CSS3

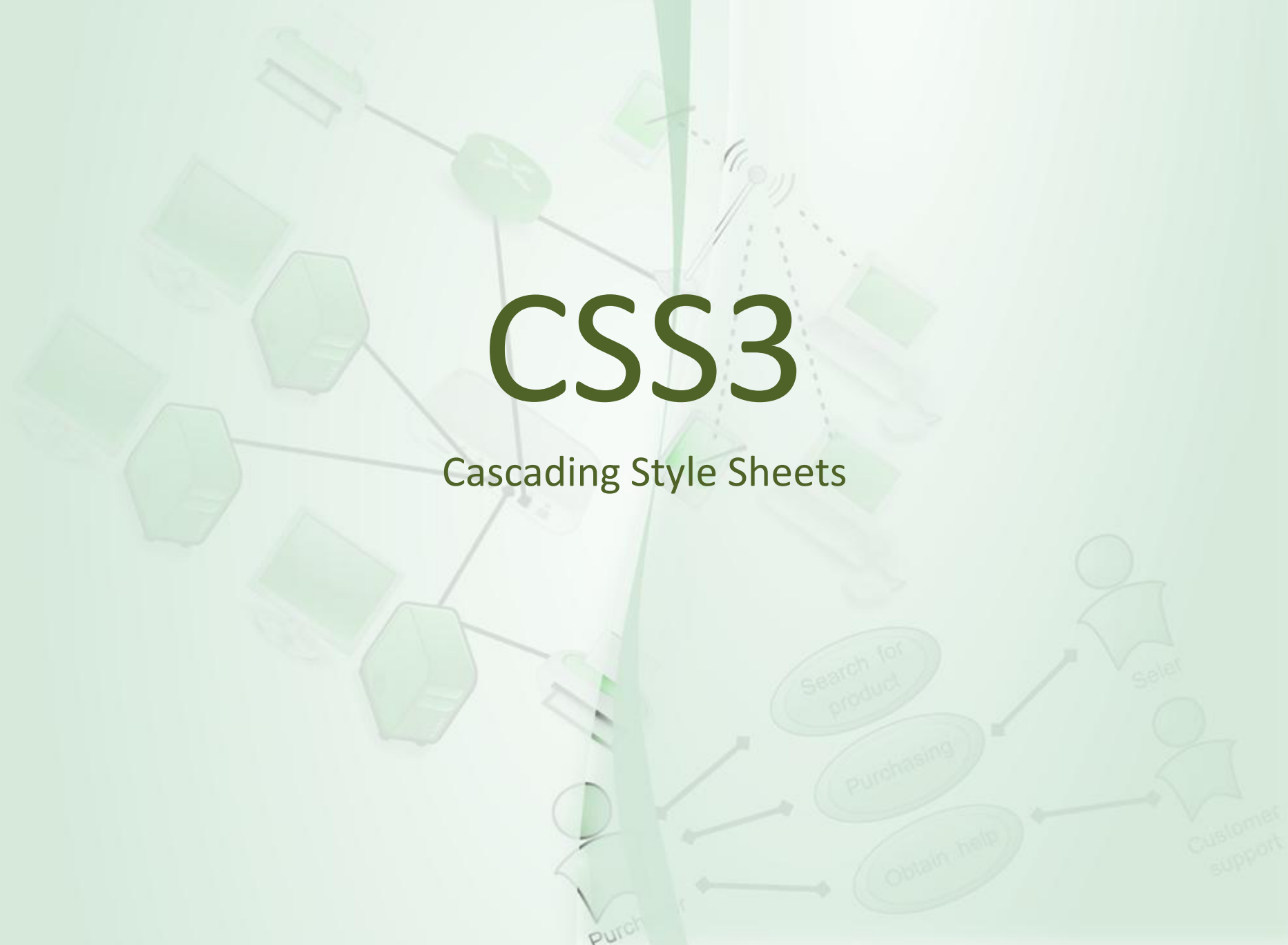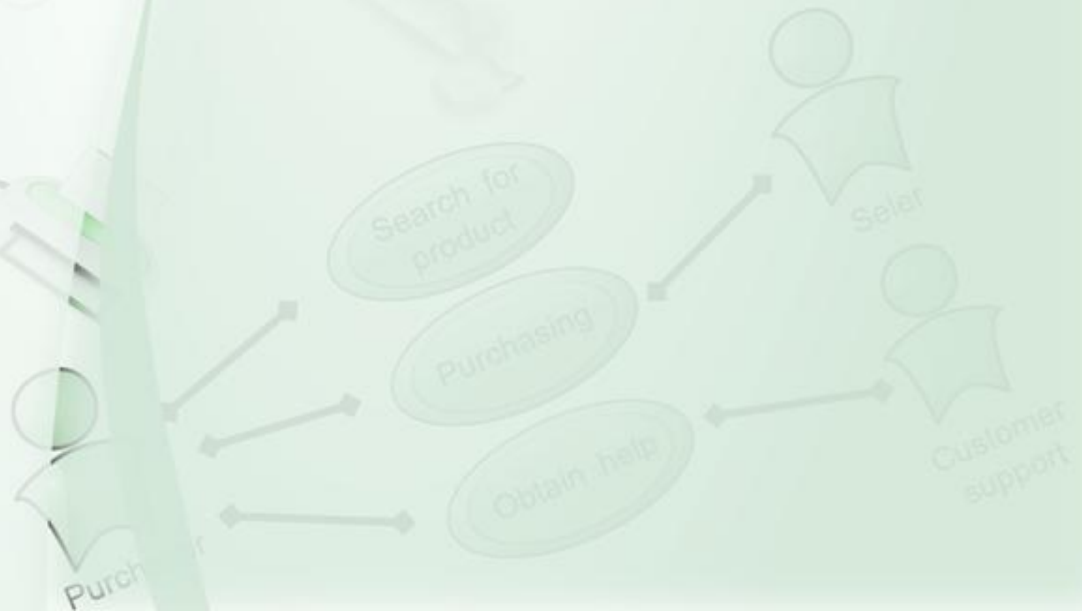