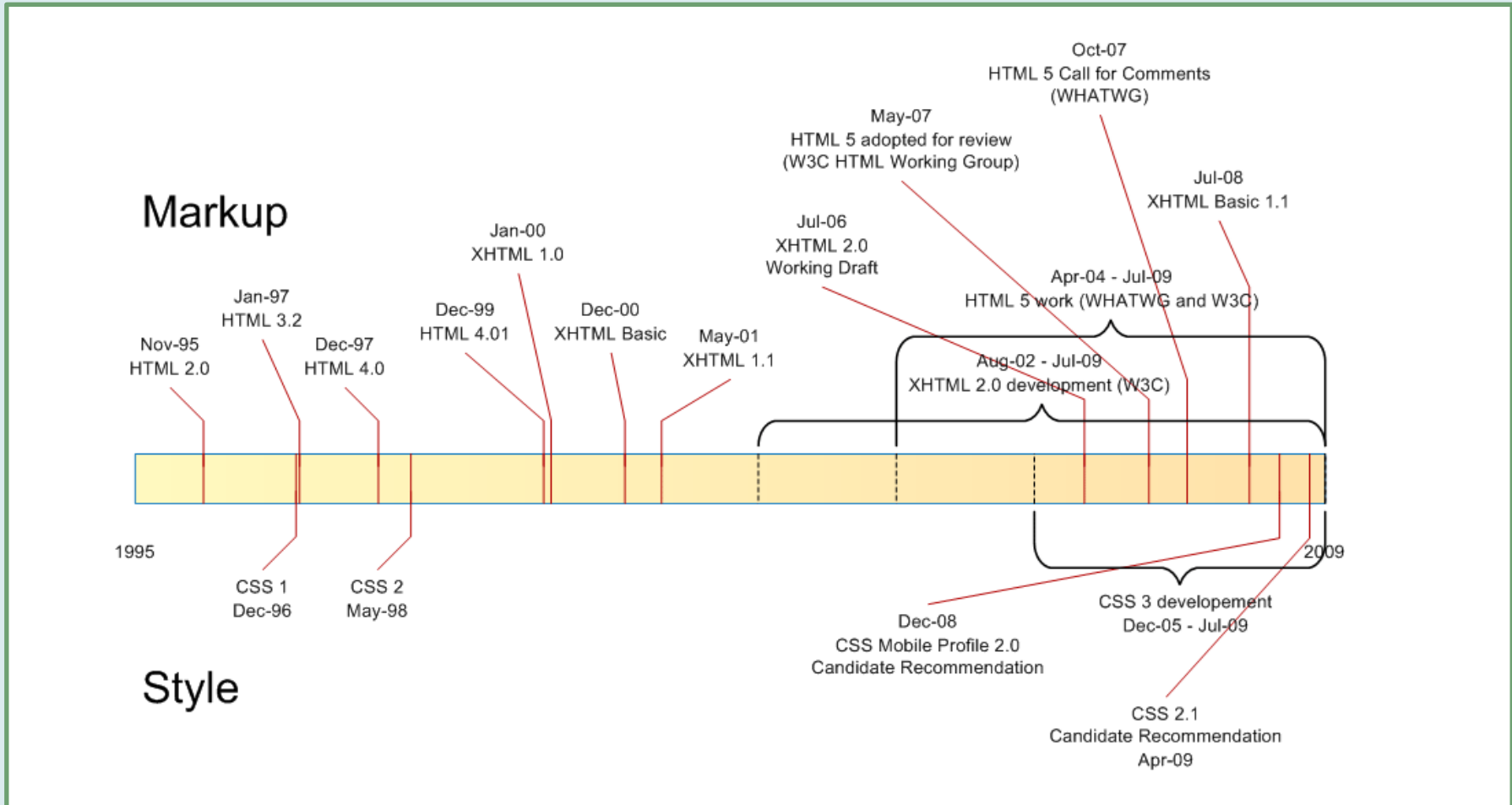
- HTML 5
- CSS 3

V Conclusion

HTML⁵

-
- Introduction
 - Nouveauté HTML
 - Nouveauté Javascript

- Introduction (1/2)



Source: <http://blog.tangcs.com/2011/04/15/html-css-tutorials-intro/>

- Introduction (2/2)

W3C vs WHATWG

World Wide Web Consortium vs Web Hypertext Application Technology Working Group



VS




HTML⁵-CSS³

- Introduction (2/2)

Nouveautés

HTML



The HTML section features several icons: a login form with fields for Username, Password, and Email; a tablet displaying a landscape image with a clapperboard icon above it; a dark grey box containing HTML5 structural tags: <header>, <section>, <header>, <article>, <footer>, <aside>, and <footer>; a pair of headphones with a sound wave; and a circular diagram of colorful nodes representing various HTML5 features.

Javascript



The Javascript section features icons for a globe with a magnifying glass, a server stack, a hand pointing at a tablet screen, and a computer monitor. A large red card displays a code snippet:


```

html>
<head>
<script>
var myStyle=document.getElementById("myStyle");
var myText=document.getElementById("myText");
</script>

```

HTML⁵

-
- Introduction
 - Nouveautés HTML
 - Nouveautés Javascript

HTML⁵-CSS³

• Nouveautés HTML (1/14)

- ❑ Allègement du code
- ❑ Balises Sémantiques
- ❑ Balises Multimédia
- ❑ Formulaire améliorés



- Nouveautés HTML (2/14)

- Allègement du code
 - Doctype, meta, script...

HTML 4

```
< DOCTYPE html PUBLIC "-//W3C//DTD XHTML
1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
xml:lang="fr" >
  <head>
    <meta http-equiv="Content-Type"
content="text/html;
charset=utf-8">

    <link rel="stylesheet"
type="text/css"
href="design.css" />

    <script type="text/javascript"
src="script.js">
  </script>
  </head>
  <body>

  </body>
</html>
```

HTML 5

```
< DOCTYPE html>
<html lang="fr">
  <head>
    <meta charset="utf-8" />

    <link rel="stylesheet"
href="design.css" />
    <script src="script.js"></script>
  </head>
```

• Nouveautés HTML (3/14)

❑ Balises Sémantiques

Elements

header : élément d'entête

footer : élément pied de page

nav : élément de navigation (e.g menu)

aside : élément de zone secondaire non liée au contenu principal de la page

section: définit une section de document

article : élément d'un même groupe, d'article

Sample



• Nouveautés HTML (4/14)

❑ Balises Sémantiques

Elements

bdi: isole une partie de texte pouvant être formaté autrement

command: bouton de commande pouvant être invoqué par l'utilisateur

details: zone d'information additionnelle pouvant être affichées ou maquées

summary: entete visible pour un élément details

figure: conteneur d'objets tels que illustrations, diagrams, photos, code listings, etc.

figcaption: titre pour l'élément figure

hgroup: groupe de heading h1 h2 etc.

Sample

mark: texte surligné

meter: jauge

progress: représente la progression d'un tache

ruby: ruby annotation (East Asian typography)

rt: caractère d'exclamation/prononciation (East Asian typography)

rp: affiche quoi afficher en ca de no support des annotations ruby

time: date/time

wbr: définit une line-break possible

- Nouveautés HTML (5/14)

- Balises Sémantiques

Elements

```

<body>
  <details>
    <summary>Additional Information</summary>
    <p>in certamen alacriter consurgentem
    revocave</p>
    <p>Quibus occurrere bene pertinax miles
    explicatis ordinibus parans sed eum</p>
  </details>

  <figure>
    
    <figcaption> The risk theory </figcaption>
  </figure>

  <meter value="2" min="0" max="10">
    2 out of 10
  </meter>
  <br />
  <meter value="0.6">60%</meter>

  <progress value="80" max="100">
  </progress>
</body>

```

Sample

▼ Additional Information

in certamen alacriter consurgentem revocave

Quibus occurrere bene pertinax miles explicatis ordinibus parans sed eum



• Nouveautés HTML (6/14)

❑ Balises Multimédia

Elements

audio: définit un contexte d'un objet audio

video: définit un contexte d'un objet video

source: définit des ressources multimédia multiple pour l'audio et la video

embed: container pour des applications externes ou du contenu interaction (plug-in)

track: liste de morceaux textuel pour la video et l'audio

<canvas> surface sur laquelle il est possible de dessiner des formes et de les animer

<svg> surface permettant de dessiner des objet au format Scalable Vector Graphics

Sample



Google Chrome



Mobile Safari



Firefox



Desktop Safari



<http://peterned.home.xs4all.nl/demooo/>

• Nouveautés HTML (7/14)

❑ Balises Multimédia

Sample

```
<body>
  <audio controls="controls">
    <source src="horse.ogg"
           type="audio/ogg" />
    <source src="horse.mp3"
           type="audio/mpeg" />
    Your browser does not
    support the audio element.
  </audio><br />
  <video width="320" height="240"
         controls="controls">
    <source src="big_buck_bunny_720p_surround.avi"
           type="video/mp4" />
    <source src="big_buck_bunny_480p_stereo.ogg"
           type="video/ogg" />
    Your browser does not
    support the video tag.
  </video>
  <br />

  <embed src="sampleB.swf" />
</body>
```

Sample Execution



• Nouveautés HTML (8/14)

❑ Balises Multimédia

Sample Canvas

```
function drawShape() {  
    // get the canvas element using the DOM  
    var canvas = document.getElementById('tutorial');  
    // Make sure we don't execute when canvas isn't supported  
    if (canvas.getContext){  
        // use getContext to use the canvas for drawing  
        var ctx = canvas.getContext('2d');  
        // Draw shapes  
        ctx.beginPath();  
        ctx.arc(75,75,50,0,Math.PI*2,true); // Outer circle  
        ctx.moveTo(110,75);  
        ctx.arc(75,75,35,0,Math.PI,false); // Mouth  
        ctx.moveTo(65,65);  
        ctx.arc(60,65,5,0,Math.PI*2,true); // Left eye  
        ctx.moveTo(95,65);  
        ctx.arc(90,65,5,0,Math.PI*2,true); // Right eye  
        ctx.stroke();  
  
    } else {  
        alert('You need Safari or Firefox 1.5+ to see this demo.');    }  
}
```



```
<body onload="drawShape();">  
    <canvas id="tutorial"  
        width="150" height="150">  
    </canvas>  
</body>
```

- Nouveautés HTML (9/14)

- Balises Multimédia

Sample SVG

```
<!DOCTYPE html>
<html>
  <body onload="drawShape();" >
    <svg xmlns="http://www.w3.org/2000/svg"
        version="1.1" height="190">
      <polygon
        points="100,35 40,180
        190,60 10,60 160,180"
        style="fill:orange;stroke:purple;
        stroke-width:8;fill-rule:evenodd;" />
    </svg>
  </body>
</html>
```

Sample Execution



• Nouveautés HTML (10/14)

□ Balises Multimédia

– Canvas vs SVG

Canvas	SVG
<ul style="list-style-type: none">• Resolution dependent• No support for event handlers• Poor text rendering capabilities• You can save the resulting image as .png or .jpg• Best suited for graphic-intensive games where many objects are redrawn frequently	<ul style="list-style-type: none">• Resolution independent• Support for event handlers• Best suited for applications with large rendering areas (Google Maps)• Slow rendering if complex (anything that uses the DOM a lot will be slow)• Not suited for game applications

- **Nouveautés HTML (11/14)**

- ❑ **Formulaires améliorés: Input Type**

Elements

- color
- date
- datetime
- datetime-local
- email
- month
- number
- range
- search
- tel
- time
- url
- week

Quantity (between 1 and 5):

Couleurs

Couleurs de base :

Couleurs personnalisées :

Teinte : 160 Rouge : 0
Satur. : 0 Vert : 0
Lum. : 0 Bleu : 0

Birthday: Jour/Mois/Année

<< < août 2012 > >>

lun.	mar.	mer.	jeu.	ven.	sam.	dim.
30	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	4	5	6	7	8	9

Points:

type=tel

type=number

1	2 ABC	3 DEF	-
4 GHI	5 JKL	6 MNO	.
7 PQRS	8 TUV	9 WXYZ	DEL
* # (0 +		Next

11:31 PM

Google

Go

Previous Next AutoFill Done

Q	W	E	R	T	Y	U	I	O	P
A	S	D	F	G	H	J	K	L	
*	Z	X	C	V	B	N	M		
@123	.	/	.com	Go					

- **Nouveautés HTML (12/14)**

- **Formulaires améliorés: Éléments de forme**

Elements

datalist: liste d'options pre-définies pour les éléments "input "

keygen: champ générateur de clé public/privé

output: résultat d'un calcul

Sample

```
<body>
  <input list="browsers" />

  <datalist id="browsers">
    <option value="Internet Explorer">
    <option value="Firefox">
    <option value="Chrome">
    <option value="Chrome Mobile">
    <option value="Opera">
    <option value="Safari">
  </datalist>
  <br /><br /><br /><br />

  <form action="demo_keygen.asp" method="get">
    Username: <input type="text" name="usr_name" />
    <br />
    Encryption: <keygen name="security" />
  <input type="submit" />
  </form>
  <br />
  <form oninput="x.value=parseInt(a.value)+parseInt(b.value)">0
    <input type="range" name="a" value="50" />100
    +<input type="number" name="b" value="50" />
    =<output name="x" for="a b"></output>
  </form>
</body>
```

• Nouveautés HTML (13/14)

❑ Formulaires améliorés: Éléments de form

Sample

```

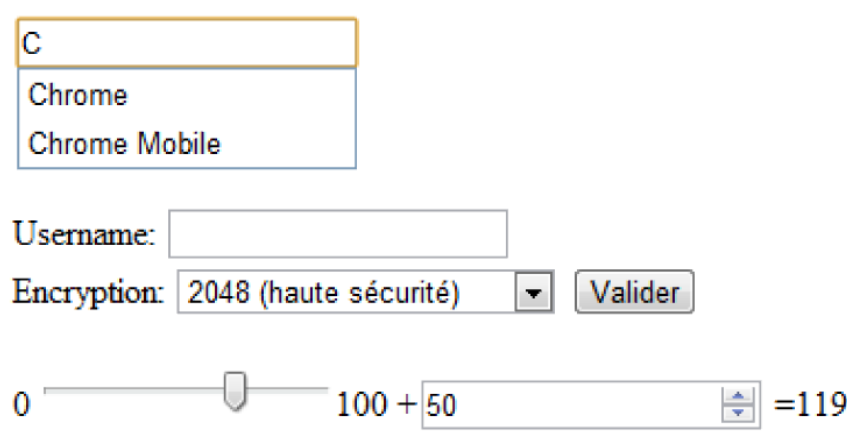
<body>
  <input list="browsers" />

  <datalist id="browsers">
    <option value="Internet Explorer">
    <option value="Firefox">
    <option value="Chrome">
    <option value="Chrome Mobile">
    <option value="Opera">
    <option value="Safari">
  </datalist>
  <br /><br /><br /><br />

  <form action="demo_keygen.asp" method="get">
    Username: <input type="text" name="usr_name" />
    <br />
    Encryption: <keygen name="security" />
    <input type="submit" />
  </form>
  <br />
  <form oninput="x.value=parseInt(a.value)+parseInt(b.value)">0
    <input type="range" name="a" value="50" />100
    +<input type="number" name="b" value="50" />
    =<output name="x" for="a b"></output>
  </form>
</body>

```

Sample Execution



Input was received as:

```
usr_name=jDoe&security=MIICQDCCASgwgEiMA0GCSqGSib3DQEB.
```

- **Nouveautés HTML (14/14)**

- **Formulaires améliorés: nouveaux attributs**

Input

autocomplete
autofocus
form
formation
formenctype
formmethod
formnovalidate
formtarget
height and width
list
min and max
multiple
pattern (regexp)
placeholder
required
step

form

autocomplete
novalidate

First name:

Last name:

E-mail:

Fill in and submit the form, then reload the page to see how autocomplete works.

Notice that autocomplete is "on" for the form, but "off" for the e-mail field.

HTML⁵

-
- Introduction
 - Nouveautés HTML
 - Nouveautés Javascript

HTML⁵-CSS³

• Nouveautés Javascript (1/22)

- Stockage local
- Localisation
- Drag and Drop
- Toolbox



• Nouveautés Javascript (2/22)

□ Stockage local

- Stockage de données sur le navigateur
- Persistance
- Info non communiqué au serveur (sécurité)
- Utilisé uniquement à la demande
- 2 modes de stockage local/session
- Grand espace de stockage (Mb)



• Nouveautés Javascript (3/22)

❑ Stockage local (local)

```
function clickCounter()
{
    if(typeof(Storage) !== "undefined")
    {
        if (localStorage.clickcount)
        {
            localStorage.clickcount=Number(localStorage.clickcount)+1;
        }
        else
        {
            localStorage.clickcount=1;
        }
        document.getElementById("result").innerHTML=
        "You have clicked the button " + localStorage.clickcount + " time(s).";
    }
    else
    {
        document.getElementById("result").innerHTML=
        "Sorry, your browser does not support web storage...";
    }
}
```

```
<body>
  <p><button onclick="clickCounter()" type="button">Click me!</button></p>
  <div id="result"></div>
  <p>Click the button to see the counter increase.</p>
  <p>Close the browser tab (or window), and try again,
  and the counter will continue to count (is not reset).</p>
</body>
```

• Nouveautés Javascript (4/22)

☐ Stockage local (local)

```
function clickCounter()
{
    if(typeof(Storage) !=="undefined")
    {
        if (localStorage.clickcount)
        {
            localStorage.clickcount=Number(localStorage.clickcount)+1;
        }
        else
        {
            localStorage.clickcount=1;
        }
        document.getElementById("result").innerHTML=
        "You have clicked the button " + localStorage.clickcount + " time(s).";
    }
    else
    {
        document.getElementById("result").innerHTML=
        "Sorry, your browser does not support web storage...";
    }
}
```

Click me!

You have clicked the button 3 time(s).

Click the button to see the counter increase.

Close the browser tab (or window), and try again, and the counter will continue to count (is not reset).

•Nouveautés Javascript (5/22)

❑ Stockage local (session)

```
function clickCounter()
{
    if(typeof(Storage) !=="undefined")
    {
        if (sessionStorage.clickcount)
        {
            sessionStorage.clickcount=
            Number(sessionStorage.clickcount)+1;
        }
        else
        {
            sessionStorage.clickcount=1;
        }
        document.getElementById("result").innerHTML=
        "You have clicked the button " + sessionStorage.clickcount +
        " time(s) in this session.";
    }
    else
    {
        document.getElementById("result").innerHTML=
        "Sorry, your browser does not support web storage...";
    }
}
```

•Nouveautés Javascript (6/22)

□ Stockage local (session)

```
function clickCounter()
{
    if(typeof(Storage)!="undefined")
    {
        if (sessionStorage.clickcount)
        {
            sessionStorage.clickcount=
                Number(sessionStorage.clickcount)+1;
        }
        else
        {
            sessionStorage.clickcount=1;
        }
        document.getElementById("result").innerHTML=
            "You have clicked the button " + sessionStorage.clickcount +
            " time(s) in this session.";
    }
    else
    {
        document.getElementById("result").innerHTML=
            "Sorry, your browser does not support web storage...";
    }
}
```

Click me!

You have clicked the button 4 time(s) in this session.

Click the button to see the counter increase.

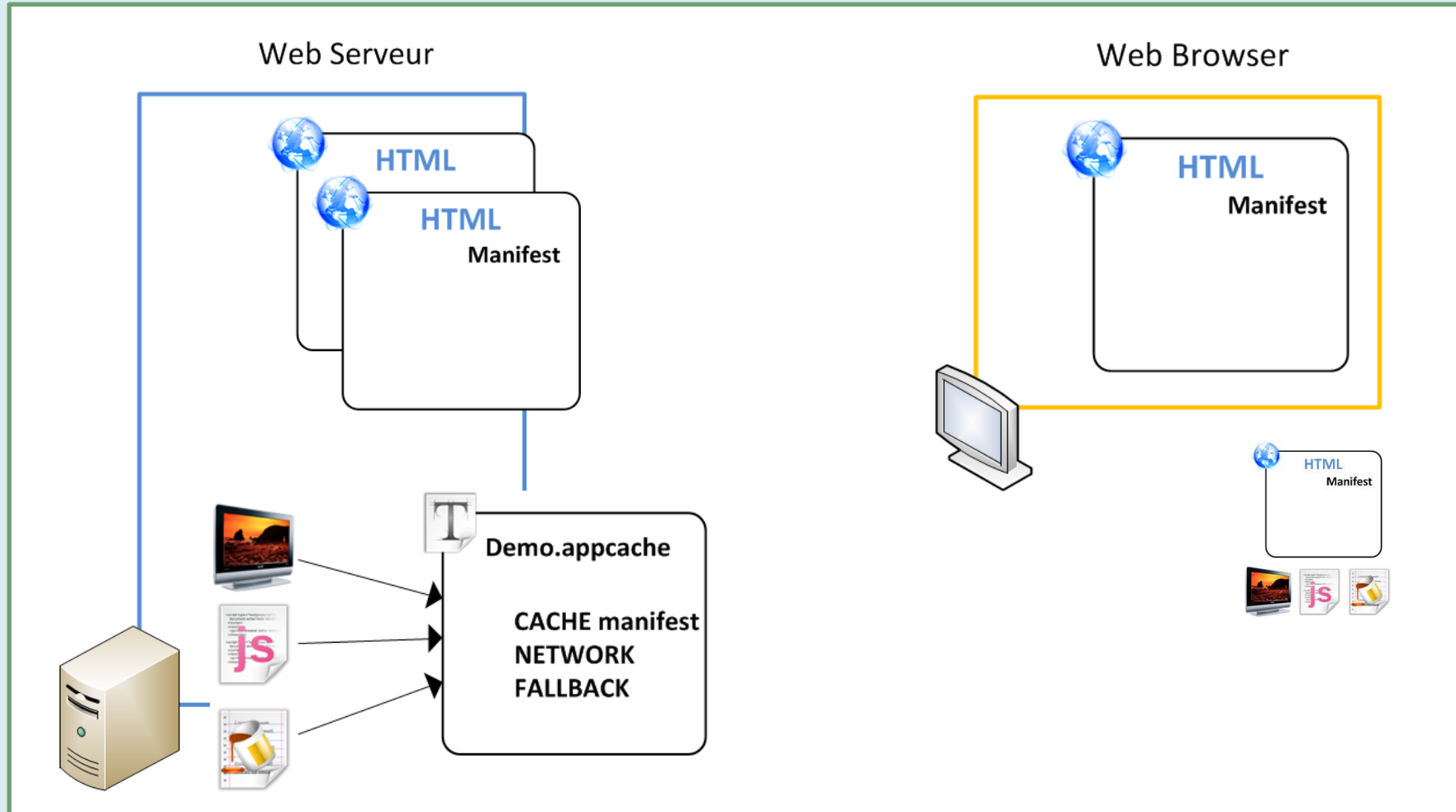
Close the browser tab (or window), and try again, and the counter is reset.