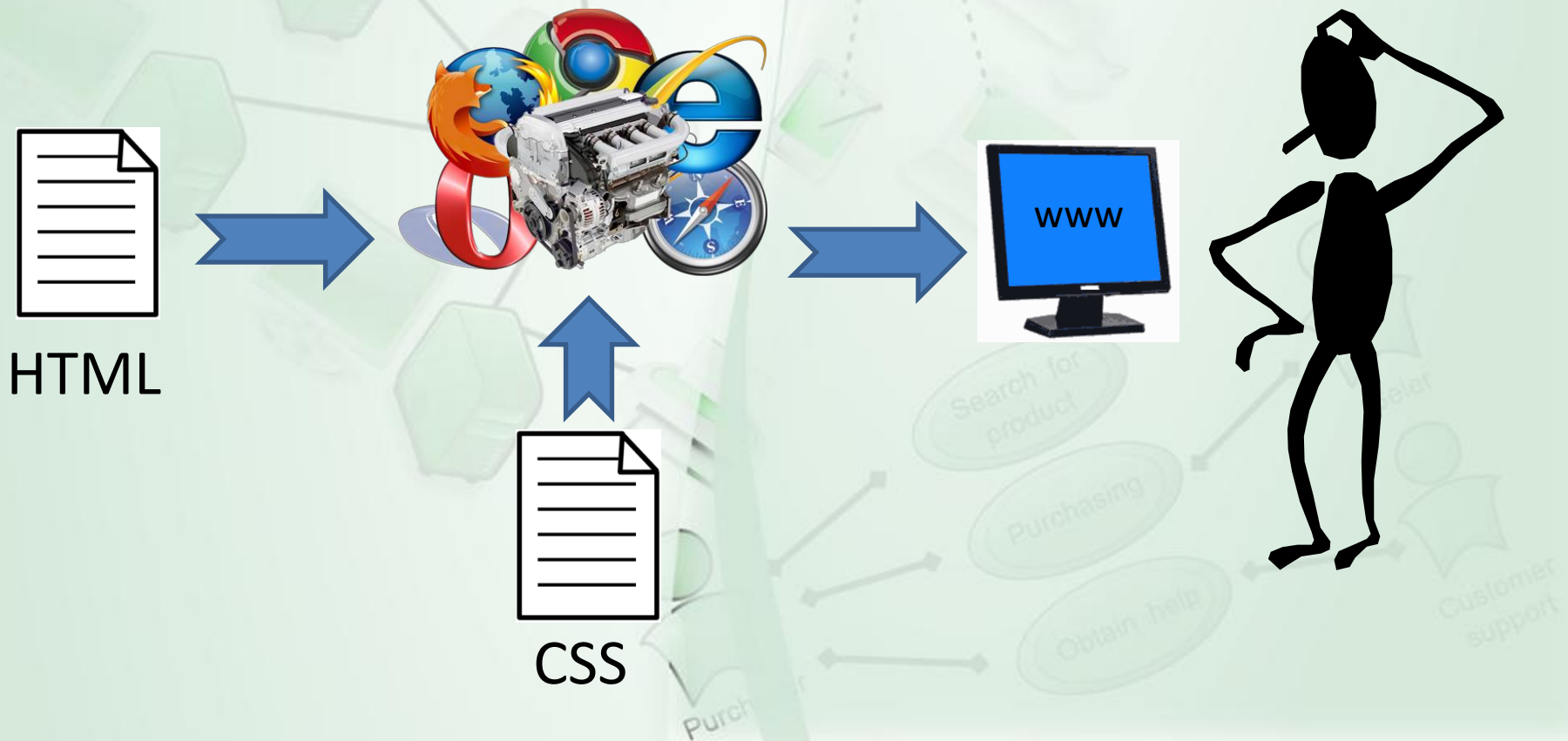## Cascading Style Sheets