- **Nouveautés Javascript (7/22)**
 - ❑ Stockage local (App Cache)
 - Navigation hors ligne
 - Rapidité
 - Allègement de la charge server



- **Nouveautés Javascript (8/22)**

- Stockage local (App Cache)



- **Nouveautés Javascript (9/22)**

- Stockage local (App Cache)

```
<!DOCTYPE HTML>  
<html manifest="demo.appcache">  
...  
</html>
```

```
CACHE MANIFEST  
# 2012-02-21 v1.0.0  
/theme.css  
/logo.gif  
/main.js
```

```
NETWORK:  
login.asp
```

```
FALLBACK:  
/html5/ /offline.html
```

- **Nouveautés Javascript (10/22)**

- Stockage local (App Cache)

```
CACHE MANIFEST
# 2012-02-21 v1.0.0
/theme.css
/logo.gif
/main.js
```

```
NETWORK:
login.asp
```

```
FALLBACK:
/html5/ /offline.html
```

Elements à mettre en cache

Element nécessitant une connexion

Page à afficher si une connexion n'est pas disponible

- **Nouveautés Javascript (11/22)**

- Localisation

- Localisation géographique du navigateur
 - Meilleure précision avec équipement GPS (mobile)
 - Gestion des exceptions
 - Collecte de la position régulière



• Nouveautés Javascript (12/22)

☐ Localisation

coords.latitude: latitude en décimal

coords.longitude: longitude en décimal

coords.accuracy: précision de la position

coords.altitude: altitude en mètre au dessus du niveau de la mer

coords.altitudeAccuracy: précision de l'altitude

coords.heading: orientation en degré depuis le nord (sens des aiguilles d'une montre)

coords.speed: vitesse mètre par second

timestamp: date de la réponse

•Nouveautés Javascript (13/22)

□ Localisation

```
var x=document.getElementById("demo");
function getLocation()
{
  if (navigator.geolocation)
  {
    navigator.geolocation.getCurrentPosition(showPosition,showError);
  }
  else{x.innerHTML="Geolocation is not supported by this browser.";}
}

function showPosition(position)
{
  var latlon=position.coords.latitude+", "+position.coords.longitude;

  var img_url="http://maps.googleapis.com/maps/api/staticmap?center="
+latlon+"&zoom=14&size=400x300&sensor=false";
  document.getElementById("mapholder").innerHTML="<img src='"+img_url+"' />";
}
```

•Nouveautés Javascript (14/22)

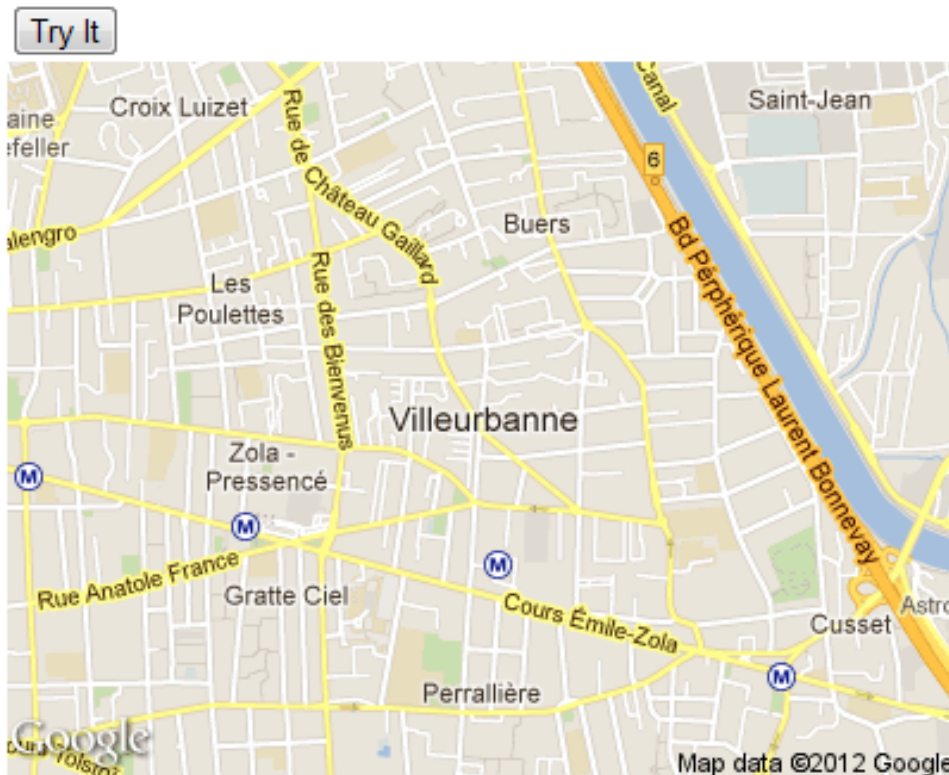
❑ Localisation

```
function showError(error)
{
  switch(error.code)
  {
    case error.PERMISSION_DENIED:
      x.innerHTML="User denied the request for Geolocation."
      break;
    case error.POSITION_UNAVAILABLE:
      x.innerHTML="Location information is unavailable."
      break;
    case error.TIMEOUT:
      x.innerHTML="The request to get user location timed out."
      break;
    case error.UNKNOWN_ERROR:
      x.innerHTML="An unknown error occurred."
      break;
  }
}
```

- **Nouveautés Javascript (15/22)**

- Localisation

Click the button to get your position:



- **Nouveautés Javascript (16/22)**

- Drag and Drop

- Déplace un élément d'une zone à une autre
 - Natif, plus d'émulation par bibliothèques javascripts
 - Traitement spécifique via javascript



•Nouveautés Javascript (17/22)

❑ Drag and Drop

```
<body>

<div id="div1"
  ondrop="drop(event) "
  ondragover="allowDrop(event) ">
</div>



</body>
```

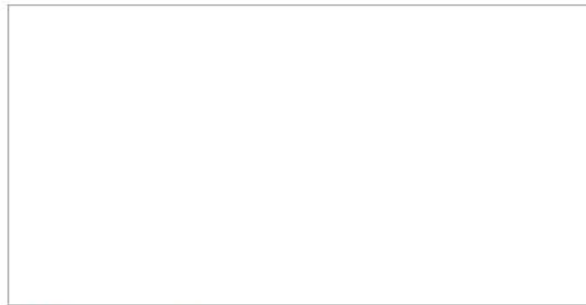
```
<script type="text/javascript">
  function allowDrop(ev)
  {
    ev.preventDefault();
  }

  function drag(ev)
  {
    ev.dataTransfer.setData("Text",ev.target.id);
  }

  function drop(ev)
  {
    ev.preventDefault();
    var data=ev.dataTransfer.getData("Text");
    ev.target.appendChild(document.getElementById(data));
  }
</script>
```

•Nouveautés Javascript (18/22)

❑ Drag and Drop



HTML⁵-CSS³

- **Nouveautés Javascript (19/22)**

- **ToolBox**

- Web Worker
 - Communication Server SSE



•Nouveautés Javascript (20/22)

☐ ToolBox

- Web Worker: JavaScript run in background

```
<script>
  var w;
  function startWorker()
  {
    if(typeof(Worker)!=="undefined")
    {
      if(typeof(w)==="undefined")
      {
        w=new Worker("demo_workers.js");
      }
      w.onmessage = function (event) {
        document.getElementById("result")
          .innerHTML=event.data;
      };
    }
    else
    {
      document.getElementById("result")
        .innerHTML= "Sorry, your browser"+
        "does not support Web Workers...";
    }
  }

  function stopWorker()
  {
    w.terminate();
  }
</script>
```

demo_workers.js

```
var i=0;

function timedCount()
{
  i=i+1;
  postMessage(i);
  setTimeout("timedCount()",500);
}

timedCount();

<body>
  <p>Count numbers: <output id="result"></output></p>
  <button onclick="startWorker()">Start Worker</button>
  <button onclick="stopWorker()">Stop Worker</button>
  <br /><br />
</body>
```

Count numbers: 955

Start Worker

Stop Worker

•Nouveautés Javascript (21/22)

☐ ToolBox

- Server-Sent Events (SSE): get automatically updates from server

```
if(typeof(EventSource) !=="undefined")
{
    var source=new EventSource("demo sse.php");
    source.onmessage=function(event)
    {
        document.getElementById("result")
        .innerHTML+=event.data + "<br />";
    };
}
else
{
    document.getElementById("result")
    .innerHTML="Sorry, your browser does"+
    "not support server-sent events...";
}
```

```
<body>
    <h1>Getting server updates</h1>
    <div id="result"></div>
</body>
```

demo_sse.php

```
<?php
    header('Content-Type: text/event-stream');
    header('Cache-Control: no-cache');

    $time = date('r');
    echo "data: The server time is: {$time}\n\n";
    flush();
?>
```

•Nouveautés Javascript (22/22)

☐ ToolBox

- Server-Sent Events (SSE): get automatically updates from server

```
if(typeof(EventSource) !=="undefined")
{
    var source=new EventSource("demo sse.php");
    source.onmessage=function(event)
    {
        document.getElementById("result")
        .innerHTML+=event.data + "<br />";
    }
}
else
{
    document.getElementById("result")
    .innerHTML="Sorry, your browser does"+
    "not support server-sent events...";
}
```

```
<body>
    <h1>Getting server updates</h1>
    <div id="result"></div>
</body>
```