Presentation outline

- A few general words about CSS
- More detailed words about CSS3
- CSS3 showcase ;)

About CSS

CSS = description how markup language document is presented on screen

HTML

CSS

www

```
<div id="linkList">
    <div id="linkList2">
        <div id="lselect">
            <h3 class="select"><span>Select a
Design:</span></h3>
            <ul>
                <li><a href="?
cssfile=/213/213.css&amp;page=0" title="AccessKey: a" accesskey="a">Under the
Sea!</a> by <a href="http://www.ericstoltz.com/" class="c">Eric Stoltz</a></li>
                <li><a href="?
cssfile=/212/212.css&amp;page=0" title="AccessKey: b" accesskey="b">Make
&#8217;em Proud</a> by <a href="http://skybased.com/" class="c">Michael McAghon
and Scotty Reifsnyder</a></li>
                <li><a href="?
cssfile=/211/211.css&amp;page=0" title="AccessKey: c" accesskey="c">Orchid
Beauty</a> by <a href="http://www.kevinaddison.com/" class="c">Kevin
Addison</a></li>
                <li><a href="?
cssfile=/210/210.css&amp;page=0" title="AccessKey: d"
accesskey="d">Oceanscape</a> by <a href="http://www.pixel-house.com.au/"
class="c">Justin Gray</a></li>
                <li><a href="?
cssfile=/209/209.css&amp;page=0" title="AccessKey: e" accesskey="e">CSS Co.,
Ltd.</a> by <a href="http://www.benklemm.de/" class="c">Benjamin Klemm</a></li>
                <li><a href="?
cssfile=/208/208.css&amp;page=0" title="AccessKey: f" accesskey="f">Sakura</a>
by <a href="http://www.re-bloom.com/" class="c">Tatsuya Uchida</a></li>
                <li><a href="?
cssfile=/207/207.css&amp;page=0" title="AccessKey: g" accesskey="g">Kyoto
Forest</a> by <a href="http://rpmdesignfactory.com/" class="c">John
Politowski</a></li>
                <li><a href="?
cssfile=/206/206.css&amp;page=0" title="AccessKey: h" accesskey="h">A Walk in
the Garden</a> by <a href="http://users.skynet.be/bk316398/temp.html"
class="c">Simon Van Hauwermeiren</a></li>
            </ul>
        </div>

        <div id="larchives">
            <h3
class="archives"><span>Archives:</span></h3>
                <ul>
                    <li><a href="/?
cssfile=/001/001.css&amp;page=1" title="View next set of designs. AccessKey: n"
accesskey="n"><span class="accesskey">n</span>ext designs &raquo;</a></li>
```