Getting server updates

The server time is: Thu, 30 Aug 2012 09:52:17 -0400

The server time is: Thu, 30 Aug 2012 09:52:21 -0400

Getting server updates

The server time is: Thu, 30 Aug 2012 09:52:17 -0400

The server time is: Thu, 30 Aug 2012 09:52:21 -0400

The server time is: Thu, 30 Aug 2012 09:52:25 -0400

The server time is: Thu, 30 Aug 2012 09:52:28 -0400

The server time is: Thu, 30 Aug 2012 09:52:32 -0400

The server time is: Thu, 30 Aug 2012 09:52:36 -0400

The server time is: Thu, 30 Aug 2012 09:52:39 -0400

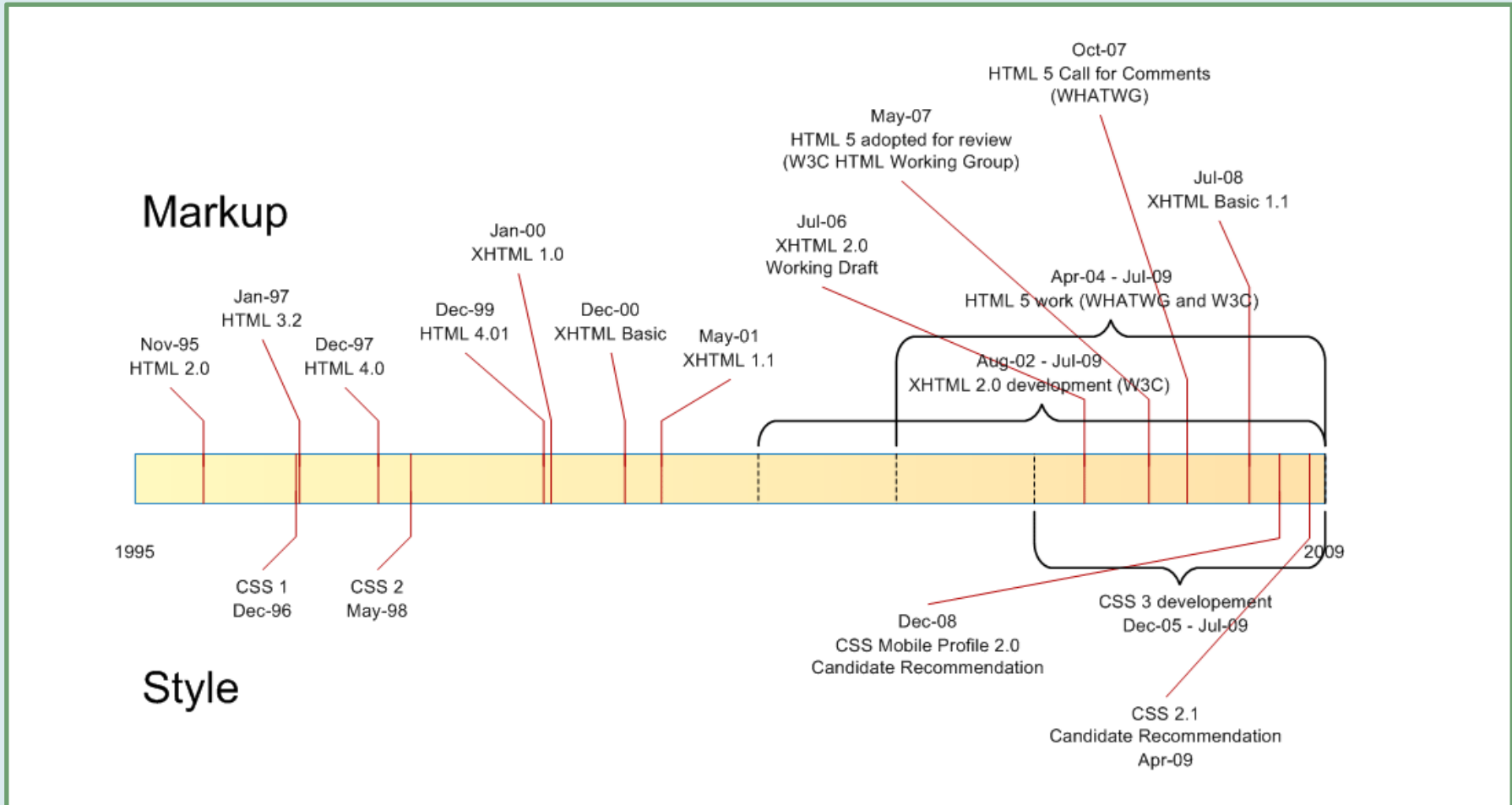
The server time is: Thu, 30 Aug 2012 09:52:43 -0400

The server time is: Thu, 30 Aug 2012 09:52:47 -0400

CSS³

-
- Introduction
 - Nouveautés Effets visuels
 - Nouveautés Sélecteurs
 - Nouveautés Utilitaires

• Introduction



Source: <http://blog.tangcs.com/2011/04/15/html-css-tutorials-intro/>

• Préfixes propriétaires

- ❑ Un monde pas encore standardisé
 - Les nouvelles propriétés CSS3 doivent être différenciées
 - Chaque navigateur peut posséder sa propre implémentation
 - Utilisation de préfixes propriétaires pour les implémentations différentes



-ms-



-moz-



-webkit-



-webkit-



-o-

CSS³

-
- Introduction
 - Nouveautés Effets visuels
 - Nouveautés Sélecteurs
 - Nouveautés Utilitaires

HTML⁵-CSS³

• Nouveautés: Effets Visuels (1/19)

- Border
- Background
- Texte
- Transformation
- Transition
- Animation



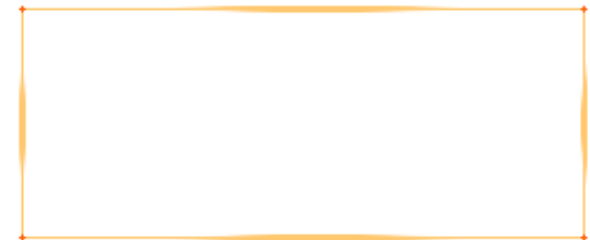
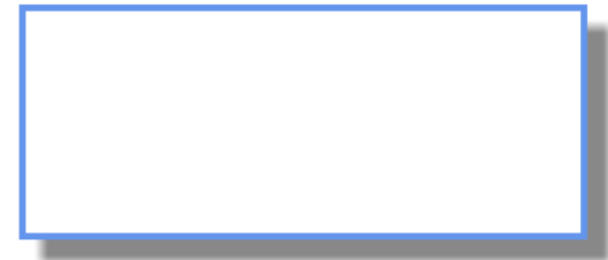
- Nouveautés: Effets Visuels (2/19)

- Border

```
div.border
{
    border:3px solid;
    border-radius:25px;
    /* Firefox 3.6 and earlier */
    -moz-border-radius:25px;
}

div.shadow
{
    border:3px solid;
    box-shadow: 10px 10px 5px #888888;
}

#borderimage
{
    border-image:url(border.png) 30 30 stretch;
    /* Firefox */
    -moz-border-image:url(border.png) 30 30 stretch;
    /* Safari and Chrome */
    -webkit-border-image:url(border.png) 30 30 stretch;
    /* Opera */
    -o-border-image:url(border.png) 30 30 stretch;
}
```

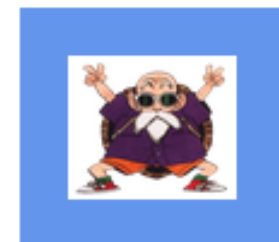
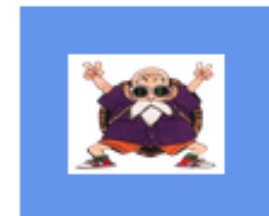
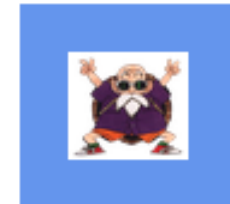


- Nouveautés: Effets Visuels (3/19)

- Background

```
div.back
{
    background:url(tortue.gif);
    -moz-background-size:100% 100%; /* Firefox 3.6 */
    background-size:100% 100%;
    background-repeat:no-repeat;
}
div.big{
    width: 30px;
    height: 20px;
}
div.small{
    width: 10px;
    height: 5px;
}
```

background-size



• Nouveautés: Effets Visuels (4/19)

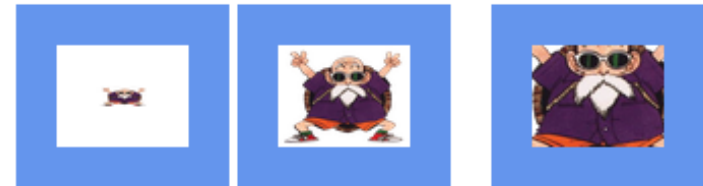
□ Background

```
div.contentbox{  
  /* Safari */  
  -webkit-background-origin:content-box;  
  background-origin:content-box;  
}
```

```
div.paddingbox{  
  /* Safari */  
  -webkit-background-origin:padding-box;  
  background-origin:padding-box;  
}
```

```
div.borderbox{  
  /* Safari */  
  -webkit-background-origin:border-box;  
  background-origin:border-box;  
}
```

background-origin



- Nouveautés: Effets Visuels (5/19)

- Texte

```
h1{  
  text-shadow: 5px 5px 5px #6495ED;  
}  
  
p{  
  width: 200px;  
}  
  
p.wordwrapping{  
  word-wrap:break-word;  
}
```

The Big Bang Theory

The Big Bang Theory is an American sitcom created by Chuck Lorre and Bill Prady, both of whom serve as executive producers on the show, along with Steven Molaro. All three also serve as head writers. It premiered on CBS on September 24, 2007.[3] The show is centered on five characters: roommates Leonard Hofstadter and Sheldon Cooper, two physicists who work at the CaliforniaInstituteofTechnology(Caltech)Pennyawaitress and aspiring actress who lives across the hall; and Leonard and Sheldon's equally geeky and socially awkward friends and co-workers, aerospace engineer Howard Wolowitz and astrophysicist Rajesh Koothrappali.