Under the Sea!
ERIC STOLTZ, United States

Make 'em Proud!
MICHAEL MCAGHON AND
SCOTTY REIFSNYDER, United
States

Orchid Beauty
KEVIN ADDISON, United States

Oceanscape
JUSTIN GRAY, Australia

CSS Co., Ltd.
BENJAMIN KLEMM, Germany

Sakura
TATSUYA UCHIDA, Japan

Kyoto Forest
JOHN POLITOWSKI, United
States

A Walk in the Garden
SIMON VAN HAUWERMEIREN,
Belgium

spring360
RENE HORNIG, Germany

Withering Beauty
WILLIAM DUFFY, United
Kingdom

Tiny Blue
TIMO VIRTANEN, Finland

Retro Theater
ERIC ROGÉ, France

http://www.csszengarden.com/

CSS evolution

CSS specifications are maintained by the World Wide Web Consortium (W3C) – *w3.org*

- 1996 – CSS level 1 specification
- 1997 – CSS level 2 specification
- 1999 – CSS level 3 first drafts

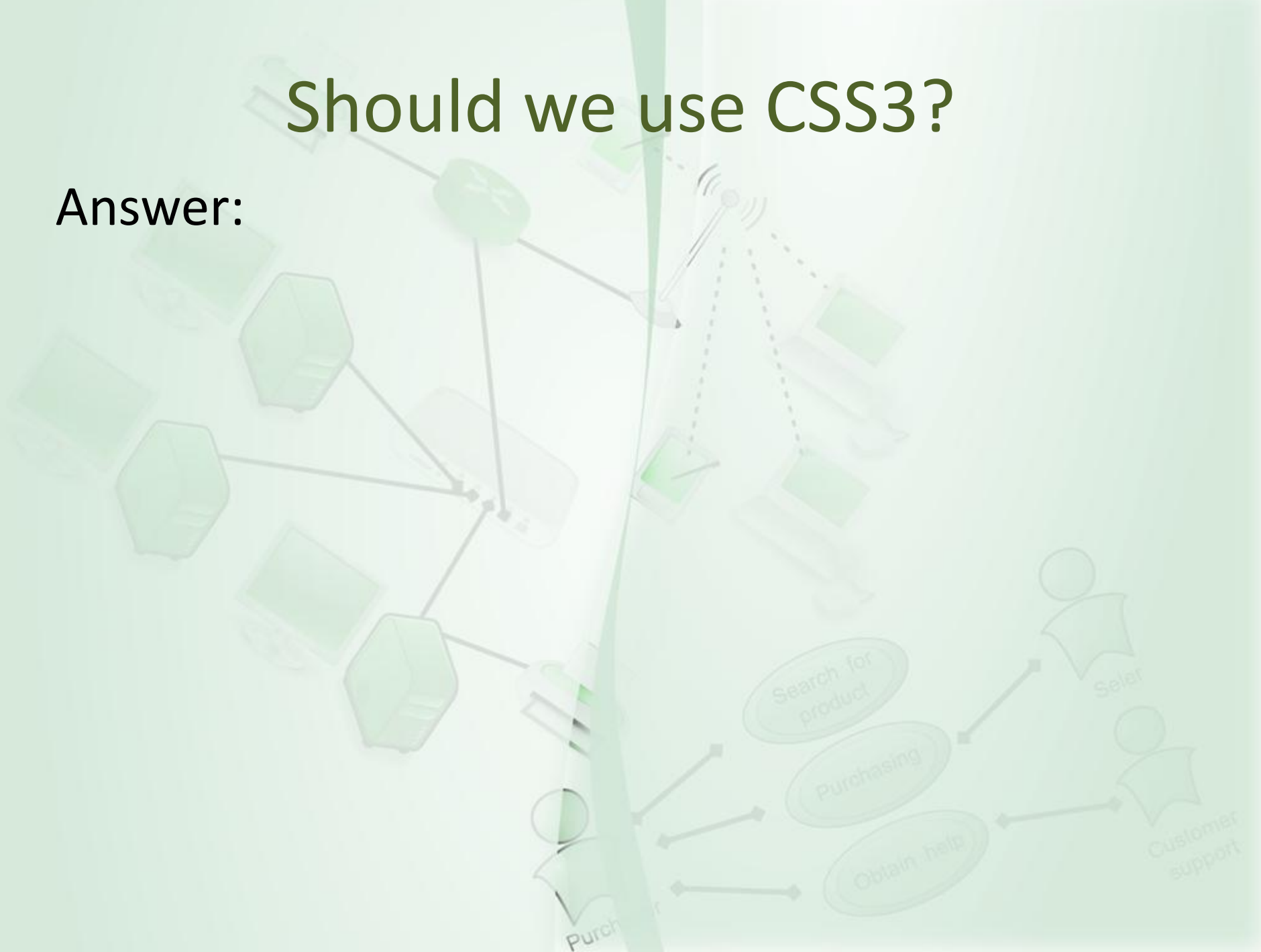In 1999 – some browsers have 99% support of CSS **1**