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- **Nouveautés: Effets Visuels (6/19)**

- Texte

Property	Description
<u>hanging-punctuation</u>	Specifies whether a punctuation character may be placed outside the line box
<u>punctuation-trim</u>	Specifies whether a punctuation character should be trimmed
<u>text-align-last</u>	Describes how the last line of a block or a line right before a forced line break is aligned when text-align is "justify"
<u>text-emphasis</u>	Applies emphasis marks, and the foreground color of the emphasis marks, to the element's text
<u>text-justify</u>	Specifies the justification method used when text-align is "justify"
<u>text-outline</u>	Specifies a text outline
<u>text-overflow</u>	Specifies what should happen when text overflows the containing element
<u>text-shadow</u>	Adds shadow to text
<u>text-wrap</u>	Specifies line breaking rules for text
<u>word-break</u>	Specifies line breaking rules for non-CJK scripts
<u>word-wrap</u>	Allows long, unbreakable words to be broken and wrap to the next line

Source: http://www.w3schools.com/css3/css3_text_effects.asp

- Nouveautés: Effets Visuels (7/19)

- Texte (font)

```

@font-face
{
    font-family: myFont;
    src: url('the_beautiful_ones.ttf')
        /* IE9+ */
        ,url('the_beautiful_ones.eot');
}

@font-face
{
    font-family: myFontb;
    src: url('appleberry_with_cyrillic.ttf')
        /* IE9+ */
        ,url('appleberry_with_cyrillic.eot');
}

p.fonta{
    font-family:myFont;
}

p.fontb{
    font-family:myFontb;
}

```

The Big Bang Theory

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HTML⁵-CSS³

- **Nouveautés: Effets Visuels (8/19)**

- Transformation (2D)



- Nouveautés: Effets Visuels (9/19)

- Transformation (2D)

```
div {  
  border:5px solid;  
  width:200px;  
  height:200px;  
  color:bleu;  
  background:url(transformer.jpg);  
  background-size:100% 100%;  
  border-radius:25px;  
}
```

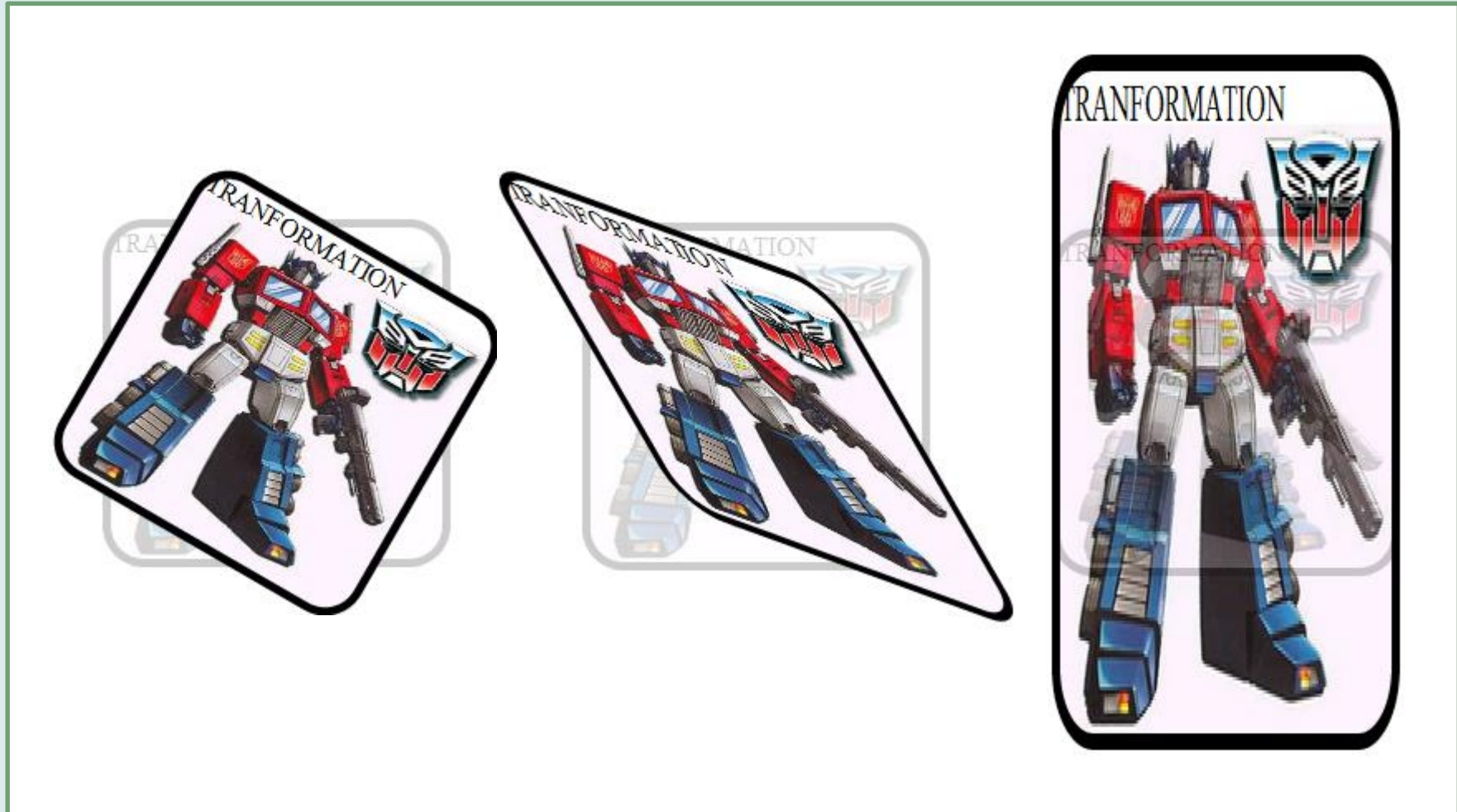
```
div.rotate{  
  transform: rotate(30deg);  
  /* IE 9 */  
  -ms-transform: rotate(30deg);  
  /* Safari and Chrome */  
  -webkit-transform: rotate(30deg);  
  /* Opera */  
  -o-transform: rotate(30deg);  
  /* Firefox */  
  -moz-transform: rotate(30deg);  
}
```

```
div.translate{  
  transform: translate(50px,100px);  
  /* IE 9 */  
  -ms-transform: translate(50px,100px);  
  /* Safari and Chrome */  
  -webkit-transform: translate(50px,100px);  
  /* Opera */  
  -o-transform: translate(50px,100px);  
  /* Firefox */  
  -moz-transform: translate(50px,100px);  
}
```

HTML⁵-CSS³

- **Nouveautés: Effets Visuels (10/19)**

- Transformation (2D)



• Nouveautés: Effets Visuels (11/19)

□ Transformation (2D)

`div.matrix`

```
{
  transform:matrix(0.866,0.5,-0.5,0.866,0,0);
  /* IE 9 */
  -ms-transform:matrix(0.866,0.5,-0.5,0.866,0,0);
  /* Firefox */
  -moz-transform:matrix(0.866,0.5,-0.5,0.866,0,0);
  /* Safari and Chrome */
  -webkit-transform:matrix(0.866,0.5,-0.5,0.866,0,0);
  /* Opera */
  -o-transform:matrix(0.866,0.5,-0.5,0.866,0,0);
}
```

`div.skew`

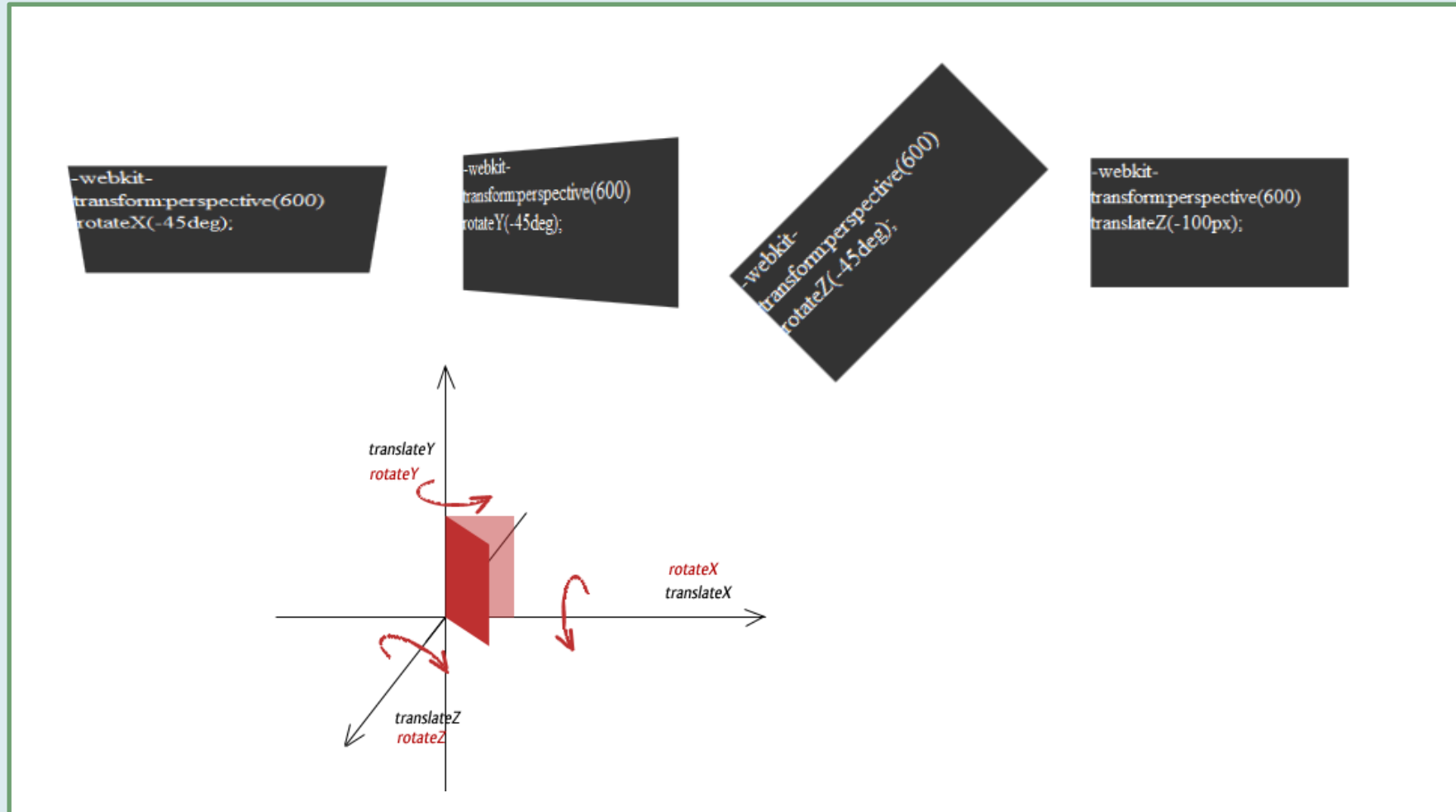
```
{
  transform: skew(30deg,20deg);
  /* IE 9 */
  -ms-transform: skew(30deg,20deg);
  /* Safari and Chrome */
  -webkit-transform: skew(30deg,20deg);
  /* Opera */
  -o-transform: skew(30deg,20deg);
  /* Firefox */
  -moz-transform: skew(30deg,20deg);
}
```