CSS3 browser engine support

Gecko (Mozilla)	Trident (IE)	Presto (Opera)	KHTML (KDE)	WebKit (Safari)	Prince XML (YesLogic)
Partial	Slight	Slight	Slight	Partial	Slight

?

?

Should we use CSS3?

Answer:

Should we use CSS3?

Answer: YES!

- Most features of CSS3 can be used today and work in all browsers using popular JavaScript libraries (jQuery, MooTools, Yahoo!, Prototype, etc.)

- In 2008 between 1% and 5% have JavaScript disabled so avoid using for important functionality that would be lost without js support

CSS3 main features

- Selectors
- Backgrounds and borders
- Advanced layout
- Text effects
- Multi-column layout
- Animations, transitions, transformations (3D)
- Color models with opacity (HSL, HSLA, RGBA)

Selectors

- Element type selectors
- Universal selectors for any element type
- Attribute selectors
- Class selectors
- ID selectors
- Pseudo-class selectors (no such in CSS2) - permit selection based on extra information that lies in the document tree but cannot be represented by other simple selectors or combinators

Pseudo-classes and pseudo-elements

Pseudo classes:
- *first-child*
- *nth-child*
- *nth-last-child*
- *last-child*
- *nth-of-type*
- *only-of-type*
- *empty*
- *not*

etc.

Pseudo elements:
- *first-line*
- *first-letter*
- *before*
- *after*

Examples:
```
tr:nth-child(2n+1)                /* represents every odd row of an HTML table */
tr:nth-last-child(-n+2)           /* represents the two last rows of an HTML table */
p:nth-child(4n+1) { color: navy; }          /* Alternate paragraph colour */
img:nth-of-type(2n+1) { float: right; }    /* Alternate position of floated images */
p::first-line { text-transform: uppercase }          /* First line with uppercase letters*/
h3::before {content: „Before header"}          /* Inserts text before h3 */
```