`div.scale`

```
{
  transform: scale(1,2);
  /* IE 9 */
  -ms-transform: scale(1,2);
  /* Safari and Chrome */
  -webkit-transform: scale(1,2);
  /* Opera */
  -o-transform: scale(1,2);
  /* Firefox */
  -moz-transform: scale(1,2);
}
```

- Nouveautés: Effets Visuels (12/19)

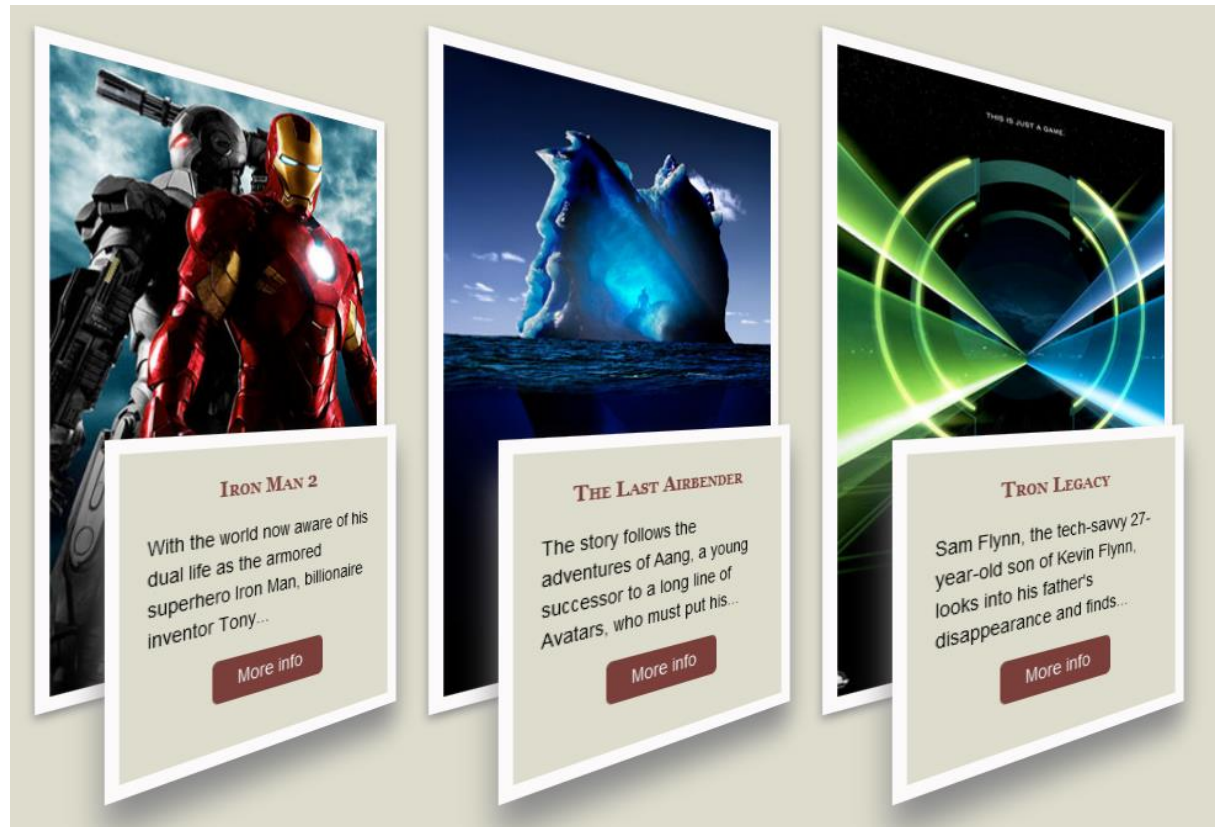
- Transformation (3D)



Source: <http://debray-jerome.developpez.com/articles/les-transformations-3d-en-css3/>

- **Nouveautés: Effets Visuels (13/19)**

- Transformation (3D)



Source: http://demo.marcofolio.net/3d_animation_css3/

- **Nouveautés: Effets Visuels (14/19)**

- Transition

transition-property: détermine à quelle propriété CSS la transition sera appliquée

transition-duration: définit la durée que prendra la transition

transition-timing-function: définit comment la durée de la transition sera calculée
(linear, ease, etc...)

transition-delay: définit quand la transition commencera

• Nouveautés: Effets Visuels (15/19)

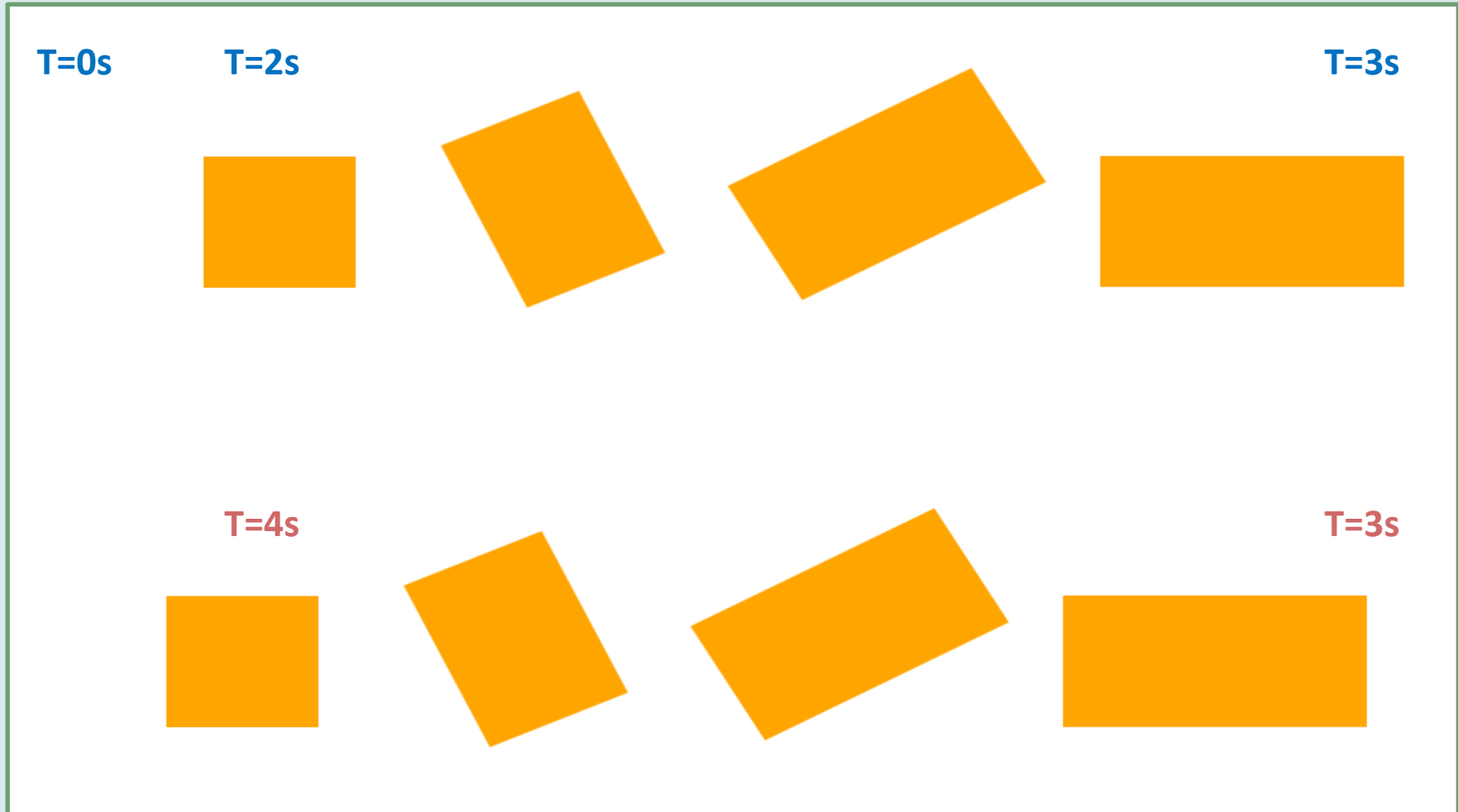
□ Transition

```
div
{
  width:100px;
  height:100px;
  background:orange;
  transition-property:width rotate;
  transition-duration:1s;
  transition-timing-function:linear;
  transition-delay:2s;
  /* Firefox 4 */
  -moz-transition-property:width rotate;
  -moz-transition-duration:1s;
  -moz-transition-timing-function:linear;
  -moz-transition-delay:2s;
  /* Safari and Chrome */
  -webkit-transition-property:width rotate;
  -webkit-transition-duration:1s;
  -webkit-transition-timing-function:linear;
  -webkit-transition-delay:2s;
  /* Opera */
  -o-transition-property:width rotate;
  -o-transition-duration:1s;
  -o-transition-timing-function:linear;
  -o-transition-delay:2s;
}

div:hover
{
  width:200px;
  transform: rotate(180deg);
  -ms-transform: rotate(180deg); /* IE 9 */
  -webkit-transform: rotate(180deg); /* Safari and Chrome */
  -o-transform: rotate(180deg); /* Opera */
  -moz-transform: rotate(180deg); /* Firefox */
}
```

- **Nouveautés: Effets Visuels (16/19)**

- Transition



- **Nouveautés: Effets Visuels (17/19)**

- Animation

@keyframes: définit une animation

animation-name: nom de l'animation @keyframes

animation-duration: durée de l'animation permettant d'accomplir un cycle (sec or millisec)

animation-timing-function: définit comment la durée de la transition sera calculée (linear, ease, etc...)

animation-delay: définit quand la transition commencera

animation-iteration-count: définit le nombre de fois que sera exécuté l'animation

animation-direction: définit la direction de l'animation

animation-play-state: définit si l'animation est "running" ou "paused"

• Nouveautés: Effets Visuels (18/19)

□ Animation

```
div
{
  width:100px;
  height:100px;
  background:red;
  position:relative;
  animation:myfirst 5s;
  /* Firefox */
  -moz-animation:myfirst 5s;
  /* Safari and Chrome */
  -webkit-animation:myfirst 5s;
  /* Opera */
  -o-animation:myfirst 5s;
}
```

```
@keyframes myfirst
{
  0%   {background:red; left:0px; top:0px;}
  25%  {background:yellow; left:200px; top:0px;}
  50%  {background:blue; left:200px; top:200px;}
  75%  {background:green; left:0px; top:200px;}
  100% {background:red; left:0px; top:0px;}
}

@-moz-keyframes myfirst /* Firefox */
{
  0%   {background:red; left:0px; top:0px;}
  25%  {background:yellow; left:200px; top:0px;}
  50%  {background:blue; left:200px; top:200px;}
  75%  {background:green; left:0px; top:200px;}
  100% {background:red; left:0px; top:0px;}
}

@-o-keyframes myfirst /* Opera */
{
  0%   {background:red; left:0px; top:0px;}
  25%  {background:yellow; left:200px; top:0px;}
  50%  {background:blue; left:200px; top:200px;}
  75%  {background:green; left:0px; top:200px;}
  100% {background:red; left:0px; top:0px;}
}
```

- **Nouveautés: Effets Visuels (19/19)**

- Animation

Note: This example does not work in Internet Explorer.