Backgrounds and borders

Allows styling box's borders and background including attach multiple background images to a single element
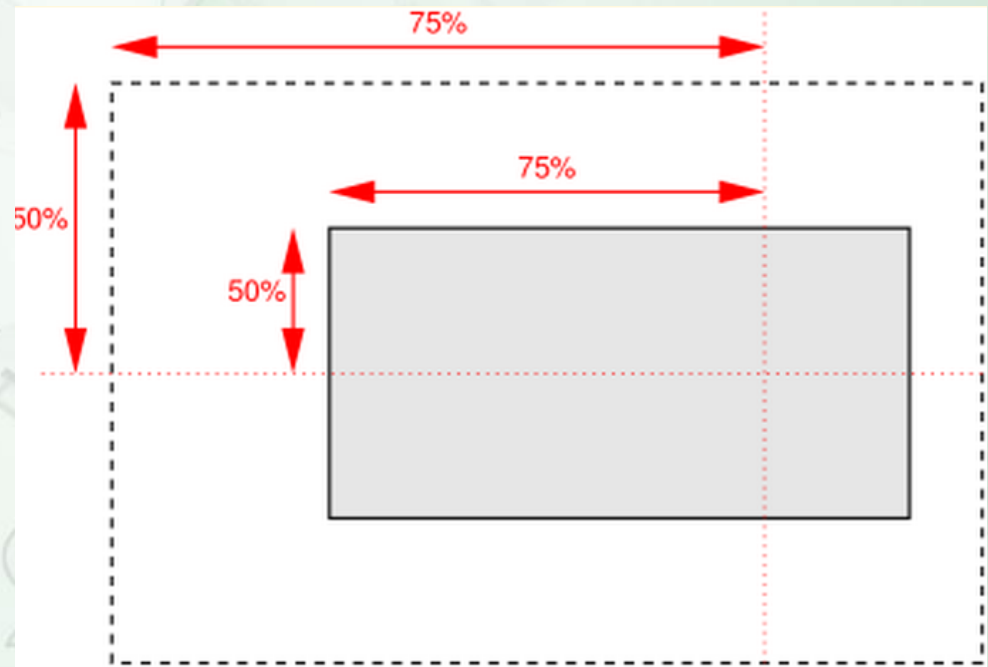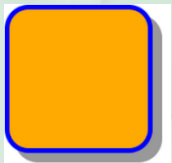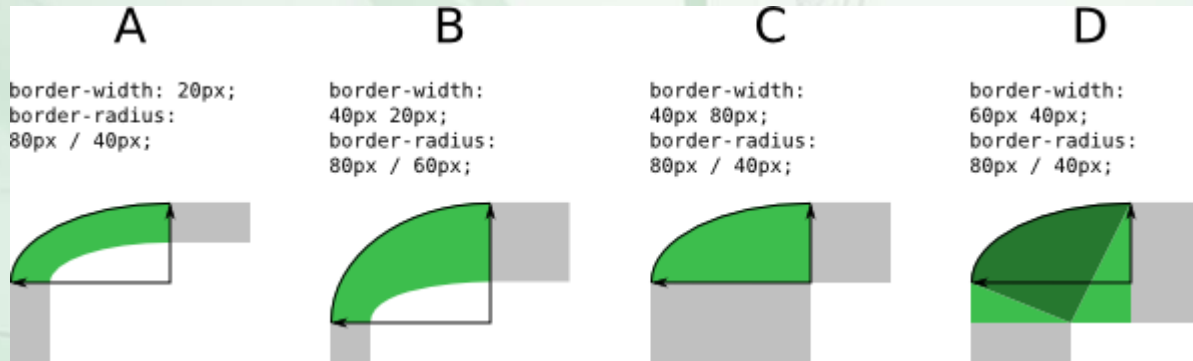
Backgrounds and borders

Multiple background images

```
background-position: left 10px top 15px;    /* 10px, 15px */
background-position: left        top   ;    /*  0px,  0px */
background-position:       10px       15px; /* 10px, 15px */
background-position: left              15px; /*  0px, 15px */
background-position:       10px top    ;    /* 10px,  0px */
background-position: left        top 15px;  /*  0px, 15px */
background-position: left 10px top    ;    /* 10px,  0px */
```


Diagram of the meaning of
'background-position: 75% 50%'.

Backgrounds and borders

A
```
border-width: 20px;
border-radius:
80px / 40px;
```

B
```
border-width:
40px 20px;
border-radius:
80px / 60px;
```

C
```
border-width:
40px 80px;
border-radius:
80px / 40px;
```

D
```
border-width:
60px 40px;
border-radius:
80px / 40px;
```

```
box-shadow:
  rgba(0,0,0,0.4)
  10px 10px;
```

```
box-shadow:
  rgba(0,0,0,0.4)
  10px 10px
  inset
```

```
box-sizing: border-box;
width: 6em;
height: 2.5em;
border-radius: 0.5em 2em 0.5em 2em
```

```
DIV {
  border-image: url("border.png") 27 round stretch;
  border: double orange 1em }
```

Blah blah blablah, blaha blah. Blah blaha blablablah, blaha blah blah blah blablah, blaha blah. Blah blah blablablah.

Advanced layout

- Aims to fully separate visual layout order from a document's content by defining „slots" in a grid in which content can flow or be placed, or that remain empty

```
body {      grid-columns: * * (0.5in * *)[2];
            grid-rows: 20% *;
            columns:3;
            column-gap:0.5in;
      }
```
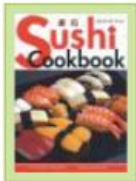
Advanced layout

WHAT IS SUSHI?