Note: This example does not work in Internet Explorer.



Note: This example does not work in Internet Explorer.



Note: This example does not work in Internet Explorer.



CSS³

-
- Introduction
 - Nouveautés Effets visuels
 - Nouveautés Sélecteurs
 - Nouveautés Utilitaires

HTML⁵-CSS³

- **Nouveautés: Les sélecteurs (1/7)**

- Sélection par position des fils
- Sélection d'éléments par valeur d'un attributs
- Exclusion d'éléments



- **Nouveautés: Les sélecteurs (2/7)**

- Sélection par position des fils

:only-child p:only-child Sélectionne des tous les éléments <p> qui sont l'unique fils de ses parents

:nth-child(n) p:nth-child(2) Sélectionne tous les éléments <p> qui sont le second fils de ses parents

:nth-last-child(n) p:nth-last-child(2) Sélectionne tous les éléments <p> qui sont l'avant dernier fils de ses parents

:nth-of-type(n) p:nth-of-type(2) Sélectionne tous les éléments <p> qui sont les sont les second élément p de ses parents

:nth-last-of-type(n) p:nth-last-of-type(2) Sélectionne tous les éléments <p> qui sont les avant dernier fils de type p de ses parents

:last-child p:last-child Sélectionne tous les éléments <p> qui sont l'avant dernier fils de ses parents

HTML⁵-CSS³

- **Nouveautés: Les sélecteurs (3/7)**

- Sélection par position des fils

```
tr:nth-child(2) {  
    background-color: grey;  
}  
  
tr:nth-last-child(3) {  
    background-color: orange;  
}  
  
tr:last-child {  
    background-color: red;  
}
```

row 1, cell 1	row 1, cell 2
---------------	---------------

row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2
row 3, cell 1	row 3, cell 2
row 4, cell 1	row 4, cell 2
row 5, cell 1	row 5, cell 2
row 6, cell 1	row 6, cell 2

row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2
row 3, cell 1	row 3, cell 2

- **Nouveautés: Les sélecteurs (4/7)**

- Sélection par position des fils

:only-child p:only-child

:first-of-type p:first-of-type

:nth-child(n) p:nth-child(2)

:last-of-type p:last-of-type

:nth-last-child(n) p:nth-last-child(2)

:only-of-type p:only-of-type

:nth-of-type(n) p:nth-of-type(2)

:root

:nth-last-of-type(n) p:nth-last-of-type(2)

:last-child p:last-child

- **Nouveautés: Les sélecteurs (5/7)**

- Sélection d'éléments par valeur d'un attributs

element1~element2 p~ul tous les éléments qui sont précédés par l'élément p

[attribute^=value] a[src^="https"] tous les éléments a dont la valeur de l'attribut src commence par la valeur "https"

[attribute\$=value] a[src\$=".pdf"] tous les éléments a dont la valeur de l'attribut src finit par la valeur ".pdf"

[attribute*=value] a[src*="w3schools"] tous les éléments a dont la valeur de l'attribut src contient la valeur "W3schools"

• Nouveautés: Les sélecteurs (6/7)

❑ Sélection d'éléments par valeur d'un attributs

```
div{
    margin:20px;
    border:5px solid;
    width:100px;
    height:100px;
}
div~div{
    color:orange;
}

span[class^="first"]{
    color:orange;
}

span[class$="an"]{
    color:blue;
}

span[class*="is"]{
    color:red;
}
```

```
<table border="0">
  <tr>
    <td>
      <div></div>
      <div></div>
    </td>
    <td>
      <div></div>
    </td>
  </tr>
  <tr>
    <td><p>
      Lorem ipsum dolor sit amet, consectetur
      adipiscing elit. Phasellus vitae sapien
      orci. Duis turpis ante, sodales sit amet
      facilisis sed,sapien.
      <span class="firstSpanEver">
        Pellentesque ornare accumsan
      </span> lacus, non aliquam
      neque tincidunt sagittis.
      <span class="secondspan">
        Mauris eu mi mi. Maecenas posuere
      </span>, nisi eget, quis ornare risus dui
      sed turpis. Mauris
      neque
      <span class="thirdspanishere">
        nulla, euismod sit amet semper id,
      </span> tincidunt eget
      tortor. Duis lacinia, urna in tempus suscipit,
      </p></td>
  </tr>
</table>
```



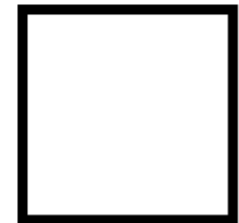
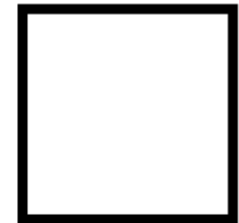
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus vitae sapien orci. Duis turpis ante, sodales sit amet facilisis sed, convallis quis sapien. Pellentesque ornare accumsan lacus, non aliquam neque tincidunt sagittis. Mauris eu mi mi. Maecenas posuere, nisi eget ullamcorper rhoncus, enim mauris semper magna, quis ornare risus dui sed turpis. Mauris ante magna, hendrerit in tristique posuere, semper ut libero. Nunc neque nulla, euismod sit amet semper id, tincidunt eget tortor. Duis lacinia, urna in tempus suscipit, ante lacus fermentum quam, non tincidunt ips

- Nouveautés: Les sélecteurs (7/7)

- Exclusion d'élément

```
div{  
  margin:20px;  
  border:5px solid;  
  width:100px;  
  height:100px;  
}  
div:not(.g1){  
  color:orange;  
}
```

```
<table border="0">  
  <tr>  
    <td>  
      <div class="g1"></div>  
    </td>  
    <td>  
      <div class="g1"></div>  
    </td>  
  </tr>  
  <tr>  
    <td>  
      <div class="g2"></div>  
    </td>  
    <td>  
      <div class="g1"></div>  
    </td>  
  </tr>  
</table>
```



CSS³

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- Introduction
 - Nouveautés Effets visuels
 - Nouveautés Sélecteurs
 - Nouveautés Utilitaires

HTML⁵-CSS³

- **Nouveautés: Les utilitaires (1/7)**

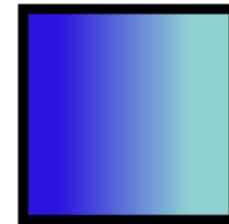
- Gradients
- Media query
- Columns
- Box



- Nouveautés : Les utilitaires (2/7)

- Gadiant

```
div.grad4{  
    background-image: -webkit-gradient(  
        linear,  
        left bottom,  
        right bottom,  
        color-stop(0.16, rgb(44,20,224)),  
        color-stop(0.8, rgb(144,209,209))  
    );  
}
```



• Nouveautés : Les utilitaires (3/7)

▣ Gadiant

```

div{
    margin:20px;
    border:5px solid;
    width:100px;
    height:100px;
}

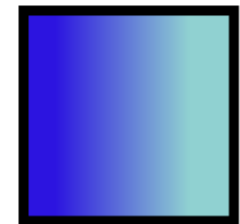
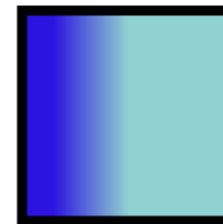
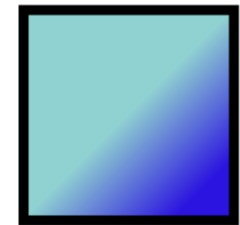
div.grad1{
    background-image: linear-gradient(bottom, rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -o-linear-gradient(bottom, rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -moz-linear-gradient(bottom, rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -webkit-linear-gradient(bottom, rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -ms-linear-gradient(bottom, rgb(44,20,224) 13%, rgb(144,209,209) 50%);
}

div.grad2{
    background-image: linear-gradient(right bottom, rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -o-linear-gradient(right bottom, rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -moz-linear-gradient(right bottom, rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -webkit-linear-gradient(right bottom, rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -ms-linear-gradient(right bottom, rgb(44,20,224) 13%, rgb(144,209,209) 50%);
}

div.grad3{
    background-image: linear-gradient(left , rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -o-linear-gradient(left , rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -moz-linear-gradient(left , rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -webkit-linear-gradient(left , rgb(44,20,224) 13%, rgb(144,209,209) 50%);
    background-image: -ms-linear-gradient(left , rgb(44,20,224) 13%, rgb(144,209,209) 50%);
}

div.grad4{
    background-image: linear-gradient(left , rgb(44,20,224) 13%, rgb(144,209,209) 80%);
    background-image: -o-linear-gradient(left , rgb(44,20,224) 13%, rgb(144,209,209) 80%);
    background-image: -moz-linear-gradient(left , rgb(44,20,224) 13%, rgb(144,209,209) 80%);
    background-image: -webkit-linear-gradient(left , rgb(44,20,224) 13%, rgb(144,209,209) 80%);
    background-image: -ms-linear-gradient(left , rgb(44,20,224) 13%, rgb(144,209,209) 80%);
}

```



- **Nouveautés: : Les utilitaires (4/7)**

- Media query

```
body{
    background-color:green;
}

@media screen and (max-device-width: 600px) {
    /* Style appliqué
    uniquement sur les écrans de moins de 600px de largeur */
    body{
        background-color:red;
    }
}
```


• Nouveautés : Les utilitaires (5/7)

□ Columns

```

<!DOCTYPE html>
<html>
  <head>
    <style type="text/css">
      .newspaper
      {
        -moz-column-count:3; /* Firefox */
        -webkit-column-count:3; /* Safari and Chrome */
        column-count:3;
      }
    </style>
  </head>
  <body>
    <div class="newspaper">
      Lorem ipsum dolor sit amet, consectetur adipiscing
      elit, sed diam nonummy nibh euismod tincidunt ut
      laoreet dolore magna aliquam erat volutpat. Ut wisi
      enim ad minim veniam, quis nostrud exerci tation
      ullamcorper suscipit lobortis isl ut aliquip ex ea
      commodo consequat. Duis autem vel eum iriure dolor in
      hendrerit in vulputate velit esse molestie consequat,
      vel illum dolore eu feugiat nulla facilisis at vero
      eros et accumsan et iusto odio dignissim qui blandit
      praesent luptatum zzril delenit augue duis dolore te
      feugait nulla facilisi. Nam liber tempor cum soluta
      nobis eleifend option congue nihil imperdiet doming
      id quod mazim placerat facer possim assum. Typi non
      habent claritatem insitam; est usus legentis in iis
      qui facit eorum claritatem. Investigationes
      demonstraverunt lectores legere me lius quod ii
      legunt saepius. </div>
    </body>
  </html>