Beginning as a method of preserving fish centuries ago, sushi has evolved into an artful, unique dining experience. In its earliest form, dried fish was placed between two pieces of vinegared rice as a way of making it last. The nori (seaweed) was added later as a way to keep one's fingers from getting sticky.

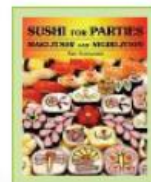Technically, the word `sushi' refers to the rice, but colloquially, the term is used to describe a finger-size piece of raw fish or shellfish on a bed of vinegared rice or simply the consumption or raw fish in the Japanese style (while sushi is not solely a Japanese invention, these days, the Japanese style
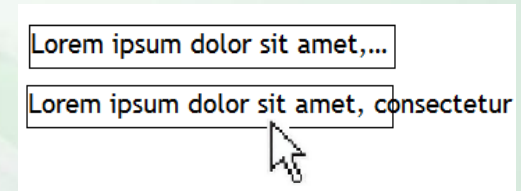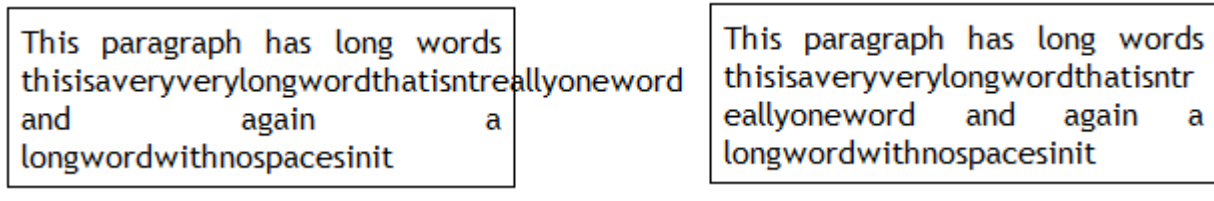
QUICK & EASY SUSHI COOKBOOK
This book has great pictures, however it is not as complete as Sushi Made Easy.

SUSHI FOR PARTIES: MAKI-ZUSHI AND NIGIRI-ZUSHI
This book also has great pictures, with advanced maki (cut roll) making techniques.

SUSHI MADE EASY
A very decent all-around book for the money.

Advanced layout

Text effects

- Shadow (text-shadow: 2px 2px 2px #000;)
- Text overflow (text-overflow: ellipsis;)

Lorem ipsum dolor sit amet,...

Lorem ipsum dolor sit amet, consectetur

- Word-wrap (normal or break-word)

This paragraph has long words thisisaveryverylongwordthatisntreallyoneword and again a longwordwithnospacesinit

This paragraph has long words thisisaveryverylongwordthatisntreallyoneword and again a longwordwithnospacesinit

- Font embedding

@font-face {font-family: SketchRockwell; src: url('SketchRockwell.ttf');}

.my_CSS3_class { font-family: SketchRockwell; font-size: 3.2em;}

hello css 3 world!

Multi-column layout

- Creating column layouts without additional markup by using column widths, counts, gaps and rules

-moz-column-count: 3; -moz-column-gap: 1em; -moz-column-rule: 1px solid black; -webkit-column-count: 3; -webkit-column-gap: 1em; -webkit-column-rule: 1px solid black;

Cras urna metus, aliquam sed, condimentum eget, pellentesque scelerisque, massa. Nullam et est id augue blandit tincidunt. Ut consectetuer, justo eleifend varius facilisis, tortor lorem pharetra nunc, ac sodales purus nunc semper tortor. Integer nec urna. Praesent scelerisque, ipsum nec aliquet volutpat, sem ante sagittis risus, sed condimentum magna libero luctus elit. Donec pede purus, hendrerit non, laoreet vel, porta ut, neque. Cras eu lacus. Pellentesque tempus mattis magna. Nullam id nisl. Quisque dolor lorem, commodo ac, pharetra sed, nonummy nec, nulla. Mauris purus. Suspendisse eget mauris nec justo eleifend vestibulum. Nunc ut eros sed pede pretium congue. Etiam in elit ut nisi ultrices hendrerit. Cras vulputate ultrices quam. Curabitur venenatis. Cras sed nisi.

Animations, transitions, transformations (3D)

- http://www.1stwebdesigner.com/development/50-awesome-css3-animations/

Thank you!