```

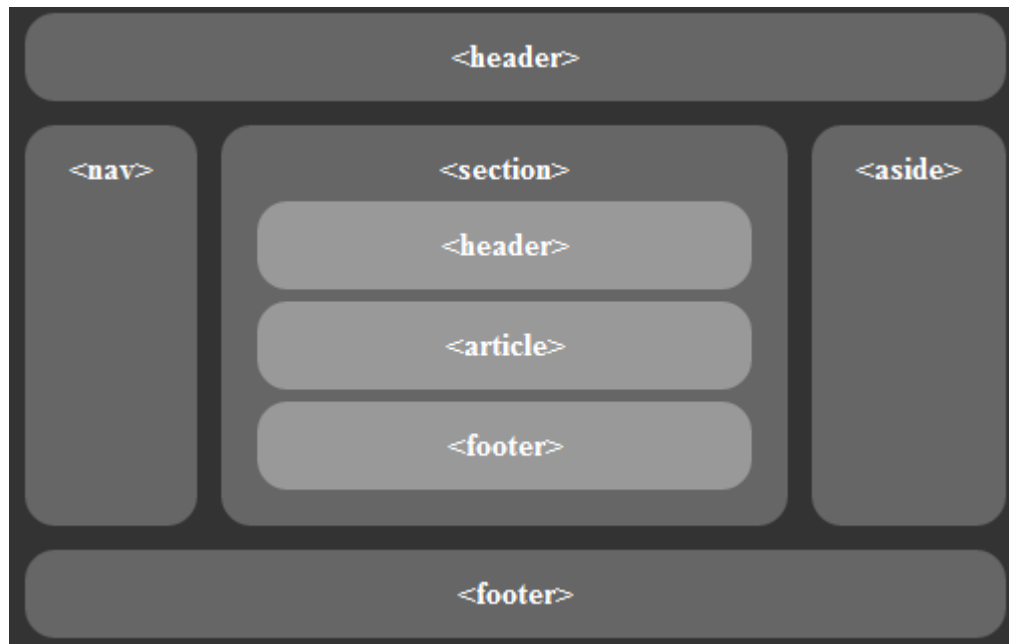
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis isl ut aliquip ex ea commodo consequat.

Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait nulla facilisi. Nam liber tempor cum

soluta nobis eleifend option congue nihil imperdiet doming id quod mazim placerat facer possim assum. Typi non habent claritatem insitam; est usus legentis in iis qui facit eorum claritatem. Investigationes demonstraverunt lectores legere me lius quod ii legunt saepius.

- Nouveautés: : Les utilitaires (6/7)

- Box



```
<body>
  <header>&lt;header&gt;&lt;/header>
  <div class="main">
    <nav>&lt;nav&gt;&lt;/nav>
    <section>&lt;section&gt;
      <header class="inside">
        &lt;header&gt;&lt;/header>
      <article class="inside">
        &lt;article&gt;&lt;/article>
      <footer class="inside">
        &lt;footer&gt;&lt;/footer>
      </section>
    <aside>&lt;aside&gt;&lt;/aside>
  </div>
  <footer >&lt;footer&gt;&lt;/footer>
</p>
</body>
```

- Nouveautés: : Les utilitaires (7/7)

- Box







```
header{
  background-color:#666666;
  border-radius:15px;
  padding:12px;
  margin:6px;
}
footer{
  background-color:#666666;
  border-radius:15px;
  padding:12px;
  margin:6px;
}
div.main {
  display:-webkit-box;
  display:box;
}
section{
  box-flex:4; -webkit-box-flex:8.0;
  background-color:#666666;
  border-radius:15px;
  padding:12px;
  margin:6px;
}
nav{
  background-color:#666666;
  border-radius:15px;
  padding:12px;
  margin:6px;
  box-flex: 1; -webkit-box-flex:1.0;
}
aside{
  background-color:#666666;
  border-radius:15px;
  padding:12px;
  margin:6px;
  box-flex: 1; -webkit-box-flex:1.0;
}
header.inside{
  background-color:#999999;
  border-radius:15px;
}
article{
  background-color:#999999;
  border-radius:15px;
  padding:12px;
  margin:6px;
}
footer.inside{
  background-color:#999999;
  border-radius:15px;
}
```

Compliance


- HTML 5
- CSS 3

- HTML 5
- 1 Référence : W3C http://www.w3schools.com/html5/html5_ref_dtd.asp
- Other <http://findmebyip.com/litmus/>










HTML5 Web Applications

	MAC				WIN								
	 SAFARI	 FIREFOX	 OPERA	 CHROME	 SAFARI	 IE				 FIREFOX	 OPERA	 CHROME	
	5.1	11	11.62	18	5.1	6	7	8	9	11	11.61	18	
Local Storage	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	94%
Session Storage	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	95%
Post Message	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	96%
Offline Applications	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	84%
Workers	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	81%
Query Selector	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	93%
WebSQL Database	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	46%
IndexedDB Database	✗	✗	✗	✓	✗	✗	✗	✗	✗	✓	✗	✓	
Drag and Drop	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	94%
Hash Change (Event)	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	92%
History Management	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	61%
WebSockets	✓	✓	✗	✓	✓	✗	✗	✗	✗	✓	✗	✓	42%
GeoLocation	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	87%
Touch	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	5%
File API	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	
meter element	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	✓	✓	
progress element	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	


HTML5 Graphics & Embedded Content

	MAC				WIN									
	 SAFARI	 FIREFOX	 OPERA	 CHROME	 SAFARI	 IE				 FIREFOX	 OPERA	 CHROME		
	5.1	11	11.62	18	5.1	6	7	8	9	11	11.61	18		
Canvas	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%	
Canvas Text	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	88%	
SVG	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	87%	
SVG Clipping Paths	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	87%	
SVG Inline	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	49%	
SMIL	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	66%	
WebGL	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	57%	
Audio	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	88%	
Video	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	88%	










HTML5 Video Codecs

	MAC				WIN									
	 SAFARI	 FIREFOX	 OPERA	 CHROME	 SAFARI	 IE				 FIREFOX	 OPERA	 CHROME		
	5.1	11	11.62	18	5.1	6	7	8	9	11	11.61	18		
Video: ogg/theora	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	72%	
Video: H.264	✓	✗	✗	✓	✓	✗	✗	✗	✓	✗	✗	✓	43%	
Video: WebM	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	49%	

HTML5 Audio Codecs

	MAC				WIN									
	 SAFARI	 FIREFOX	 OPERA	 CHROME	 SAFARI	 IE				 FIREFOX	 OPERA	 CHROME		
	5.1	11	11.62	18	5.1	6	7	8	9	11	11.61	18		
Audio: ogg/vorbis	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	72%	
Audio: mp3	✓	✗	✗	✓	✓	✗	✗	✗	✓	✗	✗	✓	43%	
Audio: wav	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	75%	
Audio: AAC	✓	✗	✗	✓	✓	✗	✗	✗	✓	✗	✗	✓	43%	

HTML5 Forms Inputs

	MAC				WIN								
													
	SAFARI	FIREFOX	OPERA	CHROME	SAFARI	IE				FIREFOX	OPERA	CHROME	
	5.1	11	11.62	18	5.1	6	7	8	9	11	11.61	18	
Form: Search	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	63%
Form: Phone	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	63%
Form: URL	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	61%
Form: Email	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	61%
Form: DateTime	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	4%
Form: Date	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	4%
Form: Month	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	4%
Form: Week	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	4%
Form: Time	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	4%
Form: LocalTime	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	4%
Form: Number	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	30%
Form: Range	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	42%
Form: Colour	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	2%

HTML5 Forms Attributes



	MAC				WIN									
	 SAFARI	 FIREFOX	 OPERA	 CHROME	 SAFARI	 IE				 FIREFOX	 OPERA	 CHROME		
	5.1	11	11.62	18	5.1	6	7	8	9	11	11.61	18		
Form: Autocomplete	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	31%	
Form: Autofocus	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	64%	
Form: List	✓	✓	✓	✗	✓	✗	✗	✗	✗	✓	✓	✗	29%	
Form: Placeholder	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	63%	
Form: Min	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	45%	
Form: Max	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	45%	
Form: Multiple	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	82%	
Form: Pattern	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	63%	
Form: Required	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	63%	
Form: Step	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	45%	

- **CSS 3**
- **1 Référence : W3C** http://www.w3schools.com/cssref/css3_browsersupport.asp
- **Other** <http://findmebyip.com/litmus/>

CSS3 Selectors

	MAC				WIN								
	 SAFARI	 FIREFOX	 OPERA	 CHROME	 SAFARI	 IE				 FIREFOX	 OPERA	 CHROME	
	5.1	11	11.62	18	5.1	6	7	8	9	11	11.61	18	
Begins with	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	98%
Ends with	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	98%
Matches	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	98%
Root	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
nth-child	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
nth-last-child	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
nth-of-type	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
nth-last-of-type	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
last-child	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
first-of-type	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
last-of-type	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
only-child	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
only-of-type	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
empty	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
target	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	88%
enabled	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
disabled	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
checked	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
not	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%
General Sibling	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	98%

CSS3 Properties

	MAC				WIN									
														
	SAFARI	FIREFOX	OPERA	CHROME	SAFARI	IE				FIREFOX	OPERA	CHROME		
	5.1	11	11.62	18	5.1	6	7	8	9	11	11.61	18		
RGBA	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%	
HSLA	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%	
Box Sizing	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓		
Background Size	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	87%	
Multiple Backgrounds	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	87%	
Border Image	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	85%	
Border Radius	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%	
Box Shadow	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	88%	
Text Shadow	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	69%	
Opacity	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	89%	
CSS Animations	✓	✓	✗	✓	✓	✗	✗	✗	✗	✓	✗	✓	56%	
CSS Columns	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	84%	
CSS Gradients	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	82%	
CSS Reflections	✓	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	✓	43%	
CSS Transforms	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	88%	
CSS Transforms 3D	✓	✓	✗	✓	✓	✗	✗	✗	✗	✓	✗	✓	23%	
CSS Transitions	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	64%	
CSS FontFace	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	97%	
FlexBox	✓	✓	✗	✓	✓	✗	✗	✗	✗	✓	✗	✓	66%	
Generated Content	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓		
DataURI	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓		
Pointer Events	✓	✓	✗	✓	✓	✗	✗	✗	✗	✓	✗	✓		
Display: table	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓		
Overflow Scrolling	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗		
Media Queries	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓		

Conclusion

• Conclusion

- Toujours pas un standard W3C
- Programmation spécifique
- Attention à la prise en charge des vieux navigateurs
- Internet Explorer: un cas à part
- Multimédia et animation à l'honneur
- Vers une programmation applicative
- Utilisation des ressources locales ! (CPU, stockage, carte video, device)



Questions ?
